PI: LOCHER, JULIE L	Title: Translational Nutrition and Aging Research Academic Career Leadership Award		
Received: 02/13/2012	FOA: PA11-192	Council: 10/2012	
Competition ID: ADOBE-FORMS-B1	FOA Title: Academic Career Award (Parent K07)		
1 K07 AG043588-01	Dual:	Accession Number: 3463901	
IPF: 1288803	Organization: UNIVERSITY OF ALABAMA AT BIRMINGHAM		
Former Number:	Department: Geriatrics		
IRG/SRG: NIA-S	AIDS: N	Expedited: N	
Subtotal Direct Costs (excludes consortium E&A) Year 1: Year 2: Year 3: Year 4: Year 5:	Animals: N Humans: N Clinical Trial: N Current HS Code: 10 HESC: N		
Senior/Key Personnel:	Organization:	Role Category:	
Julie Locher	University of Alabama at Birmingham	PD/PI	
David Allison	University of Alabama at Birmingham	Other (Specify)-Internal Advisory Committee Member	
Richard Allman	University of Alabama at Birmingham	Other (Specify)-Internal Advisory Committee Member	
Barbara Gower	University of Alabama at Birmingham	Other (Specify)-Internal Advisory Committee Member	
Michael Morrisey	University of Alabama at Birmingham	Other (Specify)-Internal Advisory Committee Member	
Kenneth Saag	University of Alabama at Birmingham	Other (Specify)-Internal Advisory Committee Member	
Connie Bales	Duke University	Other (Specify)-External Advisory Committee Member	
Gordon Jensen	Pennsylvania State University	Other (Specify)-External Advisory Committee Member	
Heather Keller	University of Waterloo	Other (Specify)-External Advisory Committee Member	
Joseph Sharkey	Texas A & M University	Other (Specify)-External Advisory Committee Member	
Nancy Wellman	Florida International University	Other (Specify)-External Advisory Committee Member	

Locher appendi

OMB Number: 4040-0001 Expiration Date: 06/30/2011

APPLICATION FOR FEDERAL ASSISTANCE	3. DATE RECEIVED BY STATE   State Application Identifier				
SF 424 (R&R)	State Application Identifier				
1. * TYPE OF SUBMISSION	4. a. Federal Identifier 11060683				
Pre-application Application Changed/Corrected Application	b. Agency Routing Identifier				
2. DATE SUBMITTED Applicant Identifier					
5. APPLICANT INFORMATION	* Organizational DUNS: 063690705				
*Legal Name: University of Alabama at Birmingham					
Department: Office of Sponsored Programs Division:					
* Street1: 1530 3rd Avenue South, AB 1170					
Street2:					
* 0(-)	Sh: Jefferson  Province:				
* State: AL: Alabama					
* Country: USA: UNITED STATES	* ZIP / Postal Code: 352940111				
Person to be contacted on matters involving this application  Prefix: Mr. * First Name: Morgan	Middle Name:				
* Last Name: Amos	Suffix:				
* Phone Number: 205-996-5660 Fax Number: (205					
Email: morganamos@uab.edu	7 373 3377				
6. * EMPLOYER IDENTIFICATION (EIN) or (TIN): 1636005396A6					
	ontrolled Institution of Higher Education				
Other (Specify):	oneroried insertation of higher suddeten				
Small Business Organization Type Women Owned Social	ally and Economically Disadvantaged				
8. * TYPE OF APPLICATION: If Revision, mark a	appropriate box(es).				
New Resubmission A. Increase A	ward B. Decrease Award C. Increase Duration D. Decrease Duration				
Renewal Continuation Revision E. Other (spe	cify):				
* Is this application being submitted to other agencies? Yes No W	/hat other Agencies?				
9. * NAME OF FEDERAL AGENCY: 10. CATAL	OG OF FEDERAL DOMESTIC ASSISTANCE NUMBER:				
National Institutes of Health TITLE:					
11. * DESCRIPTIVE TITLE OF APPLICANT'S PROJECT:					
Translational Nutrition and Aging Research Academic Car	eer Leadership Award				
12. PROPOSED PROJECT:	T OF APPLICANT				
09/01/2012 08/31/2017 AL-007					
14. PROJECT DIRECTOR/PRINCIPAL INVESTIGATOR CONTACT INFO	RMATION				
Prefix: Dr. * First Name: Julie	Middle Name: L				
* Last Name: Locher	Suffix:				
Position/Title: Associate Professor/Director					
* Organization Name: University of Alabama at Birmingham					
Department: Geriatrics Division: School of Medicine					
* Street1: 1530 3rd Avenue South					
Street2: CH19 218F					
* City: Birmingham County / Parish: Jefferson					
* State: AL: Alabama Province:					
* Country: USA: UNITED STATES	* ZIP / Postal Code: 352942041				
* Phone Number: 205-934-7542 Fax Number: 205-	975-5870				
* Email:  jlocher@uab.edu					

			6. * IS APPLICATION SUBJECT TO REVIEW BY STATE EXECUTIVE ORDER 12372 PROCESS?		
a. Total Federal Funds Requested b. Total Non-Federal Funds 0	.00	a. 120 AV	AILABLE TO	CATION/APPLICATION THE STATE EXECUTIVE REVIEW ON:	
c. Total Federal & Non-Federal Funds		DATE:			
d. Estimated Program Income	.00	b. NO PR	OGRAM IS N	NOT COVERED BY E.O.	12372; OR
			OGRAM HAS VIEW	S NOT BEEN SELECTED	BY STATE FOR
17. By signing this application, I certify (1) to the statements contained in the list of certifications* and (2) that the statements herein are true, complete and accurate to the best of my knowledge. I also provide the required assurances * and agree to comply with any resulting terms if I accept an award. I am aware that any false, fictitious. or fraudulent statements or claims may subject me to criminal, civil, or administrative penalities. (U.S. Code, Title 18, Section 1001)    * I agree					
18. SFLLL or other Explanatory Docum	nentation	۸۵۸۸	tto ob mont	Doloto Attochment	View Attackment
		Add A	ttachment	Delete Attachment	View Attachment
19. Authorized Representative					
Prefix: Ms. * First Nam	ne: <sub>Lynn</sub>			iddle Name: W	
* Last Name: Stedman			Sı	uffix: MBA	
* Position/Title: Director, Office of	Sponsored Programs				
*Organization: University of Alaba	ama at Birmingham				
Department: Office of Sponsored Programs Division:					
* Street1: 1530 3rd Avenue Sou	ith, AB 1170				
Street2:					
* City: Birmingham	County / Pari	ish: Jefferson			
* State:	AL: Alabama		Province:		
* Country: USA: UNITED STATES * ZIP / Pos		* ZIP / Posta	Il Code: 352940111		
* Phone Number: 205-934-5266	Fax Number: 2	05-975-5977			
* Email: osp@uab.edu					
* Signature of Authorized Representative			* Date Signe	ed	
John Amos				02/13/20	12

20. Pre-application

Delete Attachment

Add Attachment

View Attachment

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### Appendix

Number of Attachments in Appendix: 1

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OMB Number: 4040-0010 Expiration Date: 08/31/2011

### **Project/Performance Site Location(s)**

Project/Performance Site Primary Location	I am submitting an application as an individual, and not on behalf of a company, state, local or tribal government, academia, or other type of organization.
Organization Name: University of Ala	bama at Birmingham
DUNS Number: 0636907050000	
* Street1: 933 19th Street South	
Street2:	
* City: Birmingham	County: Jefferson
* State: AL: Alabama	
Province:	
* Country: USA: UNITED STATES	
* ZIP / Postal Code: 352942041	* Project/ Performance Site Congressional District: AL-007
Project/Performance Site Location 1	I am submitting an application as an individual, and not on behalf of a company, state, local or tribal government, academia, or other type of organization.
Organization Name:	
DUNS Number:	
* Street1:	
Street2:	
* City:	County:
* State:	
Province:	
* Country: USA: UNITED STATES	
* ZIP / Postal Code:	* Project/ Performance Site Congressional District:
Additional Location(s)	Add Attachment Delete Attachment View Attachment

Performance Sites Page 4

### **RESEARCH & RELATED Other Project Information**

1. * Are Human Subjects Involved? Yes No  1.a If YES to Human Subjects
Is the Project Exempt from Federal regulations? Yes No
If yes, check appropriate exemption number.
If no, is the IRB review Pending? Yes No
IRB Approval Date:
Human Subject Assurance Number:
2.a. If YES to Vertebrate Animals
Is the IACUC review Pending? Yes No
IACUC Approval Date:
Animal Welfare Assurance Number
3. * Is proprietary/privileged information included in the application?
4.a. * Does this project have an actual or potential impact on the environment? Yes No
4.b. If yes, please explain:
4.c. If this project has an actual or potential impact on the environment, has an exemption been authorized or an environmental assessment (EA) or environmental impact statement (EIS) been performed?
4.d. If yes, please explain:
5. * Is the research performance site designated, or eligible to be designated, as a historic place?
5.a. If yes, please explain:
6. * Does this project involve activities outside of the United States or partnerships with international collaborators? Yes No
6.a. If yes, identify countries: Canada
6.b. Optional Explanation: Dr. H. Keller from U. of Waterloo is an advisor.
7. * Project Summary/Abstract 1245-JLL K07 Project Summary Abstract Add Attachment Delete Attachment View Attachment
8. * Project Narrative 1246-JLL K07 Project Narrative.pdf Delete Attachment View Attachment
9. Bibliography & References Cited 1247-Bibliography.pdf Add Attachment Delete Attachment View Attachment
10. Facilities & Other Resources 1248-JLL K07 Facilities and Other Res Add Attachment Delete Attachment View Attachment
11. Equipment 1249-JLL K07 Equipment.pdf Add Attachment Delete Attachment View Attachment
12. Other Attachments   Add Attachments   Delete Attachments   View Attachments   🔀

Other Information Page 5

### **Project Summary/Abstract**

The overarching goal of this K07 Academic Career Leadership Award is to develop a sustainable Program in Translational Nutrition and Aging based at the University of Alabama at Birmingham (UAB) and in partnership with organizations and individuals within the state of Alabama who have an interest in collaborating on nutrition and aging research initiatives. Specific Aims are to: 1) provide leadership, core faculty, and resources that support innovative, integrated, interdisciplinary, clinical, behavioral, and policy-related collaborations focused on translational nutrition and aging research; 2) provide high quality educational experiences related to translational nutrition and aging research for pre-doctoral trainees, post-doctoral fellows, junior and transitional faculty, and community stakeholders, including policy makers and the geriatric workforce; and 3) identify gaps in the current evidence base, address methodological issues, and set priorities for translational nutrition and aging research. The candidate, Julie L. Locher, is a Medical Sociologist and Health Services Researcher whose work as an independent investigator has been devoted to the study of: 1) eating behaviors and nutrition issues of older adults and 2) the various dimensions through which nutrition affects patient-centered outcomes in older adults. Most of her work focuses on social and environmental factors, including community and health care practices and policies that affect eating behaviors and nutrition-related health outcomes in this population. She is uniquely trained in mixed quantitative and qualitative applied research methods. Dr. Locher possesses the professional qualifications and personal qualities necessary for developing and leading a substantive and sustainable Program in Translational Nutrition and Aging Research that is both timely and cutting-edge. UAB is a world leader in: 1) geriatrics, gerontology, palliative and supportive care research, education, and clinical care; 2) nutrition and obesity research, education, and clinical care; and 3) patient-centered outcomes and comparative effectiveness research and training. The candidate and UAB, with the support of a stellar External Advisory Committee, are particularly well-poised to carry out the proposed aims of the program. Demographic and economic imperatives highlight the reality that nutritional matters are too costly to ignore in our rapidly aging society. This is especially true in consideration of: 1) increasing efforts to improve transitions of care linking hospital and home health services with community-based services in order to reduce preventable healthcare utilization and 2) increasing initiatives to rebalance long-term care so that older adults can remain in the community versus having to enter an institution. Rising rates of overweight and obese Baby Boomers who enter into older adulthood with concomitant obesity-related comorbidities and disability present additional and complicating challenges to these trends wherein nutritional matters figure prominently.

### **Project Narrative/Relevance**

The expected outcome of this award is to produce a community of scholars representing diverse backgrounds and interests who possess the knowledge and skills necessary to conduct relevant and impactful research in the area of translational nutrition and aging research relevant to clinical care and population-based health initiatives. Accomplishments of the Program in Translational Nutrition and Aging Research ultimately have the potential to reduce burdens on older individuals and their caregivers and society as a whole.

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References Cited Page 9

#### **Facilities and Other Resources**

The following section summarizes the overall institutional facilities and resources that are critical for successful implementation of the Translational Nutrition and Aging Research Program. The Essential Components included in the Facilities and Other Resources are followed by a more detailed description of the exceptional institutional environment that clearly demonstrates the capability the candidate

#### **Facilities and Other Resources**

- 1. Essential Components
- 2. Overview of the University of Alabama at Birmingham
- 3. Primary Intramural Collaborations
- 4. Secondary Intramural Collaborations
- 5. Health- and Community-based Collaborators
- 6. Biographies of Potential Collaborators with NIH Funding
- 7. Relevant Cohorts and Databases
- 8. Summary

has in carrying out the proposed work. An Overview of the University of Alabama at Birmingham (UAB) is presented first. Next, in-depth descriptions of Primary Intramural collaborations that focus on the areas of specialization within UAB whose missions are firmly aligned with the goals of the Leadership Award are presented. These include: 1) geriatrics, gerontology, palliative and supportive care research, education, and clinical care; 2) nutrition and obesity research, education, and clinical care; and 3) patient-centered outcomes and comparative effectiveness research and training. Key Secondary Intramural Collaborations that will provide additional support to the Program are described next, followed by a description of Health- And Community-Based Collaborators with whom the candidate and her colleagues have strong ongoing relationships and with whom we will partner with in this Program. Biographies of Potential Collaborators with NIH Funding who are potential partners within the proposed program are presented, as well. Last, brief descriptions of Relevant Cohorts and Databases available to support the program are presented.

- 1. Essential Components. A brief overview of the computer and office resources are described here.
  - 1.1. Laboratory. Not Applicable
  - 1.2. Animal. Not Applicable
- 1.3. Computer. All offices on UAB campus that are affiliated with this program have state-of-the-art IBM-compatible personal computers linked by Local Area Networks (LAN) and through the high-speed university-wide Internet connection. Software available for personnel use includes: Microsoft XP Professional; word processing (Word), spreadsheet applications (Excel), database management (Access), electronic mail (Outlook), data analysis (SPSS, SAS), slide making (Power Point), and communication with other computers (Explorer). There is an on-campus system support service coordinated the UAB Health Information Systems and the Center for Aging and the School of Public Health (as well as other local units), which are responsible for all system support and backups. All files are password protected for privacy and reside on shared network directories with access restricted to only appropriate personnel. There are essentially unlimited data storage capabilities through this shared University-wide resource.

Additionally, Dr. Locher will personally rely upon the computer facilities available through the Center for Aging (CFA). The CFA maintains its own Microsoft Windows 2003 Server farm that includes Information Internet Services (IIS) 6.0, Exchange Server 2003, SQL Server 2005, SharePoint Server 2003, and secure File-Sharing. The servers are housed in a secure environment with tape and power backup systems. All systems and data are fully compliant with the HIPAA Privacy Standards and the HIPAA Security Standards. The CFA offers data management and programming assistance using several software programming languages. Creation of scannable forms using Teleform software, custom Adobe forms assists data entry and capturing. Custom ACCESS databases, Visual Basic programs can be created using ACCESS or SQL, as well as Pocket PC programs. IIS usage includes WEBCT/VISTA and custom web forms. The CFA has three scanners with document feeders for scanning of multiple types of forms (Teleform, PDF, and images) directly into data management and analysis programs. Data management and analysis services include the ability to convert file formats using DBMSCOPY. SPSS, and GIS (Geographic Information System) to assist in the analysis of datasets.

1.4. Office. Dr. Locher has two offices on campus—one on the second floor of the Community Health Services Building (CH19) (associated with the Division of Gerontology, Geriatrics, and Palliative Care and the Center for Aging [CFA]) and one on the third floor of the Ryals Public Health Building (associated with the Department of Health Care Organization and Policy). Dr. Locher also has three offices available for mentees within the CH19 Building. It is most likely the case that activities associated with this award will utilize the space of the CFA. Offices for the UAB Center for Aging administrative staff and additional faculty and staff are located on the second floor of the Community Health Services Building, 933 19th Street South and occupy

10,277 square feet. The Center for Aging has a multi-purpose conference room that can be scheduled for use by Center faculty. The conference room located in the Community Health Services Building (Room 207) is 878 square feet and can accommodate meetings of up to 50 people. A fully equipped 476 square foot kitchen adjoins the conference room, and can also be used for informal meetings. The conference room is equipped with audiovisual equipment including 35-mm projector, overhead projector, LCD projector, VCR, and a television set. The Center provides grant and contract administration, funding information dissemination, biostatistical consultation, data entry, computer programming services, and a resource room of journals in aging, textbooks, and other materials. Office space, computer equipment, and supplies are available for the proposed staff and faculty members.

### (Clinical and Other Resources: (See Sections 2 – 7))

- 2. Overview of the University of Alabama at Birmingham. UAB is a doctoral research institution and the only four-year, public university located in Birmingham, Alabama, the largest metropolitan area in the state. The University has grown from 15 blocks in 1969 to more than 83 blocks with some 225 buildings providing over 12 million square feet of assignable space. UAB's budget of \$49.9 million in 1969 has multiplied to more than \$2 billion annually today. UAB currently has a \$4.6 billion economic impact on Alabama, which is projected to grow over a decade to \$6.6 billion. UAB supports 61,025 jobs state-wide (i.e., one of every 33 jobs in the state) and generates \$302.2 million in tax revenue to state and local governments. \$1 in every \$25 in the state's budget is generated by UAB; and, for every dollar invested by the state, UAB returns \$16.23.
- 2.1. UAB as a leader in education and training. UAB is a comprehensive university with an exceptionally strong Academic Health Center and graduate programs in a wide variety of disciplines—ranking among the top 15 percent of U.S. colleges and universities by *The Princeton Review*. Medical- and health-related schools include Dentistry, Health Professions, Medicine, Nursing, Optometry, and Public Health. There are 36 doctoral programs and 46 masters programs. For the fall 2011 semester, the undergraduate schools have enrolled 11,128 students and the graduate and professional schools have enrolled 6,447 trainees (Master's/Post-Master's/Certificate 4,019, Doctoral 2,428) and 1,202 Advanced Professionals). The 2012 edition of U.S. News and World Report on "America's Best Graduate Schools" has ranked a number of UAB programs among the top in the nation (the Master's Program in Health Services Administration in the School of Health Professions ranked 5th, the School of Medicine's AIDS Program ranked 6th, the School of Nursing's Nurse Practitioner (Adult) Program and Nursing Service Administration Program both ranked 10<sup>th</sup>, The School of Medicine ranked 10th overall in Primary Care). Other programs ranked in the top 25: Nursing: Nurse Practitioner (Family), 12<sup>th</sup>; Medicine: Geriatrics, 12<sup>th</sup>; Medicine: Rural Medicine, 15<sup>th</sup>; Public Health: Master's in Public Health, 16<sup>th</sup>; Health Professions: Occupational Therapy, 17<sup>th</sup>; Medicine: Internal Medicine, 20<sup>th</sup>; Nursing: Master's in Nursing, 21<sup>st</sup>; Health Professions: Physician Assistant, 25<sup>th</sup>.
- Dr. Locher holds a primary faculty appointment within the School of Medicine (Department of Medicine, Division of Gerontology, Geriatrics, and Palliative Care, Section of Social and Behavioral Sciences), and secondary appointments within the School of Public Health with formal responsibilities (Department of Health Care Organization and Policy), the College of Arts and Sciences (Sociology), and the Graduate School. She is active in all of them and continues to collaborate on NIH-supported grants from colleagues within every School at UAB, including training grants.

The Scientist ranked UAB 22nd nationally (and 6th among public universities) in its' top 40 "Best Places to Work as a Postdoctoral Fellow." Four of the 36 scholars selected for participation in the 2011 National Institute on Aging (NIA) Summer Institute on Aging Research were from UAB: Barrett Bowling, Akilah Keita, Richard Kennedy, and Daniel Smith. No other institution had more than one representative. The work of Drs. Keita and Smith focus on aspects of nutrition and aging, and Dr. Locher serves as a mentor for Dr. Keita. Four UAB junior faculty were approved as Hartford Center of Excellence Scholars for 2011-2012: Heather Herrington, Caroline Harada, Barrett Bowling and Kendra Sheppard. Bryan Ford was selected as one of four VA Hartford Geriatric Social Work Scholars. UAB provides an environment to thrive for nutrition and aging trainees.

**2.2. UAB as a growing biomedical research hub.** In addition to stellar academic programs, UAB is consistently rated among the best medical centers in the nation in terms of providing the best quality care and having the best physician-researchers. The flagship UAB Health System, and the associated Birmingham VA Medical Center and Children's Hospital of Alabama, the five other major hospital systems (Baptist, St.

Vincent's, Brookwood, Trinity, and Lakeshore Rehabilitation Hospital), as well as the national headquarters for several major health maintenance organizations have created a comprehensive, world-class health care industry. Moreover, half a dozen other colleges and universities complement UAB's educational and research mission and further highlight the extraordinary conversion of Birmingham into one of the leading biomedical centers in the U.S.

- 2.3. UAB as a research enterprise. UAB ranks 31st nationally in federally funded research, and 20th in National Institutes of Health funded research (10th among public universities). UAB consistently ranks in the top 25 nationally in funding from the National Institutes of Health. UAB is among 96 public and private universities (and the only university within Alabama) classified as an institution of "very high research activity" by the Carnegie Foundation. Additionally, externally funded grants and contracts continue to increase, doubling every decade since 1969, when UAB was established, and now stands at more than \$489 million (in 2010). According to data generated from the NIH Reporter, total aging related research funded at UAB totaled more than \$25 million in 2010. Aging related research awards were obtained from multiple NIH institutes including 18 awards from the National Heart, Lung, and Blood Institute; 7 from the National Institute of Neurological Disorders and Strokes; 5 from the National Center for Complementary and Alternative Medicine; 5 from the National Institute of Diabetes and Digestive and Kidney Diseases; 3 from the National Institute of Arthritis and Musculoskeletal and Skin Disorders; 3 from the National Eye Institute; and 13 awards from other NIH Institutes, the Office of Veterans Affairs, and the Agency for Healthcare Research and Quality. In addition, twenty-three grant awards came to UAB from NIA in FY10. UAB achieved a ranking of #23 in the total number of NIA awards among domestic institutions of higher education in FY 2010 with total funding from NIA at \$7.6 million.
- 2.4. UAB as a culture of multidisciplinary research. UAB is a multidisciplinary academic and research institution. While research is well supported by traditional extramural funding, it is dramatically stimulated by a rich culture of interdisciplinary collaboration supported through University Wide Interdisciplinary Research Centers (UWIRCs) unique to the institution. The network of UWIRCs is supported by a university investment of over \$5 million annually. It is important to note that all Centers must go through a rigorous approval process to must maintain their activity to retain the appellation (http://main.uab.edu/show.asp?durki=88869). To be designated a UWIRC, an entity, at a minimum, must demonstrate sponsorship from more than two UAB schools. Additionally, potential UWIRC are reviewed by a Research Advisory Group based upon a clearly defined set of criteria: substantive interdisciplinary faculty involvement; provision of research infrastructure; contribution to the intellectual environment so as to enhance faculty and student recruitment, development and retention; a financial base to support center and core activities; internal and external review processes to assure quality and productivity; and leadership in the integration of research and service including community outreach or partnerships. Centers receiving this designation are funded for three years at varying levels with 70% coming from the Deans' share of indirect expense recovery and 30% from the sponsoring schools (although, sponsoring schools may contribute more independently). The resources of these centers are available to investigators conducting research if the research overlaps with the center's mission.

The Specific Aims of the proposed Translational Nutrition and Aging Research Program figure prominently in the key missions of the Center for Aging (Director: Richard M. Allman, MD), the Nutrition and Obesity Research Center (Director: David B. Allison, PhD), and the Center for Outcomes and Effectiveness Research (Director: Kenneth G. Saag, MD and Co-Director: Michael M. Morrisey, PhD). Strong letters of support from these Centers' Directors provide unequivocal evidence of institutional commitment for the proposed program which is: 1) cross-cutting across these three already vibrant Centers and 2) strongly aligned with the overarching goals of each of the Centers. Moreover, the Candidate occupies leadership roles within each of these Centers and plans to capitalize on these positions in combination with the high quality of UAB's institutional research environment comprised of a solid core of key faculty members either already or willing to collaborate with the candidate in the area of nutrition and aging.

3. Primary Intramural Collaborations. UAB is a world-renowned leader in three domains whose missions are most germane to the development of a Translational Nutrition and Aging Research Program. These include: 1) geriatrics, gerontology, palliative and supportive care research, education, and clinical care; 2) nutrition and

obesity research, education, and clinical care; and 3) patient-centered outcomes and comparative effectiveness research and training.

- 3.1. Geriatrics, Gerontology, Palliative and Supportive Care Research, Education, Clinical Care, and Service. The aging program at UAB is comprised of a broad-based, comprehensive, and integrated set of activities that emanate largely from the UAB Center for Ag ing and the Division of Gerontology, Geriatrics, and Palliative Care located within the Department and School of Medicine.
- 3.1.1. The UAB Center for Aging (CFA). The UAB Center for Aging is an interdisciplinary community that promotes the health and well-being of older adults

# 3.1. Geriatrics, Gerontology, Palliative and Supportive Care Research, Education, and Clinical Care Program

- 3.1.1. UAB Center for Aging
- 3.1.2. UAB Geriatric Education Center
- 3.1.3. UAB Gerontology Education Program
- 3.1.4. Resource Center for Minority Aging Research
- 3.1.5. Southeast Center for Excellence in Geriatric Medicine
- 3.1.6. Reynolds Program
- 3.1.7. Birmingham/Atlanta VA Geriatric Research, Education, and Clinical Center
- 3.1.8. Division of Gerontology, Geriatrics, and Palliative Care
- 3.1.9. Geriatric-Affiliated Clinics

and their families through research, education, community programs, and specialized care. The Center's vision is to be a world leader in creating and using knowledge that will optimize function, enhance management of illness, and reduce health disparities among older adults. This University-Wide Center Interdisciplinary Research Center (UWIRC) was established in 1976, and encourages and coordinates the activities of the multiple disciplines represented by the UAB Schools of Business, Dentistry, Education, Engineering, Health Professions, Medicine, Nursing, Optometry, Public Health, and the College of Arts And Sciences to fulfill its mission. Membership includes 201 faculty members representing all schools across the UAB campus. The Center for Aging is the only UWIRC with sponsorship from the deans of all UAB Schools and the College of Arts and Sciences.

The Center's mission and goals are met through a wide variety of programs under the overall leadership of the Director, Richard M. Allman, MD (See Letter of Support.). Dr. Allman reports to the Vice President for Research, the Senior Vice President and Dean of Medicine and the other sponsoring deans. The Director, three Associate Directors (Karlene Ball, Marcas Bamman, and John Mountz), and the Assistant Director (Patricia Sawyer) serve as the Executive Committee and provide leadership and oversight for all aspects of the Center's programs. The Steering Committee includes all of the members of the Executive Committee, additional faculty members appointed by the Director and sponsoring deans, and program directors to assist with providing guidance for the development, on-going evaluation, and administration of the Center's programs. Dr. Locher currently serves as a member of the Steering Committee and Directs the Public Policy and Aging Program. Dr. Allman has committed to promote Dr. Locher as an Associate Director of the Center for Aging to reflect the anticipated increased focus on Translational Nutrition and Aging Research as a formally designated Research Program within the Center for Aging concomitant with the funding of this Award.

An External Advisory Committee (EAC) of nationally recognized experts in aging meets every three years to provide recommendations about the Center's programs to the Director and the Steering Committee. The members of the October 2010 EAC described the Center for Aging and its programs as a "national treasure." Deans, Department Chairs, and other Center Directors provide ongoing guidance on how the Center can most effectively carry out its mission. A Community Advisory Committee consisting of representatives of not-for-profit community organizations and service organizations and businesses with interests in the problems of older adults meets regularly with the Center Director to provide recommendations to help the Center be more responsive to the needs of older adults in the community. A Board of Advocacy made up of donors and community leaders committed to the mission of the Center provides guidance and leadership for community outreach and development activities. Dr. Locher regularly meets with the EAC, the Community Advisory Committee, and the Board of Advocacy. All are supportive of the initiatives led by Dr. Locher. In fact, Dr. Locher was awarded the 2011 Center for Aging Faculty Service Award in recognition of her leadership role in the Center for Aging and in fostering community partnerships for research activities.

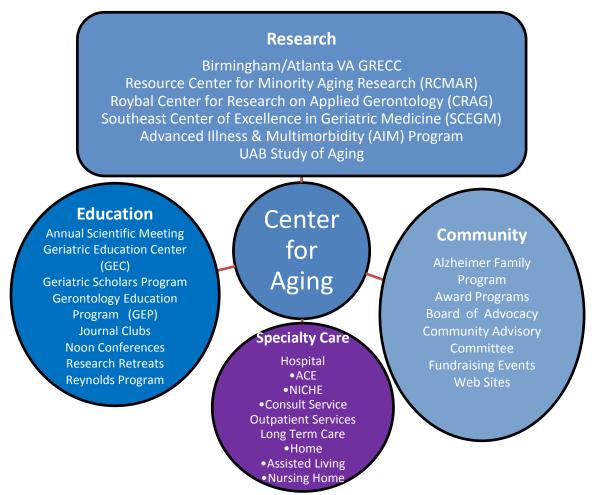
Research, education, community programs and specialty care services all have designated leaders that are supported by the administrative infrastructure of the Center for Aging (Figure 3 on next page shows extramurally funded research programs in addition to education, community and specialty care programs.). Many of these programs, such as the Geriatric Research, Education, and Clinical Center (GRECC), the

Resource Center for Minority Aging Research (RCMAR), the Southeast Center of Excellence in Geriatric Medicine (SCEGM), the UAB Geriatric Education Center (GEC), the Gerontology Education Program (GEP), and the Reynolds Program have their own internal and external advisory groups. <u>Dr. Allman has committed to designate the Translational Nutrition and Aging Research Program as one of the recognized and highlighted externally funded research programs of the Center for Aging. The activities of the other research programs have missions that are completely distinct, yet complementary, to the proposed program.</u>

- 3.1.1.1. Center for Aging core services. Support for Center for Aging research and other program initiatives are offered through multiple cores, including an Administrative Core, Investigator Development Core, Community Liaison Core, Cell Senescence Culture Facility, Data and Analysis Core, and Muscle Research Laboratory. The CFA Administrative Core is supported by UWIRC funds, the GRECC, SCEGM, GEC, and the Reynolds Program. It provides operational, administrative, and financial assistance to all CFA programs. The CFA Associate Directors each use CFA support to foster research program development in their respective areas of responsibility - Social Behavioral Science, Translational Research, Basic Science, and Advanced Illness and Multi-Morbidity. Dr. Allman has committed to providing Dr. Locher 2.4 person months for a Program Manager as well as additional support as needed for Administrative infrastructure to support curriculum development. Specifically, Ms. Janet McCoy, MPA (Program Administrator within the Division of Gerontology, Geriatrics, and Palliative Care) will provide primary support for Dr. Locher in assisting her with organizing the activities of the program. Additionally, Ms. Channing Ford, MPA MA, will assist Dr. Locher in developing core curriculum. Ms. Ford serves as Education Program Director for the Division of Gerontology, Geriatrics and Palliative Care. She will assist Dr. Locher in integrating the proposed curriculum for the Translational Nutrition and Aging Research Program into a cohesive educational strategy within existing programs and to promote the K07 educational programs more effectively to UAB and community partners.
- 3.1.1.2. Center for Aging pilot grants. Since October 2008, the Center for Aging has awarded 20 pilot grants and enabled 3 UAB junior faculty members to get NIH diversity supplement awards. This has been done in partnership with the Resource Center for Minority Aging Research, the Roybal Center, the Advanced Illness and Multi-morbidity (AIM) Program, the Southeast Center of Excellence in Geriatric Medicine (SCEGM), the Department of Nutrition Science, and the UAB Center for Clinical and Translational Science (CCTS). Many of these projects have led to larger studies funded by extramural sources such as the National Institute on Aging, other NIH institutes, the Department of Veterans Affairs and other federal agencies, the Alzheimer's Disease Association, the American Federation for Aging Research, and other private foundations. Dr. Allman has committed to partner with Dr. Locher in combining Center for Aging pilot grant monies with the Translational Nutrition and Aging Research Program pilot grant monies to support quality project that require combined or supplemental funding.
- <u>3.1.1.3. Center for Aging contributions to faculty recruitment and retention.</u> The Center for Aging has played important efforts in the recruitment and retention of multiple faculty members at UAB over the years. Dr. Allman, in his role as Director of the Center for Aging and especially in his role as Director of the Division of Gerontology, Geriatrics, and Palliative Care. Undoubtedly, he will continue in this capacity. <u>Dr. Allman has committed to support recruitment and retention of faculty with expertise in nutrition and aging within his own units and in partnership with others.</u>
- <u>3.1.1.4. Center for Aging Weekly Scientific Seminar Series.</u> The Center for Aging fosters research through support of a weekly interdisciplinary Scientific Seminar Series and sponsorship of interdisciplinary research retreats and conferences. The Center's Data Management and Analysis Core (DMAC), offers a monthly educational seminar on biostatistical issues and aging research. <u>Dr. Allman has committed to sponsoring at least one nutrition and aging speakers at its seminar series per year.</u>
- <u>3.1.1.5. Center for Aging website.</u> The Center maintains a website at <a href="www.aging.uab.edu">www.aging.uab.edu</a> to provide information on UAB programs on aging. Additionally, the Center for Aging sponsors <a href="www.AgeWell.com">www.AgeWell.com</a>, a website designed to help persons in the community find information related to aging. New topics, written to be understood by a lay audience, are resources of the Center for Aging that while benefitting the community may also enhance research activities related to recruitment and philanthropy. <a href="Dr. Allman has committed to feature the Translational Nutrition and Aging Research Program on the Center for Aging website.">www.aging.uab.edu</a> to provide information on UAB programs on aging. Additionally, the Center for Aging New topics, written to be understood by a lay audience, are resources of the Center for Aging that while benefitting the community may also enhance research activities related to recruitment and philanthropy. <a href="Dr. Allman has committed to feature the Translational Nutrition and Aging Research Program on the Center for Aging website.">Dr. Locher has previously contributed to AgeWell and will continue to do so.

3.1.1.6. Support of the Public Policy and Aging Program. The Candidate, Julie Locher, PhD MSPH has provided leadership for the Public Policy and Aging Program, a joint venture between the Center for Aging and the Lister Hill Center for Health Policy. In collaboration with AARP Alabama, the Public Policy and Aging Program has sponsored annual conferences featuring leading experts from across the nation and focused on state-of-the-art issues of relevance to regional and national policy makers and program leaders. Topics have included the geriatric health care professional workforce shortages, the impact of the economic downturn on older adults, and hunger among older adults. Dr. Locher and her colleagues are currently preparing for the 5<sup>th</sup> Annual UAB/AARP Aging Policy Conference. The focus of the conference this year will be on Environmental Threats to Healthy Aging. Dr. Locher directs these activities and has always ensured that some aspect of Nutrition and Aging are integral with the program content. She will continue to promote Nutrition and Aging in future conferences. Dr. Allman and Dr. Morrisey (Director of Lister Hill Center for Health Policy) have committed to support both Dr. Locher with salary support and to provide financial support for the annual conference.

Figure 1. Center for Aging Programs.



<u>Aging Research.</u> The Center for Aging's goals are guided by a strategic plan finalized in 2008 with guidance from the provost, VP for research and all sponsoring deans, and reviewed annually by the Center for Aging Strategic Plan is aligned with the University and School-based Strategic Plans to ensure optimal synergy for its' programs with other institutional initiatives. Dr. Locher's goals are synergistic with the goals of the Center for Aging. These goals and related benchmarks include:

(1) Expand the cadre of Center investigators with extramural funding pursuing basic, clinical, phase I translational, phase II translational, and public policy research on aging. Benchmarks: Over the next three years, the Center proposes to increase the number of principal investigators with funding from NIA from 17 UAB investigators to 21 and to submit a competitive renewal application for the NIA-funded P30 Deep South RCMAR. An explicit goal of the Translational Nutrition and Aging Research

Program is to increase the Research Base, including in terms of extramural funding, in the area on nutrition and aging.

- (2) Establish the Center as a leader in fostering and developing future independent PhD and MD translational research scientists in aging while complementing UAB strategic initiatives in cardiovascular biology, cancer, diabetes and obesity, infectious disease, and neuroscience. Dr. Allman and Dr. Locher have discussed collaborative efforts with the leaders of initiatives in all these areas and the cross-cutting areas of outcomes, health disparities, and translational research. The Center for Aging is committed to increasing collaborative pilot grants, enrichment and research training activities, and faculty retention and recruitment efforts in these areas. Benchmarks: Assist at least 3 junior faculty members to obtain career development awards and four investigators to get their first independent R-type award from the NIH. Submit a T32 training grant in collaboration with the Nutrition and Obesity Research Center (NORC) on Aging Nutrition, Obesity, and Energetics. Dr. Locher serves as the Associate Director for Enrichment of the NORC, as well. Her responsibilities include fostering research training activities and promoting nutrition and aging research. She will play a key role in leading these initiatives. Dr. Allman has committed to support quality research related to nutrition and aging and will support hiring of faculty in this area of investigation. Both Drs. Allman and Dr. Allison (Director of the NORC) have committed to promote Nutrition and Aging as a focus area at UAB.
- (3) Improve gerontology and geriatric education across all UAB Schools and through educational opportunities for practitioners, professionals, older adults, and their family members. Benchmark: Provide career development support for faculty in all UAB schools through the RCMAR, SCEGM, GEC, GEP and our pilot grant programs. Dr. Locher will contribute to these efforts through planned curriculum development to be integrated into these established educational activities.
- (4) Foster Phase I translation of Center research into the development and implementation of inpatient and outpatient geriatric clinical programs at UAB and across the UAB Health System. Benchmark: Obtain funding to implement and evaluate at least two clinical innovations within the UAB Health System based upon work being done by our clinician educators. Dr. Locher's focus on transition of care research, especially as it relates to nutritional support, is completely consistent with this goal of the Center for Aging. Dr. Locher has already partnered with Dr. Kellie Flood (Director of the Acute Care for Elders Unit at UAB Highlands Hospital) to support translational research related to nutrition processes of care in acute care settings and during transitions of care.
- (5) Strengthen the translation of Center public policy research to play prominently in local, state, and national aging program and policy development, thus elevating the Center's impact on the health and well-being of older adults in Alabama and across the nation. Benchmark: Hold annual public policy and aging conferences that lead to at least one newly funded initiative at UAB. Dr. Locher is the Director of the Public Policy and Aging Program, jointly sponsored by the Center for Aging and the Lister Hill Center for Health Policy. The annual public policy and aging conference, of which Dr. Locher spearheads, is now in its' 5<sup>th</sup> year. The conference will continue to focus on issues relevant to Translational Nutrition and Aging Research. The 2011 conference focused on hunger and food insecurity among older adults; and the 2012 conference will focus on environmental threats to healthy aging (including the food environment). Dr. Locher will plan future conferences on topics relevant to nutrition and aging, including, e.g., transitions of care and nutritional support. As described above, Dr. Allman and Dr. Morrisey provide financial support for the aging policy conference and will continue to do so. Dr. Allison has also committed to support this activity when it relates to Nutrition and Aging.
- (6) Continue efforts to position the Center prominently in the community, thereby enabling the expansion of public—private partnerships to grow the Center's research and service portfolio. The CFA will continue to partner with the Development Office and work to disseminate research findings into practice within the community. Benchmark: Increase annual philanthropic support by at least 50% from ~ \$90,000 to \$135,000. Dr. Locher participates in all fundraising initiatives sponsored by the Center for Aging and she will continue to do so. Dr. Locher currently serves on 1) the committee to develop the Alabama State Plan on Aging for the Administration on Aging and 2) the Advisory Council for the Alabama Quality Assurance Foundation (See descriptions below.).

3.1.2. Geriatric Education Center (GEC). The GEC, supported by a five-year renewable grant from the US Department of Health and Human Services Health Resources and Service Administration, is designed to support the training and retraining of health care professionals focused on the care of the complex older adult. The Director is Dr. Cynthia Brown, a geriatrician and physical therapist (who provided a letter of support for the proposed program). The GEC sponsors, co-sponsors, or facilitates a number of educational programs including interdisciplinary training programs in geriatrics for health professionals, annual conferences, and clinical experiences for interdisciplinary audiences. The Steering Committee of the UAB GEC is comprised of faculty representing Dentistry, Medicine, Nursing, Occupational Therapy, Optometry, Physical Therapy, Social Work, Pharmacy, and Nutrition (which was only most recently added as a focus area).

A key program of the GEC is the <u>Faculty Scholars Program</u>, which supports the training and retraining of faculty and preceptors in geriatric topics (themes) targeted at improving healthcare quality for older adults experiencing chronic and advanced illness and improve care coordination, symptom management, and medication management. The Faculty Scholars Program consists of a 160-hour curriculum available to faculty throughout the state and a match between trainees and appropriate mentors. The curriculum consists of half-day and day-long workshops, group projects, online curriculum, and independent research projects. More than 40 faculty members have participated in the annual Faculty Scholars Program. Its' current class of 25 faculty members represents all of the disciplines noted above. Dr. Locher currently serves as a mentor in the Faculty Scholars Program for one scholar who is a nutrition scientist from the University of Alabama (Dr. Jeannine Lawrence). As part of the Translational Nutrition and Aging Research Program, Dr. Locher proposes to develop in collaboration with key colleagues a new day-long workshop focused on Nutrition and Aging.

Another key program of the GEC includes the <a href="Inter-professional Geriatric Conference">Inter-professional Geriatric Conference</a>, which is held yearly. More than 490 health professional students have participated in the annual inter-disciplinary team training sponsored by the GEC. Attendance exceeds 200 health care providers and trainees representing multiple disciplines from across the state of Alabama. Continuing education credits are offered for attendees. The structure of the conferences is to divide the program into "Tracks". In a future conference, Dr. Locher proposes to develop a Track in Nutrition and Aging (See Description in Section 4 Career Development/Training Activities during Award Period.).

There are two opportunities within the GEC for clinical experiences for interdisciplinary audiences: The Interprofessional Clinical Experience (ICE) and the <u>Geriatrics Scholars Program</u> (The latter is directed by Dr. Kellie Flood who is fully supportive of partnerships with Dr. Locher.) The ICE program focuses primarily on nursing home care, while the Geriatrics Scholars Program focuses on training health care professionals in a hospital setting regarding care of older adults. There is a two-day orientation, followed by monthly lunch and learns, and clinical rotations. Each experience is two years long and each scholar has a requirement to complete a scholarly project focused on process improvement. The first class, consisting of 18 nurses, is wrapping up their second and final year of training. The second class of 15 is beginning their second year in the program and the third class has just enrolled 19 participants, including nurses, physician assistants, a speech therapist and a pharmacist in collaboration with the Veterans Administration Medical Center in Birmingham. Previous focus areas have included programs designed to improve communication between staff, patients and family; reduce fall risk in certain units; and increase staff awareness of geriatric issues. As part of the Translational Nutrition and Aging Program, Dr. Locher proposes to add to the two-day orientation curriculum a module on Nutrition and Aging that she will develop in partnership with Dr. Flood focused on nutritional process of care in the hospital setting and with transitions of care to the home.

3.1.3. Gerontology Education Program (GEP). The GEP (directed by Dr. Patricia Sawyer, who is supportive of the proposed Program), jointly sponsored with the College of Arts and Sciences since 1980 and the School of Health Professions since 1993, offers courses leading to an Undergraduate Minor and a Graduate Certificate. The main goals of the Gerontology Education Program are to provide students with a thorough background in existing theory and research in gerontology and, thereby, to supplement their knowledge related to their primary professional disciplines with information that will enable them to address important issues related to aging. The GEP awards approximately seven Graduate Certificates a year. Dr. Locher teaches the graduate level Aging Policy Course with the GEP, wherein Nutrition and Aging Policies are the focus on one lecture.

The Gerontology Education Program annually offers two undergraduate and two graduate scholarships to students pursuing mentored aging-related research. The program also offers assistance to faculty committed to offering gerontology content into new or established courses, and support for medical and other health professional students pursuing mentored research projects over one to three-month periods. The Gerontology Education Program provides an increasing pool of potential graduate and post-graduate trainees who will be involved in gerontological education, service, and research. Patricia Sawyer, PhD, Richard Shewchuk, PhD (Health Administration) and Patricia Drentea, PhD (Sociology) are Associate Directors providing leadership for this program. In addition a committee of faculty representing Nursing, Physical Therapy, Psychology, Biology, and Health Behavior provides guidance for program implementation. Since 2008, scholarships have been awarded to students from biology, biostatistics, medicine, neurobiology, nutritional sciences, psychology, and sociology as well as to the Science & Technology Honors Program and the University Honors Program. Dr. Locher and Dr. Kellie Flood currently serve as Co-Mentors for Ms. Michelle Chang, a University Honors Program student, who is conducting a study of a hospital feeding assistance program for older adults.

Historically, the graduate level courses offered by the GEP have consisted of 3 credit hour courses. In 2010, the GEC and GEP partnered to develop three 1 credit hour courses that are offered online during the Summer Semester that meets partial requirements for the graduate level certificate. These courses include: Health Literacy and Aging, Cultural Competency and Aging, and Ethics and Aging. Dr. Locher proposes to develop a 1 credit hour course on Nutrition and Aging that can be offered through the GEP, that will increase the options available to advanced-level students who are interested in taking 1 credit hour courses (This is supported by Dr. Sawyer.).

- 3.1.4. Resource Center for Minority Aging Research (RCMAR). The Deep South RCMAR is NIA-funded and provides a research infrastructure for the following objectives: (1) establish a mechanism for mentoring research careers: (2) enhance cultural diversity of the professional workforce conducting research on the health of older persons; (3) conduct research on and disseminate strategies for recruiting and retaining African American older adults in research; (4) facilitate innovative strategies to support enduring research careers in minority health, and/or encourage the recruitment of established researchers to undertake research on minority aging health; (5) improve the research methods and tools necessary to conduct rigorous and comparable research on diverse populations; (6) advance scientific knowledge leading to a decrease in health disparities; and (7) disseminate to scientific and non-scientific communities research results addressing the resolution of health disparities through the improvement of minority health, particularly for older African Americans. The Deep South RCMAR is composed of three interacting and collaborative cores (Administration, Investigator Development, and Community Liaison) created by and built upon the unique strengths of four partnering institutions (Morehouse School of Medicine, Tuskegee University, University of Alabama, and the University of Alabama at Birmingham). The cores provide an infrastructure to provide training and mentoring programs, fund three pilot projects per year, and nurture community relations needed to meet the stated objectives. The Deep South RCMAR and the UAB Minority Health and Health Disparities Research Center (See below for a description.) partner on joint initiatives. Dr. Richard Allman serves as PI and Dr. Mona Fouad serves as Co-PI of the RCMAR and Dr. Fouad serves as Director of the Minority Health Center. Dr. Locher serves as a faculty mentor on both of these grants and will continue to participate in Nutrition and Aging research and training activities aimed at understanding and eliminating health disparities (Dr. Fouad endorses Dr. Locher's partnerships.).
- <u>3.1.5. Southeast Center of Excellence in Geriatric Medicine (SCEGM).</u> The Hartford Foundation Southeast Center of Excellence in Geriatric Medicine (SCEGM) is a collaborative program with Emory University that provides salary support and a formal mentoring infrastructure for physician junior faculty members committed to academic careers in Geriatrics. Dr. Allman serves as the Director of the UAB SCEGM. The Translational Nutrition and Aging Research Program will be available to provide support to SCEGM mentees interested in pursuing related relevant pilot studies.
- 3.1.6. The Reynolds Program. The Reynolds Program is an inter-professional geriatric education program funded by the Donald W. Reynolds Foundation to establish a comprehensive program to improve physician education in Geriatrics. In collaboration with the GEC, this program has led to the development and implementation of new curricula not only to medical students in medicine, but in nursing, dentistry,

rehabilitation, optometry and social work. The Translational Nutrition and Aging Research Program will be available to provide support to SCEGM mentees interested in pursuing related relevant pilot studies.

- 3.1.7. The VA-funded Birmingham/Atlanta Geriatric Research, Education, and Clinical Center (GRECC). The VA-funded Birmingham/Atlanta Geriatric Research, Education, and Clinical Center (GRECC) provides infrastructure for research, clinical demonstrations, and geriatric education with a focus on mobility, continence, and end-of-life care. The annual budget of the GRECC is about \$1.7 million, and supports 7 doctoral level investigators that provide leadership for many UAB programs in aging including Richard Allman, Amos Bailey, Marcas Bamman, Cynthia Brown, Kathryn Burgio, Tim Garvey, Patricia Goode, Caroline Harada, Elizabeth Kvale, Alayne Markland, Gerald McGwinn, John Mountz, Richard Sims, and Lesa Woodby. The GRECC also supports investigators from Emory University that are based at the Atlanta VA. Dr. Locher collaborates closely with GRECC investigators and will continue to do so with this award in supporting nutrition and aging research.
- 3.1. UAB Division of Gerontology, Geriatrics, and Palliative Care. The Division of Gerontology, Geriatrics, and Palliative Care is located within the Department of Medicine, School of Medicine. It is directed by Dr. Richard Allman and has 53 faculty members and four Sections: Geriatric Medicine, Palliative and Supportive Care, Social and Behavioral Sciences, and Basic Sciences. The Division also has 9 postdoctoral fellows and supports more than 60 full-time staff members. Faculty development goals are to: identify and facilitate development of talented faculty to lead and work in all programs of the Division, ensure faculty progress in meeting performance goals and productivity metrics, and recruit new faculty to address strategic programmatic needs. As described above, Dr. Allman has committed to support Translational Nutrition and Aging initiatives through his multiple leadership roles. Through his role as Director of the Division, he currently is recruiting for a Section Director of Palliative and Supportive Care, as well as multiple faculty positions to support the Division's activities. Those with an interest in Nutrition and Aging would be looked upon favorably in recruitment efforts.
- <u>3.1.9. Geriatric Affiliated Clinics.</u> UAB offers a number of services and specialized clinical programs for older adults, including those most relevant to the proposed Program: Geriatric Clinic; Geriatric Heart Failure Clinic; The Alzheimer Family Program; The Acute Care for the Elderly Program.
- <u>3.1.9.1. Geriatric Clinic.</u> The Geriatric Clinic provides primary care and specialty services to older adults at the William Clifford and Margaret Spain McDonald Clinic. The clinic is supported by geriatricians, advanced practice nurses, social workers, and other geriatric specialists. Dr. Locher has recruited extensively from the UAB Geriatric Clinic for study participants in NIA-supported research.
- <u>3.1.9.2. Geriatric Heart Failure Clinic.</u> The UAB Geriatric Heart Failure Clinic provides comprehensive care to older adults with systolic and diastolic heart failure. The goal of the clinic is to provide comprehensive care to older adults with heart failure, to reduce morbidity and mortality, and help restore and maintain functional independence and quality of life through maximum relief from symptoms. The Clinic is directed by Dr. Ali Ahmed (Director of the Clinic) is particularly interested in collaborating on projects related to nutrition and aging in geriatric heart failure patients.
- 3.1.9.3. The Alzheimer Family Program. With support from the Jefferson County Office of Senior Citizens' Services, the Center for Aging sponsors the Alzheimer Family Program. This program provides educational information for caregivers, health professionals, and others involved in meeting the needs of older adults with Alzheimer's disease. In addition, seven caregiver support groups are regularly offered. Elizabeth Roberts and Elizabeth Hope serve as the coordinators for the Alzheimer Family Program under the leadership of Virginia Wadley, the Director of the Center's Dementia Care Research Program. Dr. Locher has been supportive of this program by providing educational materials related to nutrition, caregiving, and physical activity for the support groups.
- <u>3.1.9.4. The Acute Care for the Elderly Program.</u> Kellie Flood, MD has provided leadership for the development of the Acute Care for the Elderly (ACE) Program for University Hospital and UAB Highlands. The ACE Unit is helping to improve quality and outcomes of care, while at the same time reducing readmissions and length of hospital stay. The ACE Unit was selected for the UAB Health System Award for the most

innovative clinical program in 2010. In addition, an abstract describing cost-savings of more than \$400,000 due to the program was selected as one of 3 oral presentations at the 2011 American Geriatrics Society Meeting. Dr. Locher and Dr. Flood have begun collaborating on relevant nutrition and aging programs related to these initiatives and will continue to do so without support from this award, but enhanced by support from the K07.

3.2. Nutrition and Obesity Research, Education, and Clinical Care. The nutrition (and obesity) program at UAB is comprised of a broad-based, comprehensive, and integrated set of activities that emanate largely

from the UAB Nutrition and Obesity Research Center and the Department of Nutrition Sciences located jointly within the School of Health Professions and the Department and School of Medicine.

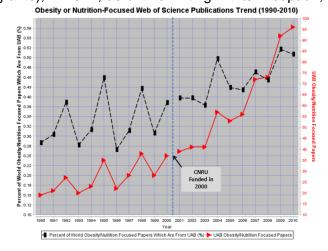
<u>3.2.1. Nutrition and Obesity Research Center.</u> In 1996, Dr. Roland Weinsier established UAB's Obesity-Nutrition Research Center as a Pilot Center. It became the first UAB Pilot Center to be elevated to the status of a University-Wide Intramural Research Center. In 2000, the Center was renamed to the

## 3.2. Nutrition and Obesity Research, Education, and Clinical Care

- 3.2.1. Nutrition and Obesity Research Center (University-Wide Intramural Research Center)3.2.2. NIDDK Nutrition Obesity Research Center3.2.3. NIDDK Diabetes Research & Training
- Center 3.2.4. Department of Nutrition Sciences
- 3.2.5. Clinics Operated by Nutrition and Obesity Researchers
- 3.2.6. Alabama Obesity Initiative

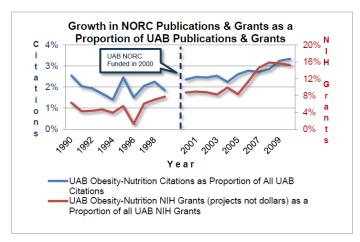
Clinical Nutrition Research Center (CNRC) when the Center was awarded a prestigious NIDDK CNRC. At NIH's request and with UAB approval, the Center was renamed a Nutrition Obesity Research Center (NORC) in 2010. The NORC's membership increased from 60 total members at NIH inception in 2000 to 134 at present, hailing from 8 different UAB Schools and its one College. In 2000, the NORC's research base included 15 R01s or K-awards that were clearly related to nutrition or obesity; this increased by 93%, to 29 such grants, in 2006 and another 17%, to 34 (including R00 grants), in 2012, as of this writing. At its' inception,

the NORC had no training grants; in 2006 it had two; now it has three. Over the years, the NORC also has raised substantial philanthropic support and has generous and committed support from UAB itself, which sees the NORC as a vital element in enriching UAB as a hub for interdisciplinary nutrition and obesity research and training. The NORC fosters a multidisciplinary approach to understanding and ultimately alleviating suffering caused by obesity and nutrition-related health problems. Specific Aims include: (A) Research: To foster multidisciplinary research focused on the bases of nutrition/obesity-related disorders, (B) Training: To offer high-quality training in obesity and nutrition research to UAB and to the scientific community, (C) Translational Services: To enhance patient care and public health via translation of research findings.



The NORC's impact on science at UAB includes major growth in extramural research support, training grants, academic enrichment, and philanthropic fund-raising. Yet, its' ultimate goal is to advance understanding

of nutrition and obesity through scientific inquiry. The figures at right quantitate success and growth in grant acquisition and publication output and impact from 1990 to 2010 (the last year for which complete data are available) extracted from *NIH RePorter* and *Web of Science* (search terms available on request). The increase in the total number of UAB nutrition/obesity focused publications and grants could easily be shown, but here three 'normalized' indices are plotted: (A) The proportion of all UAB publications that are obesity/nutrition publications; (B) The proportion of all NIH grants at UAB which are obesity or nutrition-oriented; and (C) The proportion of the world's obesity/nu trition-focused publications that are from



UAB. By all of these stringent indicators, UAB's funding, scientific output, and scientific impact have steadily increased. Not only has the quantity of its' publication output increased, but averaged across the last 10 years, the median number of times UAB obesity/nutrition-focused papers were cited exceeds by 70% the median for obesity/nutrition-focused papers in the world's literature, indicating a high level of impact as well.

David B. Allison, PhD, serves as NORC Director, and has been an obesity researcher for all of his career. In 2011, Dr. Allison stepped down as director of UAB's Section on Statistical Genetics to allow himself to focus more fully on obesity and energetics research. He was appointed Associate Dean for Science in UAB's School of Public Health and charged with and given resources for developing the Office of Energetics, which will provide additional resources for nutrition and obesity research to the UAB community. Dr. Allison holds secondary appointments as Professor in the Departments of Biostatistics, Nutrition Sciences, Medicine, and Genetics. He was conferred the distinction of *Distinguished Professor* by the UAB Board of Trustees in 2011 and has received multiple international awards for his research and mentoring, including the 2009 TOPS Award from the Obesity Society. W. Timothy Garvey, MD, NORC Associate Director, is an internationally recognized expert in obesity, especially as related to metabolic dysfunction and diabetes. Dr. Garvey holds the endowed Charles Butterworth Professorship and is Chair of the Dept of Nutrition Sciences. He serves as Director of the NIH-funded Diabetes Research and Training Center (DRTC). Drs. Garvey and Allison use their complementary expertise and MD and PhD backgrounds to facilitate interdisciplinary and translational research in the NORC. Both Drs. Allison and Garvey are strongly impressed with Dr. Locher and supportive of her career leadership (see Dr. Allison's letter of support) as evidenced by her Appointment as Associate Director of Enrichment of the NORC.

The NORC is aided by an Action Committee that effectively serves as an executive committee. The Action Committee, consisting of Drs. Allison, Garvey, G. Hunter, T. Nagy, and C. M. Brooks, offers general advice and vets decisions on new directions for NORC, faculty recruiting, and new member applications. The NORC has 4 scientific cores whose directors and co-directors are: Drs. WT Garvey, JR Fernandez, R. Desmond, TR Nagy, R. Kesterson, S. Watts, and B Gower. The Academic Enrichment Program is directed by Drs. Locher and Allison. The pilot grant program is run by Dr. S. Barnes. The aforementioned individuals, including Dr. Locher, administer their components and also have a major voice in determining the NORC's overall direction.

The NORC relies on periodic formal evaluations from an External Advisory Committee (EAC) consisting of 5 outstanding accomplished obesity-nutrition scientists from outside UAB representing basic animal model biology, human genetics, human physiology, clinical research, and community-based research. In particular, this EAC must approve the annual appointment of a NORC 'Named New Investigator' (NNI) who is selected from among the pilot and feasibility grant recipients. In addition to receiving their pilot and feasibility grant, the NNI receives support for roughly 30% of their salary for one year to assure they have time to commit to developing themselves as a nutrition or obesity researcher.

<u>3.2.1.1. NORC core services.</u> The NORC maintains 4 cores for cost-effective and enhanced access to technology. Cores perform specialized analyses that most investigators would be unable to set up in their own labs and provide routine services (e.g., serum glucose assays) at reduced cost. This enables investigators to obtain pilot data and run studies more cost-effectively, which improves their ability to garner extramural research funding. Support for these cores is has been provided primarily by the NIDDK, the UWIRC, and other government, foundation, and industry grants. The Cores include: a Metabolism Core (PI: Barbara Gower), a Biostatistics Core (PI: Renee Desmond), a Genetics Core (PI: W. Timothy Garvey, Associate Director: Jose Fernandez), and a Small Animal Pheotyping Core (PI: Tim R. Nagy). Dr. Barbara Gower is a key collaborator of Dr. Locher's on community-based initiatives. The Metabolism Core will continue to play a key role in the proposed Program in Translational Nutrition and Aging Research (Dr. Gower will serve as a member of the Internal Advisory Committee.).

<u>3.2.1.2. NORC training and pilot grants.</u> Over the years, the NORC has increased its' training grant support in a steady and deliberate manner. The NORC went from initially holding no training grants to now holding 2 T32s and 1 industry training grant (especially valuable because it can support individuals who are not US citizens or permanent residents). Collectively, these grants support post-doctoral training, pre-doctoral training, and summer medical students and are open to NORC members from any department at UAB. The NORC has a plan to obtain additional training grants, including a T32 Post-doctoral application to be submitted

to NIA focused on Nutrition and Aging under the leadership of Drs. Locher, Allison, and Allman. The NORC also has succeeded in securing no fewer than 10 training slots for obesity/nutrition-related post-docs on multiple T32 grants held by PIs throughout UAB. In doing so, the NORC has aided young investigators' careers, promoted UAB's obesity-related research, assisted other T32 directors in filling slots when they were struggling, and recruited minority trainees. Notably, ~25% of the NORC's post-doc trainees are minorities, compared to 8% nationwide (according to NSF) and 5% at UAB overall.

Dr. Stephen Barnes directs NORC's Pilot Grant Program. An RFA is distributed and advertised throughout UAB annually. Applications from junior UAB faculty or more senior investigators changing their research areas to include topics related to nutrition and obesity are reviewed using NIH format by 2 or more non-UAB reviewers. A NORC committee then awards grants based on the reviews, scores, and NORC goals. In the past 3 years, \$747,510 (including Named New Investigator funds) has been awarded to 18 investigators in 5 different schools. Funds came from the NIDDK P30, UWIRC funds, ARRA funds obtained for promotion of specific topics in obesity research, and the NIDDK-funded Named New Investigator Program (which funds ≥\$50,000 worth of effort and fringe for 1 pilot grant recipient, above and beyond his or her pilot grant, to enhance his or her research focus). Pilot grants are typically \$25,000/year for 1 to 2 years. Dr. Allison has committed to supporting quality Nutrition and Aging trainees and investigators and will partner with Dr. Locher in identifying these scholars and financially supporting their work.

<u>3.2.1.3. NORC contributions to faculty recruitment and retention.</u> With respect to external recruitment, the NORC contributes to recruitment of nutrition/obesity investigators to UAB by providing financial support, by using the NORC itself as a point of attraction, and by partnering with on-campus leaders who have active searches underway and offering names of candidates who work in nutrition or obesity, with great success. Dr. Allison is committed to growing the Nutrition and Aging program at UAB and will support recruitment of quality external candidates to promote the proposed Program.

The NORC also encourage UAB investigators who are not yet conducting nutrition/obesity research to do so via personal contacts and the NORC's resources. This is accomplished most notably through its' sponsorship of Researcher Roundtable Discussion. The discussion focuses on issues related to Nutrition and Obesity studies, featuring NORC and related UAB faculty. These 2-hour forums bring together a variety of scientists, and are widely publicized throughout campus. The roundtables bring together scientists who may not otherwise know one another well, familiarize them with one another's work, and provide opportunities for future collaborations on new studies. Primetime to sponsor these events are when a sizeable number of new scientists are arriving at UAB or when NORC members are considering new investigations. Of note, Dr. Allison has already committed to sponsor a Researcher Roundtable Discussion on Aging and Nutrition to be held on March 2<sup>nd</sup>, 2012 and led by Drs. Locher, Allman, and Allison.

<u>3.2.1.4. NORC enrichment program.</u> The NORC sponsors a number of activities related to enrichment, including a Seminar Series, Workshops and Special Events, a Conference Series, and a Creativity Prize.

NORC seminars occur Tuesdays from noon to 1:00 from Sept to May annually. An outstanding cast of internationally recognized speakers lecture on topics related to obesity and nutrition from many perspectives. Topics range from molecular genetics to mathematical models, behavioral psychology, clinical trials, public policy, and developmental biology. Seminars are videotaped and placed on the NORC website (<a href="http://www.norc.uab.edu/courses/seminars">http://www.norc.uab.edu/courses/seminars</a>) for free viewing. NORC members who miss a lecture can view the video at their convenience. Attendance averages ~50 persons per seminar.

Many aspects of scientific careers are not covered in traditional graduate training. Examples include aspects of grant writing, presenting research in the media, job interviewing, negotiating in academia, rising up in academic leadership, and managing time to ensure productivity. Hence, the NORC sponsors a series of ~3 workshops (½ to full day duration) yearly (see: <a href="http://www.norc.uab.edu/courses/professionaldevelopment">http://www.norc.uab.edu/courses/professionaldevelopment</a>). Both UAB-based and national speakers are brought in to help conduct these workshops. NORC trainees report that they find these both valuable and enjoyable. The workshops are also a forum for trainees and senior NORC members to share experiences and advice.

NORC also sponsors occasional special scientific events or seminars (one or two per year) with, e.g., Nobel Prize winners. These events inform NORC members, but more importantly aim to inspire young and

senior members alike to reach for the stars in their research.

The NORC Conference Series is comprised of a program of national conferences on obesity research funded largely by NIH R13 grants. This elevates our national education efforts and national profile. The NORC host a conference roughly every 18 months. Conferences typically include several UAB speakers and multiple UAB trainnes are given stipends to attend. Past topics have been: (a) Adipogenic & Metabolic Effects of Antipsychotic Drugs; (b) Developmental Origins of Obesity; (c) The New Genetics; (d) Body Weight, Adiposity, Energetics, & Longevity, and (e) Design, Analysis, & Interpretation of Randomized Clinical Trials In Obesity. Video proceedings are freely available on NORC's website (<a href="http://www.norc.uab.edu/courses/conferences">http://www.norc.uab.edu/courses/conferences</a>). A planned conference series will focus on Quantitative Sciences and Nutrition and Obesity. This conference will include economic and policy analyses and modeling relevant to the proposed program.

A major NORC goal is to promote more *creative* and *impactful* (as opposed to simply *more*) research. Hence, NORC held a special competition, Creativity is a Decision, for the first time this summer. The response of both applicants and reviewers was overwhelmingly positive. The contest was open to all UAB grad students, post-docs, faculty & staff regardless of seniority. The NORC had 35 applicants and five winners were selected. The graduate level prize is \$1,000, \$2,500 for post-docs, and \$5,000 for faculty and staff winners. To collect, each winner must each submit their proposal to an extramural sponsoring authority (e.g., NIH, NSF) by November, 2011. It is not required that the proposal be funded, only that it be submitted. This prize is not a research grant, rather the cash prize is processed as a payment to the winner. Because initial indications are that this was very successful in provoking investigators to break out of the box, we plan to offer it again annually.

The NORC Enrichment Program is marked by: (1) a tremendous expansion of the NORC Training Program (including especially both Post- and Pre-Doctoral Opportunities), (2) the initiation of its' Experimental Creativity Promotion Program, and (3) the development of partnerships with other institutions designed to foster nutrition and obesity research and to implement research findings beyond UAB. The NORC's efforts include both The Alabama Obesity Initiative and several Translational Training and Education initiatives (all described below). Reflecting the growth of the NORC in these new areas, Dr. Julie Locher, the Candidate, was asked to serve as Associate Director of the Enrichment Program effective January 1, 2012 to support Dr. Allison especially in facilitating these new projects. Dr. Allison and Locher had been working closely over the past year on several other initiatives. This is clear indication of Dr. Allison's support of Dr. Locher and his interest in promoting the Nutrition and Aging Program (See Letter of Support.).

<u>3.2.1.5. NORC Strategic Plan synergistic with Program in Translational Nutrition and Aging Research.</u> The NORC's goals are guided by a strategic plan and consistent with the Specific Aims of the NIDDK P30 resubmission that was prepared in November 2011 and currently under review. Dr. Locher's specific aims for this Leadership Award are in sync with the aims of the NORC. These goals and related benchmarks include:

- (1) Expand faculty recruitment efforts. NORC supports recruitment through financial and non-financial means (e.g. identification of candidates). In the next 3 years, the NORC aims to contribute to the recruitment of at least 9 faculty members (3 per year) working in nutrition or obesity and to contribute financially to at least 6 recruitments. The NORC is especially eager to help recruit obesity and nutrition scientists working in the areas of aging, longevity and energetics, policy and economics, exercise science, cancer and energetics, and diabetes. In all of these areas, the NORC is especially (but not exclusively) interested in recruiting expertise in quantitative/mathematical sciences such as engineering, mathematics, statistics, computer science, physics, and econometrics. Dr. Allison and Locher are already conferring on collaborative recruitments with leaders in Departments such as Health Care Organization and Policy, Heath Behavior, Epidemiology, Nutrition Sciences, and Medicine. The NORC has partnered with many other departments and centers in the past and will do so again. Clearly, it is obvious that the NORC's plans for recruitment are directly in line with the planned program.
- (2) Work towards the creation of an endowment. During his time as Director of UAB's Section on Statistical Genetics, Dr. Allison conceived and led the successful fund-raising for creation of two endowed professorships. Such endowments have great value because once in place, they remain in perpetuity without constant effort. Dr. Allison has successfully fundraised \$1.5 million endowment for

obesity/energetics research. He also plan to raise endowment funds for other elements of obesity-related research and training, such as the Creativity Prize described above, a lectureship in obesity/energetics, or a studentship which can be used for non-US citizens. These endowments can support the proposed Program in Translational Nutrition and Aging Research.

- (3) Increase the number of Training Grants. Drs. Allison, J. Fernandez, and J. Locher are leading a drive to increase NORC training grants. This plan was initiated 18 months ago and resulted in submission of three NIH T32 grant applications: one was funded (NHLBI); one is pending (NIDDK); and one was not funded (resubmission to NICHD planned for May of 2013). We also plan to submit an R25 for obesity-related training to NIDDK in 2012. Finally, we aim to submit a T32 application for a post-doctoral training program on aging and energetics to the NIA in May of 2013. Drs. Allison and Locher have communicated with Dr. Allman, Director of UAB's Center for Aging UWIRC, and will partner with his center in preparing this application.
- (4) Increase program of national conferences. NORC has a program of national conferences funded largely by NIH R13 grants on obesity-related research, which elevates its' national education efforts and national profile. The NORC's first conference was on *Design*, *Analysis*, & *Interpretation of RCTs in Obesity* in Newark, NJ. Speakers included the luminaries of the field and showcased UAB investigators. Attendance exceeded 100 investigators representing academia, industry, and government (CDC & NIH). Our most recent event (July, 2011), funded by NIMH and NIDDK and titled *Adipogenic and Metabolic Effects of Antipsychotic Drugs*, was exceptionally well-received. The NORC plan to have one such conference every 18 months. Such activities are consistent with the proposed Program aim to submit an R24 application to build the nutrition and aging infrastructure.
- (5) Help Mentored Members Obtain Independent Extramural Funding and Build Their Careers. The NORC has 22 mentored members, obesity or nutrition scientists who have not yet obtained major independent federal funding for their obesity/nutrition research. The NORC aims to foster career development, and set a benchmark of at least 60% of these mentored investigators securing independent extramural research funding within the next 3 years. NORC will host 4 intensive day-long workshops in the next 18 months featuring experts on (A) Grant writing strategies in the current NIH system; (B) Creativity as a decision; (C) Revising and resubmitting applications; and (D) Taking the next step getting multi-investigator multi-disciplinary grants funded. Dr. Locher's submission of the Academic Career Leadership Award to build a cadre of nutrition and aging researchers is clearly consistent and complementary with this goal.
- <u>3.2.2. NIDDK Nutrition Obesity Research Center (NORC) Grant.</u> This grant (P30DK056336), one of only 12 such centers in the US, serves as the funding backbone of the UWIRC-supported Center. The NORC was competitively renewed in 2007 with a 21% increase in annual direct costs. A renewal application was submitted in November 2011. Funds support 4 scientific support cores, pilot and feasibility grants, and an academic enrichment program, the latter of which Dr. Locher serves as the Associate Director.
- 3.2.3. NIDDK Diabetes Research & Training Center (DRTC) Grant. UAB was awarded an NIH Diabetes Research & Training Center (P60DK079626) in 2008, one of only 7 such centers in the US. The DRTC focuses on developing new methods to treat, prevent, and ultimately cure diabetes and its complications. The DRTC is a multi-disciplinary operation with faculty researchers from UAB's Schools of Health Professions, Medicine, and Public Health, among other units. The DRTC has 5 research cores (pathology, animal physiology, human biology, metrics and health services research, and community research), a pilot and feasibility grant program, and enrichment activities that synergizes with NORC to enhance UAB's obesity and metabolism research environment. Much diabetes research focuses on aging matters. The Director of the DRTC (Dr. Tim Garvey) is strongly supportive of the proposed program.
- <u>3.2.4. Department of Nutrition Sciences.</u> The Department of Nutrition Sciences is primarily administered by the School of Health Professions with additional administrative reporting lines to the Schools of Medicine and Dentistry. The department has a distinguished history and is currently comprised of over 20 primary full-time faculty members and more than 90 staff, students, and postdoctoral fellows. The faculty includes a

multidisciplinary team of physician-scientists, PhD scientists, registered/licensed dietitians, and nurses working together in patient care, research, and education programs. The department is organized into four divisions: Molecular Nutrition and Genetics; Physiology and Metabolism; Clinical Nutrition and Dietetics; and Pediatric Nutrition. The department is located in the Susan Mott Webb Nutrition Sciences Building and in the adjacent Learning Resources Center. Both of these buildings are centrally located within the UAB Medical Center complex. The Webb Building provides more than 60,000 ft<sup>2</sup> of space dedicated to teaching, community service activities, and nutrition research, and includes world-class core facilities for multiple assessments in humans. Dr. Timothy Garvey is the Director of the Department and he has strongly endorsed the proposed Program.

- <u>3.2.5. Clinics Operated by Nutrition and Obesity Leaders.</u> On average, over 2,500 patients are seen each year in NORC-affiliated clinics. A synergistic relationship exists between the NORC and its associated clinics which are vigorously engaged in community outreach activities. The NORC provides the research infrastructure to support clinical research activities that, in turn, informs the research priorities and programmatic development of the NORC. The clinical settings provide opportunities for faculty and trainees to engage in translational research supported by the NORC. Clinics include:
- <u>3.2.5.1. The General Nutrition Clinic and the Department of Nutrition Sciences Inpatient Consultative Services.</u> The General Nutrition Clinic is part of The Kirklic Clinic, where NORC clinicians see patients who are referred from other physicians or who are self-referred. The consult service provides nutrition support care for inpatients within UAB's University Hospital System and the Birmingham Veterans Administration Hospital.
- <u>3.2.5.2. EatRight Weight Management Services.</u> The EatRight Weight Management Services, directed by Dr. Jamy Ard, has multiple medically supervised weight control programs with a variety of intervention approaches focused on treatment for obesity. An innovative component EatRight is the Nutrition Information Service (NIS). NIS provides up-to-date, accurate and useful nutrition and food information to the community and health care professionals through community workshops, a national hotline, and information fact sheets. Dr. Ard and Locher are Co-Pls of an NIA-supported randomized controlled trial investigating the effects of a lifestyle intervention on outcomes in older adults. Dr. Ard and Dr. Locher are increasingly interested in conducting cost analyses of various nutrition interventions in older adults (Dr. Ard is particularly supportive of the Proposed Program.).
- <u>3.2.5.3. The UAB Tone Your Bones Program.</u> Tone Your Bones includes a toll-free hotline, a nutrition and exercise class, plus a free lunchtime program where individuals can learn up-to-date information about osteoporosis. Ms. Beth Kitchin, PhD MS, RD, directs these activities. Dr. Locher served on Dr. Kithcin's dissertation committee that focused on a community-based intervention to increase vitamin D and calcium consumption among community dwelling older adults.
- 3.2.6. The Alabama Obesity Initiative. With Drs. Allison as Chair and Fouad as Co-Chair, the state of Alabama awarded UAB \$170,025 in 2010 to establish the Alabama Obesity Initiative (AOI). The AOI fosters collaborative efforts throughout the state (with UAB and other research organizations in AL) in an effort to generate extramural funding for research and research training in obesity. Four multi-institutional interuniversity wide obesity initiatives are currently under way and involve NORC faculty. The initiatives are organized into Working Groups that include: Translational Sciences (Clinical, Community, Policy, Outreach), Meetings and Conferences, Education, and Basic Science. Each Working Group may receive up to \$15K to invest in developing grant proposals for obesity research and research training. Appropriate expenditures of the working group may include, but are not limited to: consultant fees (e.g., for grant writing), pilot data, travel, software, local administrative support, etc. This is another exciting initiative only in its initial phase. Dr. Locher co-chairs the Education Workgroup with Drs. Allison and Jose Fernandez. It is expected that the state will refund the AOI. The AOI will support the activities of the proposed program.

3.3. Patient-Centered Outcomes and Comparative Effectiveness Research and Training. UAB has one of the most distinguished health services research and training programs in the world. This program

revolves around activities emanating largely from the Center for Outcomes Effectiveness Research and Education, the Lister Hill Center for Health Policy, the Department of Health Care Organization and Policy, the Division of Preventive Medicine, as well as other entities.

3.3.1. Center for Outcomes Effectiveness Research and Education (COERE). In May, 2009, Dr. Saag was appointed the Director of the UAB's Center for Outcomes, Effectiveness Research and Education (COERE). Established in 1998, the COERE multidisciplinary UAB is University-Wide Interdisciplinary Research Center. The COERE's mission is to maintain and continuously enhance a successful program of research on improving the quality and outcomes of health care in Alabama and across the nation. To accomplish this mission, the COERE 1) uses interdisciplinary teams to test innovations that promote evidence-based practice, reduce inequities in care for under-served and minority populations, and improve quality of life and functional outcomes for patients; 2) develops and tests innovative methods with application to important questions 3.3. Patient-Centered Outcomes and Comparative Effectiveness Research and Training.

3.3.1. UAB Center for Outcomes and Effectiveness Research and Education 3.3.2. Lister Hill Center for Health Policy 3.3.3. Training Grants in Outcomes, Cost Effectiveness, and Health Services Research

3.3.4. Deep South Musculoskeletal Center for Education and Research on Therapeutics 3.3.5. Center of Excellence in Comparative Effectiveness Research for Eliminating Disparities

3.3.6. National VA Quality Scholars Fellowship Training Program 3.3.7. Department of Health Care Organization and Policy

Organization and Policy
3.3.8. Division of Preventive Medicine

3.3.9. Division of Continuing Medical Education

in the delivery of health care; 3) trains and mentors students, fellows and faculty in these methods; and 4) serves as a resource to UAB faculty, health care systems, related organizations, government, and philanthropy to further disseminate outcomes research knowledge and expertise.

The COERE offers integrated scientific expertise and experience in health services and outcomes and effectiveness research. This expertise includes: quality measurement and improvement, implementation research, patient-based outcomes assessment, pharmacoepidemiology, epidemiological/population-based health services research, retrospective claims data analysis, and economic evaluation and modeling (decision analytic modeling, cost-effectiveness and cost-benefit analysis). This expertise is currently supported by a Methods Unit of faculty-level biostatisticians, epidemiologists and masters level program managers, statisticians and data managers and coordinated through focused Work Groups in methodological areas of expertise and interest (e.g., health informatics, economic evaluation and modeling, behavioral sciences, use of large data bases in health services research, pharmacoepidemiology) and certain disease focused areas of interest (e.g., cardiometabolic disorders, including diabetes; musculoskeletal disorders; HIV-AIDS). Within and across these focus areas are the cross-cutting themes of health disparities, quality improvement, and patient safety.

Since being formalized as a University-Wide Interdisciplinary Research Center, COERE leadership has been instrumental in attracting over \$283M in extramural grant support for interdisciplinary research and training in health services and outcomes research at UAB. Through its work in statistical and methodological innovations in quality measurement and improvement, COERE has become a national resource to the health care industry. An example of this is its' work in developing and disseminating the Achievable Benchmarks of Care (ABCTM). In the area of training, COERE has established an excellent track record in mentoring junior faculty to facilitate their training in clinical health services and outcomes research and in 2003 was awarded a highly competitive 5-Year National Research Services Award Institutional Training Grant (T32), the UAB Health Services & Outcomes Research Training Program, from the Agency for Healthcare Research and Quality (AHRQ). Dr. Saag was recently appointed the director of this training grant which was just competitively renewed for another 5 years of funding (2008-2013). In 2010, Dr. Saag and the COERE were award two competitive 5-year grants (a T32 training grant targeted at pre- and post-doctoral students and a K12 targeted at junior faculty) in the area of Comparative Effectiveness Research. Dr. Locher is a formal mentor on these grants and is a solid collaborator within the COERE (Dr. Saag provides strong endorsement of Dr. Locher's application.).

- 3.3.2. Lister Hill Center for Health Policy. Federally endowed in 1987 and directed by Dr. Michael Morrisey (a well-regarded and internationally recognized health economist), the Lister Hill Center has a university-wide mission to facilitate the conduct of health policy research, to disseminate the findings of transdisciplinary research beyond the usual channels of academic publication, and to sponsor the Lister Hill Policy Fellows Program. The Center draws on scholars from throughout the university to address issues of health care access, financing, organization, delivery, and outcomes, such as those relevant to the proposed project. The Center publishes UAB Health Policy Research, a précis of policy research for regional and national policy makers. It sponsors an intramural grants program in health policy/health services research. The research of the LHC Scholars are organized into five areas: 1) health care markets and managed care; 2) maternal and child health; 3) strategic management of health care organizations; 4) outcomes research; and 5) aging policy. The Lister Hill Center provides guidance in understanding and projecting the impact of such changes on health care policy and identifying the most efficient methods for implementing such strategies. Currently, the Center has over 50 appointed faculty representing 20 departments and 7 schools at UAB. Dr. Locher is the Director of the Public Policy and Aging Program, which is formally supported by the Lister Hill Center for Health Policy and the Center for Aging. Dr. Morrisey, along with Drs. Allman, Allison, and Saag, is one of Dr. Locher's most ardent supporters, particularly in her initiatives related to aging and nutrition. He has written a strong letter of support committing Lister Hill Center resources to the Program in Translational Nutrition and Aging.
- 3.3.3. Training Grants in Outcomes, Cost Effectiveness, and Health Services Research. UAB received a highly competitive National Research Service Award T32 in Health Services Research funded by AHRQ in 2003 which has been continually competitively refunded through June 2013. The T32 currently funds 2 pre- and 3 postdoctoral trainees annually. To date, it has graduated 13 T32 trainees who between them have published 48 peer-reviewed manuscripts and presented numerous abstracts at national meetings; 11 have been clinicians (10 physicians and 1 nurse PhD), with all but one pursuing academic careers; 30% of the trainees have been minorities. In July 2010, UAB was awarded a 3-Year T32 Comparative Effectiveness Research training grant from AHRQ under the American Recovery and Reinvestment Act (ARRA) of 2009: supporting two cohorts of two fellows each. K.Saag (Director, PI), Safford (Co-director, Co-PI), and Morrisey (Director, Predoctoral Program) provide leadership for the training program. The academic component of our T32 currently involves attainment of an MSPH in Outcomes Research or Pharmacoepidemiology/Comparative Effectiveness Research (see section 3.D.2) for most clinician-postdoctoral trainees. A novel component of this T32 is a "train the mentors" program, where experienced mentors partner with promising junior faculty on mentoring teams for fellows, with the purpose of developing the mentoring skills of the junior faculty. Another facet of the T32 training program is its use of a structured approach to evaluate mentoring. An application is currently under review for a Patient Center Outcomes Research K12 training grant. Dr. Locher is a Senior Mentor on each of these applications. Additionally, she is key faculty in the MSPH in Outcomes Research; the course she teaches, Patient-based/centered Outcomes, is required of all students.
- 3.3.4. Deep South Musculoskeletal Center for Education and Research on Therapeutics (CERTs). In 1999, UAB received the first of four awards from the AHRQ to develop the UAB CERTs. The CERTs was renewed in 2002, 2006 and again in 2011 as a \$4.1 million cooperative agreement. The UAB CERTs is now one of 6 national CERTs. Under the directorship of Dr. Saag, the UAB CERTs has successfully identified, funded and conducted more than 50 projects investigating and disseminating knowledge about safe and effective use of therapeutics related to musculoskeletal disease, much of which is relevant to patient centered outcomes research. One of these projects in which Dr. Locher served as Co-investigator, involved, in part a nutrition assessment and intervention, targeted at older adults throughout the state. CERTs scientific seminars are regularly conducted with university-wide participation. For example, in February 2012, the CERTs, in collaboration with six UAB centers and schools, will facilitate its fifth annual Methods half-day symposium entitled, "New Design and Analytical Methods in Patient Centered Outcomes and Comparative Effectiveness Research".
- 3.3.5. Center of Excellence in Comparative Effectiveness Research for Eliminating Disparities. Funded by NIMHD as an administrative supplement to the P60 Comprehensive Research Center of Excellence that supports the Minority Health Research Center, the CERED expanded the infrastructure created by the P60 to include comparative effectiveness research, training, and dissemination. The goals are to: 1) conduct research on the comparative effectiveness of health care delivery strategies within health disparities populations; 2) conduct comparative effectiveness research (CER) on the impact of different treatments in the

reduction of health disparities, including the development of innovative research methods for evaluating effectiveness in health disparity populations; 3) establish effective dissemination strategies to ensure that health disparity populations and the health care providers and systems that serve them are aware of and capable of utilizing the results of CER; 4) promote linkages to patient data registries and networks that can partner with our UAB CERED in health disparity-relevant CER and dissemination; and 5) promote participation of health disparity populations in CER studies. Dr. Mona Fouad (who supports Dr. Locher's application) is the Director of the Center.

- 3.3.6. National VA Quality Scholars Fellowship Training Program (VAQS). Directed by Dr. Carlos Estrada, this 6-site, 2-year, VA-funded fellowship program targets post-residency physicians and nurses with the purpose of training clinicians to become champions for change in the health care system and/or become leaders in quality improvement (implementation) research. The program has an organizational change curriculum, coordinated by the Dartmouth Center for the Clinical Evaluative Sciences and imparted to scholars at the 6 sites through interactive video-teleconferences. There are 2 to 4 VA Quality Scholars in Birmingham at any given time and the program was just awarded a training position for a Chief Resident in Quality and Patient Safety which will lead the residency's program in quality and safety education and improvement. Most Quality Scholars obtain an MPH or MSPH, and frequently the MSPH is in Outcomes Research. Dr. Locher teaches the Patient-based/centered Outcomes course taught in this track. Most Quality Scholars go on to careers in quality improvement and only occasional Scholars have pursued academic research careers.
- 3.3.7. Department of Health Care Organization and Policy (HCOP). HCOP is located within the School of Public Health. The Department has 25 faculty members and is chaired by Dr. Peter Ginter (See Letter of Support.) Faculty research focuses on health economics, public health management and planning, health policy, outcomes research, and health services evaluation. Both Masters and Doctorate Level degrees are offered. Master of Public Health (M.P.H.) degrees are offered in health policy, health care organization, general theory and practice, maternal and child health policy and leadership, outcomes research, public health preparedness as well as coordinated degree options in business, optometry, public administration, nursing, social work, and juris doctorate. The department's Doctor of Public Health (DrPH) degree has concentrations in Public Health Management, Maternal and Child Health Policy and Outcomes Research.

The UAB Health Services and Outcomes Research Training Program, housed within the Department of HCOP and directed by Dr. Meredith Kilgore, is a multidisciplinary program designed to build a health services research training infrastructure that will prepare independent investigators to pursue careers focused on translating research evidence into practice. A collaborative program between the Center for Outcomes and Effectiveness Research and Education (COERE) and the Lister Hill Center, the training program seeks to develop research skills in the following areas: changing physician practice behavior; improving quality of care; assessing the impact of the delivery system on the quality of care; relevant epidemiological, statistical, experimental, and quasi-experimental methodology; analysis of large data sets; economic evaluation; and the practical application of outcomes research methodology. Dr. Kilgore and Locher have worked very closely together on numerous projects. The aims of the Program in Translational Nutrition and Aging Research are especially compatible with the work of Dr. Kilgore and his colleagues, who are all supportive of the proposed program.

- <u>3.3.8. UAB Division of Preventive Medicine.</u> The Division of Preventive Medicine is located within the School and Department of Medicine. The Division of Preventive Medicine, directed by Dr. Mona Fouad, is a research intensive Division comprised of ~25 faculty members and more than 280 staff members. The Division has five Scientific Program Areas: Cancer Prevention and Control; Other Chronic Diseases including Cardiovascular, Diabetes, and Obesity; Outcomes and Effectiveness Research and Methodology; Addiction and Homelessness; and Behavioral Sciences. Leading researchers within the Division who are Pls of large-scale research projects (described below) include Drs. Cora E. Lewis and Monika Safford; both of whom are willing to support and partner with the candidate in the proposed program.
- <u>3.3.9. Division of Continuing Medical Education (CME).</u> Directed by Monika Safford, MD (who fully supports the proposed program), the mission of the School of Medicine's Division of Continuing Medical Education (CME) is to facilitate the diffusion and adoption of new medical knowledge and skills into medical practice and to measure the effectiveness of various educational interventions in improving physician

performance and patient health outcomes. The Division sponsors a range of educational activities, including Internet online courses, grand rounds, live symposia, case-based programming, audio conferences and teleconferences and enduring materials including monographs, audio-tapes and Interactive DVDs.

The measurement of the effectiveness of various educational interventions in changing provider behavior has been focused in several areas. First, case-based surveys are developed using scenarios based on elements of clinical practice guidelines; the congruence of physician practice patterns and clinical practice guidelines is measured by answers to case scenarios. These have been developed and used nationally and regionally in arthritis, stroke, asthma, hypertension, diabetes, gastro-esophageal reflux disease and HIV-infection. Second, prospective randomized controlled trials are being conducted to determine the effectiveness of educational interventions in improving physician performance and patient health outcomes in the areas of hypercholesterolemia, depression, ischemic stroke, and pediatric asthma. In addition, the Division tests the effectiveness of innovative interventions in changing provider performance, including academic detailing, patient-activation, on-line courses, asynchronous learning networks, fax-transmitted updates and medical updates using push technology.

Current research initiatives include evaluating the effectiveness of strategies to disseminate and promote adoption of practice guidelines, use of academic detailing, use of chart reminders and feedback to physicians, as well as measurement of physician learning and patient health outcomes. Continuing initiatives include development of new Internet and print case study courses, additional audio conferences, focused CME activities offered throughout the State of Alabama for primary care physicians, and activating patients to change physician behavior. For the current application, the Division will assist with engaging stakeholders and disseminating the results of the Scholars projects.

- 4. Secondary Intramural Collaborations. UAB is a vibrant campus with many opportunities for multidisciplinary research and training. Here we present five additional entities with whom the Candidate, Dr.
- Locher, has strong ties and with whom she will partner. Because these entities do not form the core or focus of the proposed program (i.e., the Comprehensive Cancer Center, The Center for Clinical and Translational Sciences, and the Minority Health and Health Disparities Research Center) or because they are growing and in transition (School of Nursing and Department of Sociology), they are not presented as primary collaborations. Yet, they are still vital and important.

### 4. Secondary Intramural Collaborations

- 4.1. Comprehensive Cancer Center
- 4.2. Center for Clinical and Translational Sciences
- 4.3. UAB Minority Health and Health Disparities Research Center
- 4.4. School of Nursing
- 4.5. Department of Medical Sociology
- 4.1. Comprehensive Cancer Center. The UAB Comprehensive Cancer Center (CCC) is the cancer program-coordinating hub of the UAB Medical Center. UAB received funding for an NCI Cancer Center Planning Grant in 1970. The first Cancer Center grant was awarded to UAB in 1972 and was converted to a Cancer Center Core Support Grant in February of 1975. The UAB CCC has been continuously funded by the NCI 39 years including the Cancer Center Planning Grant, and it is one of the original cancer centers funded by the NCI. Currently, the CCC has 238 members representing 8 Schools and 30 Departments. Combined members have annual total funding of \$37.5 million from the NCI and its' total extramural funding is \$121.9 million. There are several programs within the CCC, most of which focus on bench science and are not relevant to the proposed program. However, the Cancer Prevention and Control Program within the CCC is most relevant to the proposed program. Dr. Wendy Demark-Wahnefried, Ph.D., R.D., serves as Associate Director for Cancer Prevention and Control for the CCC and is a Professor of Nutrition Sciences. She was specifically recruited to UAB because of her clinical research that involves nutrition-related concerns of cancer patients, as well as determining effective lifestyle interventions that improve the overall health of cancer survivors and their families. Dr. Demark-Wahnefried's laboratory has conducted some of the largest studies exploring metabolic and body composition changes in response to cancer treatment. She has experienced particular success in studying the delivery of home-based lifestyle interventions among cancer survivors where she leads a number of NCI-funded trials aimed at improving the diet and exercise behaviors of cancer survivors. For her work in this area, she was a named a Susan G. Komen Professor of Survivorship. Dr. Demark-Wahnefried has already invited Dr. Locher to serve as Co-Investigator on two grants involving older cancer survivors and different aspects of nutrition. She has strongly endorsed the proposed program.

4.2. Center for Clinical and Translational Science (CCTS). The CCTS, directed by Dr. Robert Kimberly, was funded by the NIH in 2008 and was developed in response to the NIH request for applications for Clinical Translational Science Awards. The vision of the CCTS is to transform the institutional environment by building productive and efficient interdisciplinary research teams through educational ingenuity, regulatory reorganization, resource coordination, and methodological innovation. Its mission is to develop a transformative infrastructure that spans the spectrum from preclinical research to bench-to-bedside translation to community implementation. The Bionutrition Core of the Clinical Research Unit, directed by Ms. Betty Darnell, is particularly relevant to the aims of the Program in Translational Nutrition and Aging Research. The Bionutrition Core of the CRU offers a variety of services to investigators with approved protocols. Currently, almost half of active protocols have nutrition components. The Bionutrition Core assists with planning and designing the nutritional components of research protocols and can assist with implementing the protocol, recruitment/screening of research participants, and data collection and analysis of dietary intake. Additionally, the Metabolic Kitchen provides specially designed meals for participants on both inpatient and outpatient studies to meet protocol requirements. There are four research cooks and one diet technician on staff with 50 years of combined experience. They are trained in preparing research meals for participants. Dr. Locher has used and continues to use the services of the CCTS. She will continue to do so with the proposed program.

4.3. Deep South Comprehensive Research Center of Excellence P60. The overarching goal of the NIH/NCMHD-funded center, built on the success of the P-60 Project EXPORT (RESPECT), is to establish a comprehensive minority and health disparities research infrastructure to generate new knowledge on minority health and disease and on health disparities in chronic diseases. The UAB Minority Health and Health Disparities Research Center (MHDRC) established by the grant placed emphasis on understanding the mechanisms underlying health disparities and developing and testing interventions to reduce and ultimately eliminate these disparities. This goal is being accomplished through three cores—Research, Community Engagement, and Research Training—that achieve the following specific aims: 1) Conduct innovative interdisciplinary research to understand the complex interactions between biological, clinical, and social factors associated with health disparities in cancer screening and diabetes/obesity; 2) Implement a Summer Enrichment Program to increase the number of competent and well-trained researchers and health-care professionals with a strong ties to minority and medically vulnerable populations who will work to eliminate health disparities in the Deep South; 3) Engage the community in the dissemination of our interventions.

The UAB MHDRC is a University-Wide Interdisciplinary Research Center, which serves as the coordinating hub for the Health Disparities Research Training Program (HDRTP). The HDRTP is a one-year training program for junior faculty and post-doctoral scholars that pulls together the training components of four other grants—the Alabama Collaboration for Cardiovascular Equality (ACCE) Partnership, the Morehouse School of Medicine/Tuskegee University/UAB Comprehensive Cancer Center Partnership, the Project EXPORT/RESPECT Minority Health and Health Disparities Research Center (MHDRC), and the Deep South Resource Center for Minority Aging Research (RCMAR)— into one infrastructure to maximize effectiveness and resources. Six institutions currently participate in the HDRTP: Morehouse School of Medicine, Tuskegee University, University of Alabama, Tulane University, Creighton University, and UAB. To date, the HDRTP has trained 100 fellows and junior faculty from these institutions. The advantages of such a coordinated approach are evident: by gathering together a sizeable group of multidisciplinary trainees, we can bring in senior faculty to lecture and teach; provide a venue for interdisciplinary discussions and potential collaborations; and streamline resources and management into one effective and efficient administrative process. Dr. Locher serves as a faculty mentor of these training programs and serves on the advisory panel that select trainees.

**4.4. UAB School of Nursing.** The University of Alabama School of Nursing at UAB is ranked 21st in overall graduate programs, among the top 5 percent of nursing schools nationwide, by *U.S. News and World Report.* The UAB School of Nursing is home to a leading research center with funded studies in the areas of oncology, pediatrics, minority health, international nursing, HIV/AIDS care, occupational health, and aging and palliative care. The UAB School of Nursing offers innovative bachelor's, master's, and doctoral programs. Among these are the state's only PhD in Nursing and joint Doctor of Nursing Practice (DNP) degrees, more than 10 specialty and/or subspecialty nurse practitioner and clinical nurse specialist majors, dual degree options, advanced nursing executive majors in administration and informatics, and an program for students who already have one degree. Dr. Locher collaborates with School of Nursing faculty on multiple research and

teaching initiatives. The School of Nursing is actively building their Program in Aging and are recruiting multiple faculty members in this area—including an endowed chair position in aging research.

- 4.5. UAB Department of Sociology. The UAB Department of Sociology is located within the College of Arts and Sciences. The focus of the Department is on Medical Sociology. The Vision of the Department is to be one of the leading Medical Sociology programs in the country, providing the highest quality teaching and research opportunities for both undergraduate and graduate students. Sociologists within the department have a very long and solid tradition of collaborating with faculty across campus particularly in the Department of Medicine and the School of Public Health. The Department is currently in a state of transition, having recently lost several faculty members due to unforeseen circumstances (including death and early retirement). As a consequence, the Department currently has at least three open faculty position. Of particular note, the department is specifically recruiting for those with expertise in "nutrition" and "outcomes". Dr. Locher has and continues to mentor Medical Sociology PhD Students from the Department and has taught many courses in the Department. She will continue to mentor students and participate in guest lectures for their Professional Seminar Series. She has close colleagues and friends in the Department.
- **5.** Health- and Community-based Partnerships. Dr. Locher has lived in the state of Alabama for nearly two decades. During that time, she has developed close and enduring relationships with numerous agencies and individuals within those agencies who serve the needs of older adults. Here, she highlights a few that are particularly strong and that are central to the overarching goal of the Program in Translational Nutrition and Aging Research.
- 5. Health- and Community-based Partnerships
- 5.1. AARP Alabama
- 5.2. Alabama Department of Senior Services
- 5.3. Alacare Home Health and Hospice
- 5.4. Alabama Quality Assurance Foundation
- 5.5. United Way of Central Alabama
- 5.1. AARP Alabama. AARP Alabama is the statewide arm of the larger AARP non-profit organization that exists at the national level. AARP Alabama engages in multiple initiatives that affect older adults throughout the state. For example, AARP Alabama provides consumer information, volunteer opportunities, and sponsors various events, including in partnership with UAB (under Dr. Locher's leadership) the annual UAB/AARP Aging Policy Conference for the past five years. Two of AARP's top goals, at the national and state levels, are to reduce hunger among seniors through the Drive to End Hunger and to promote Livable Communities for all persons, including older adults. In Alabama, AARP also works hard to facilitate partnerships between various entities. Food Policy Councils, as in all states, are forming in states and communities across the US. The purpose of these councils is to bring stakeholders together to examine food systems. AARP Alabama is working to ensure that local food policy councils attend to aging matters. Toward this end, Dr. Locher has been enlisted to provide expert input to guide these initiatives. Dr. Locher has had a long-standing relationship with AARP Alabama was awarded its' Champion for Change Award in 2011. AARP is committed to continuing to provide financial and personal resources to continue the Aging Policy conference.
- 5.2. Alabama Department of Senior Services. The Alabama Department of Senior Services (ADSS) is part of the Network on Aging Services established by the Older Americans Acts of 1965 and directed by the Administration on Aging. ADSS supports a network of Area Agencies on Aging and programs throughout the state. Area Agencies on Aging develop, monitor, and maintain coordinated systems of community based services within their respective planning and service areas. These systems are designed to assist older persons and caregivers to lead independent, meaningful and dignified lives in their own homes and communities as long as possible. Area Agencies carry out a wide range of functions related to advocacy, planning, coordination, interagency linkages, information sharing, brokering, monitoring and evaluation. A major function of ADSS and area agencies on aging involves the provision of home delivered and congregate meals to older adults. For nearly a decade, Dr. Locher has worked closely with local Agencies on Aging and the ADSS in developing and evaluating its' meal programs. Dr. Locher is currently working with aging leaders representing various stakeholders to develop a new State Plan on Aging that is mandated by federal law and that will be in effect from 2013 - 2016. Dr. Locher has previously served as an expert consultant with the Florida Department of Elder Affairs in a similar capacity. Mr. Neal Morrison (the Commissioner of ADSS) and Ms. Julie Miller (Programs and Planning Division Chief) are strongly committed to continuing working together with Dr. Locher on Nutrition and Aging matters, as well as more generally on those related to Aging Policy.

- 5.3. Alacare Home Health & Hospice. Headquartered in Birmingham, Alabama, Alacare Home Health & Hospice is dedicated to providing patients with the highest level of skilled nursing, rehabilitative, palliative and hospice care available in the most cost-effective environment in the patient's own home. The Alacare team includes nurses, home care aides, physical therapists, occupational therapists, speech-language pathologists, medical social workers, medical nutritionists and chaplains. Founded in 1970 by Charles D. Beard, Jr., the agency is still owned and operated by the Beard family today. With 23 branch offices covering almost every county in the state, Alacare is Alabama's oldest and largest privately owned, Medicare-certified home health agency. Alacare has initiated fall prevention education, diabetes education; mental health nursing; nutritional services; and infusion therapy as part of patient care plans. Alacare is a strong supporter of research. They have partnered with UAB on two of Dr. Locher's NIA-supported nutritional studies and on an AHRQ-sponsored osteoporosis intervention study wherein each Alacare office is participating as a clinical practice site for UAB programs and their associated research. John Beard, JD has provided strong support to Dr. Locher and will continue to do so.
- 5.4. Alabama Quality Assurance Foundation (AQAF). AQAF is a non-profit company that provides quality improvement expertise and services through contracts with federal and state governments, as well as private organizations. Through a contract with the Centers for Medicare & Medicaid Services (CMS), AQAF serves as Alabama's Medicare Quality Improvement Organization (QIO). As Alabama's QIO, AQAF works in partnership with health care professionals and organizations, government, business and consumers to improve the quality of health care for the state's 830,000 Medicare beneficiaries. During its current 10th Scope of Work as Alabama's QIO, AQAF is focusing on: 1) Making care beneficiary- and family-centered by actively engaging patients and their families in decision-making and empowering them to actively participate in managing their own health and health care; 2) Improving individual patient care by reducing healthcare-associated infections in hospitals and achieving a 40 percent decrease in healthcare-acquired conditions in nursing homes; 3) Integrating care for populations and communities by supporting transitions of care that reduce unnecessary rehospitalizations; and 4) Improving health for populations and communities by leveraging the power of electronic health records (EHRs) for better data reporting and care management. Dr. Locher serves on the Advisory Council for AQAF. Members of AQAF are supportive of Dr. Locher's application especially as it is consistent with much of its current Scope of Work activities.
- 5.5. United Way of Central Alabama. United Way of Central Alabama, Inc., formerly The Birmingham Community Chest, was organized in 1923 with 31 agencies and a goal of \$450,000. Even in 1929, the year of the stock market crash, the goal was met and more than half a million dollars was raised a remarkable amount, considering the economic conditions. In 1943, during World War II, the Birmingham Community Chest campaign raised more than \$1 million for the first time. In 1956, it changed its name to the United Appeal. Two years later, the \$2 million milestone was passed. In 1969, the local organization was invited into neighboring Shelby County, and in 1970, agencies in Walker County were asked to be included as well. That year, more than \$4 million was raised. In January 1985, the legal name was changed to the United Way-Community Chest of Central Alabama, Inc. In 1992, the name was changed to United Way of Central Alabama, Inc. Throughout its history, United Way has not changed its basic purpose to increase the organized capacity of people to care for one another and to improve their community.

United Way of Central Alabama is partnering with the UAB Center for Aging, the Jefferson County Office of Senior Citizens, and the Middle Alabama Area Agency on Aging to create a collaborative network that meets senior needs, builds on existing infrastructure, and provides ongoing data regarding senior issues and service gaps that need to be addressed. Dr. Locher is a member of the The Senior Issues Task Force. The Senior Issues Task Force, consisting of key stakeholders in the greater Birmingham senior service sector, was established in 2008 to bring together across-section of individuals and organizations to develop a collaborative strategic community approach in a cohesive, efficient and compassionate service system. The Senior Issues Task Force presented the Senior Summit: "Mobilizing Communities and Congregations to Enhance the Care of our Seniors" in February 2010 to begin a dialogue among medical and senior service providers and representatives from faith communities to explore collaborative ways to serve those who encounter the challenges of aging. This was the first event of its kind in our community. United Way and Dr. Locher have recently partnered and submitted a grant to work with PEER, Inc., to provide home-delivered meals to older adults recently discharged from the hospital. Dr. Locher has strong collaborations with United Way and they are committed to integrating her into their activities.

**6. Biographies of Potential Collaborators with NIH Funding.** The following are currently members of the Nutrition Obesity Research Center who have active grants and who: 1) represent potential mentors already actively engaged in nutrition and aging research, 2) faculty with whom aging and nutrition researchers might likely collaborate to achieve mutual goals, or 3) faculty who are likely to transition to a focus on translational nutrition and aging research given increased opportunities for collaboration (To be clear: this is not an exhaustive list of potential partners at UAB. It is based upon a list that Dr. Locher helped to compile in support of the resubmission of the NORC application. Thus, the pool is greater, but this presents a sampling of the quality and quantity of what exists.).

Investigator: Olivia Affuso, PhD

Primary University Title: Associate Professor of Epidemiology

Secondary University Appointments: N/A

**Background & Interests:** Dr. Affuso was recruited to UAB in 2006 as an Assistant Professor in the Department of Epidemiology. Dr. Affuso obtained her PhD in Nutritional Epidemiology at the University of North Carolina at Chapel Hill (Chapel Hill, NC) and completed postdoctoral training at the University of Miami in Exercise Science. Dr. Affuso has won several awards while at UAB, including the NORC Named New Investigator Award, the Science Unbound Foundation's 2009 Best Paper in Nutrition or Obesity Award, and the School of Public Health's Back of the Envelope Award. She has published several papers related to nutrition and obesity. Dr. Affuso's main research interests include obesity, body composition, physical activity/exercise, and metabolic syndrome. The main questions addressed by her research are: 1) the development of novel methods for measuring body composition; 2) design issues of obesity randomized controlled trials; and 3) the effects of exercise on body composition and metabolic risk factors.

### **Funding Sources:**

Nutrition or Obesity Grants to Be Active during the Requested Funding Period (2012–2017):

- R01HL107916 (PI: Affuso). Period 04/01/12–03/31/15. Title. A Photographic Method for Human Body Composition Assessment. *Obtained fundable score (12<sup>th</sup> percentile) and awaiting notice of grant award.*
- RWJF–New Connections Award (PI: Affuso). Period: 10/01/10–09/30/12. Title: Academic Performance Interventions in the Prevention of Childhood Obesity: A Systematic Review and Meta-analysis.

**Description of Research Projects and Relevance to Nutrition:** The current research conducted by Dr. Affuso seeks to develop a novel method to measure human body composition that will serve as an alternative to BMI in epidemiologic and field-based research where portable but accurate methods are in great need. Dr. Affuso is also conducting research on the design of obesity randomized controlled trials.

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### Investigator: David B. Allison, PhD

**Primary University Title**: Distinguished Professor, Associate Dean for Science School of Public Health **Secondary University Appointments**: Department of Nutrition Sciences; Department of Biostatistics; Department of Medicine; Department of Genetics

Background & Interests: Dr. Allison was recruited to UAB in 2001 jointly by the NORC leadership and the Department of Biostatistics. He began as Associate Director of the NORC and assumed the Directorship after the untimely death of the prior Director, Dr. Roland Weinsier. Dr. Allison began his professional career as an obesity researcher in 1991 at the NIH-funded New York Obesity Research Center at St. Luke's/Roosevelt Hospital Center/Columbia University where he worked until joining UAB. He was a research scientist at the NY Obesity Research Center. He has won several awards, including the 2002 Lilly Scientific Achievement Award from NAASO and the 2002 Andre Mayer Award from the International Association for the Study of Obesity, the 2009 Centrum Award from the American Society of Nutrition, and the 2009 TOPS Award from the Obesity Society. He has been elected a fellow of the American Psychological Association, the American Statistical Association, the Society for Behavioral Medicine, and the American Association for the Advancement of Science. Dr. Allison's nutrition and obesity research interests are wide-ranging. Key foci include: (A) The differential effects of caloric intake, energy balance, body weight, body composition, and changes in each of these variables on longevity in humans and model organisms; (B) The genetic and environmental influences on obesity; and (C) Statistical and research methodology as applied to obesity.

### **Funding Sources:**

Nutrition or Obesity Grants to be Active during the Funding Period (2012-2017):

 NIH/NIA (Intramural Contract PI: Allison). Period: Renewed annually, ongoing since prior to 2001. Title: NIA Intramural Caloric Restriction in Monkeys Study.

- NIH/NIA R01AG033682 (PI: Allison). Period: 03/15/10–02/28/15. Title: Body Composition, Energetics, and Longevity.
- ARA10 (PI: Allison). Period: 03/01/10–08/31/12. Title: Laying the Foundation for the Alabama Obesity Institute.
- Jason Pharmaceuticals Medifast, Inc. (PI: Allison). Period: 09/14/10–09/13/12. Title: Randomized Clinical Trial of the Medifast 5&1 Plan.
- R01DK52431 (Multi-PI: Leibel/Chung/Allison). Period: 12/01/08–11/30/13. Title: Molecular Genetic Analysis of Human Obesity.
- NSF1051890 (PI: Hahn). Period: 4/01/11–3/31/14. Title: LIT: Integrating Physiological and Genetic Mechanisms to Understand the Evolution of Cold Tolerance.
- T32DK062710 (PI: Allison) Period: 09/01/02–06/30/14. Title: UAB Obesity Training Program.
- T32HL105349 (PI: Allison). Period: 09/22/10–07/31/15. Title: UAB Predoctoral Training Program in Obesity-Related Research.
- Kraft Foods, Inc. (PI: Allison). Period: 01/01/07–12/31/13. Title: UAB Training Program in Obesity and Nutrition Research.

Notable (Selected Only) Recently Expired Nutrition- or Obesity-Related Grants:

- R01DK076771 (PI: Allison). Period: 08/15/07-06/30/11. Title: Obesity & Mortality.
- R01DK078826 (PI: Allison). Period: 03/01/09–02/28/12. Title: Design Issues in Obesity RCTs: Building An Evidence Base.

Notable (Selected Only) Pending Nutrition- or Obesity-Related Grants:

- R01HL107916 (PI: Affuso). Period: 04/01/12–03/31/15. Title. A Photographic Method for Human Body Composition Assessment. Obtained fundable score (12<sup>th</sup> percentile) and awaiting notice of grant award.
- R13CA168347 (PI: Allison). Period: 4/01/12–3/31/13. Title. Functional and Dysfunctional Foods: Issues in Evaluating Bioactive Food Component.

Description of Research Projects and Relevance to Nutrition: Obesity is associated with increased mortality rates, yet many important questions remain. Will weight loss among obese persons prolong life? What are the differential effects of various adipose tissue depots, adipocyte cellularity, and body composition changes on mortality rate? Has the association of obesity with mortality rate changed in recent decades, perhaps due to better preventive care or treatment of comorbidities among obese persons? What are the mechanisms by which caloric restriction prolongs life in animals, and how do these relate to the mechanisms by which obesity shortens life? To address such questions, Dr. Allison utilizes a combination of epidemiologic and experimental model organism studies including both rodents and (collaboratively) non-human primates. This translational work often yields novel insights not obtained by pursuing only one type of research and potentially informs both public health practice and generates new hypotheses for basic science investigation. Throughout most of his work, Dr. Allison operates from a statistical perspective, and this often leads to recognition of statistical challenges in obesity-related research and development of new methods. Thus, a branch of his research activity involves developing, evaluating, and disseminating novel statistical methods

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### Investigator: Richard M. Allman, MD

pertinent to nutrition and obesity research.

**Primary University Title:** Parrish Endowed Professor of Medicine and Director, Center for Aging, Division of Gerontology, Geriatrics, and Palliative Care, and the Birmingham/Atlanta VA Geriatric Research, Education, and Clinical Center

**Secondary University Appointments:** Division of General Internal Medicine, Division of Preventive Medicine, Department of Sociology, Graduate School Adjunct Faculty

Background & Interests: Dr. Allman was named Director of the Division of Gerontology, Geriatrics, and Palliative Care in 1990 and Director of the university-wide Center for Aging in 1992. Dr. Allman began his research on aging as a fellow in GI Medicine at Johns Hopkins University, where he identified nutrition-related factors such as low body weight and decreased dietary intake as important predictors of pressure ulcer development and poor outcomes among hospitalized older adults. With his first NIA-funded R01, he demonstrated that low body weight and a depleted lymphocyte count were independent risk factors for hospital-acquired pressure ulcers. After joining UAB, Dr. Allman continued research related to age-related mobility loss and related complications and began research on cardiovascular disease prevention and treatment among older adults, serving as the site PI for multi-center randomized controlled trials for

cardiovascular risk factors, including the NHBLI-funded Systolic Hypertension in the Elderly (SHEP) Study and the Cholesterol and Recurrent Events (CARE) Study. His subsequent studies in nutrition, obesity, and diabetes demonstrate that diabetes is an important predictor of mobility loss in community-dwelling older adults. In 2003, Dr. Allman received the prestigious Kosiak Award, presented to one person every other year by the National Pressure Ulcer Advisory Panel. Dr. Allman was named the Distinguished Alumnus of the West Virginia University School of Medicine in 2004.

### **Funding Sources:**

Nutrition or Obesity Grants to Be Active during the Requested Funding Period (2012–2017):

• R01AG15062 (PI: Allman). Period: 02/15/10–02/14/15. Title: Mobility among Older African Americans and Whites.

**Description of Research Projects and Relevance to Nutrition:** Nutritional factors are important to the health and well-being of older adults. As PI for the NIA-funded UAB Study of Aging, a longitudinal study of 1,000 community-dwelling Medicare beneficiaries in Alabama, Dr. Allman is pursuing multiple research questions relevant to nutrition and obesity. He and his collaborators are specifically examining the relationship between several nutrition-related laboratory tests (total cholesterol, albumin, IGF1, lymphocyte count, methylmalonic acid, vitamin B12, folate, homocysteine, and vitamin E levels), body-mass index, weight loss, weight gain, and dietary intake with mobility changes, nursing home placement, and mortality in aging adults. He is working with Dr. Locher and Dr. Allison to develop an interdisciplinary research interest group to foster collaboration between the UAB Center for Aging and the NORC faculty members on this important topic.

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### Investigator: Jamy D. Ard, MD

Primary University Title: Associate Professor, Department of Nutrition Sciences

Secondary University Appointments: Department of Medicine

**Background & Interests:** Dr. Ard received his MD in 1997 and completed internal medicine residency training at Duke University Medical Center in 2000. He also received formal training in clinical research as a fellow at the Center for Health Services Research in Primary Care at the Durham VA Medical Center. In work completed prior to coming to UAB in 2003, Dr. Ard explored the effects of dietary patterns on insulin sensitivity, the cultural appropriateness of dietary interventions for African Americans, and the effect of African-American acculturation on the intake of fruits, vegetables, and fats. Recently, Dr. Ard completed work related to the development and testing of culturally appropriate dietary interventions for cardiovascular disease risk reduction in African-American populations. He is now examining the benefits and risks associated with intentional weight loss in older adults (65+ years). In addition to his ongoing research activity, he is Medical Director of UAB's EatRight Weight Management Services, which includes a variety of specialized clinical and behavioral programs for the management of overweight and obesity. Since arriving at UAB, Dr. Ard has published several manuscripts, co-edited the 4<sup>th</sup> edition of the *Handbook of Clinical Nutrition*, and received the 2006 ILSI North America Future Leaders Award and the Charles Barkley Health Disparities Research Award.

### **Funding Sources:**

Nutrition or Obesity Grants to Be Active during the Requested Funding Period (2012–2017):

- N1HC48047 (PI: Lewis). Period: 02/01/89–06/30/13. Title: Longitudinal Studies of Coronary Heart Disease Risk Factors.
- R01AG033094 (Pls: Locher, Ard). Period: 09/01/09–08/31/14. Title: Calorie Restriction & Changes in Body Composition, Disease, Function, & QoL in Older Adults.
- R01MD003997 (PI: Baskin). Period: 01/01/10–12/31/12. Title: Sociocultural Influences on Dietary Intake Among Black Women in the Deep South.
- U54CA153719 (PI: Partridge). Period: 09/07/10–08/31/15. Title: Deep South Network for Cancer Control: Testing the Efficacy of Evidence-Based Community Strategies in Support of Weight-Loss Programs among Overweight AA Women in the Deep South.
- R01DK062148 (PI: Bray). Period: 07/01/02–05/31/15. Title: Training Interventions and Genetics of Exercise Response (TIGER).

**Description of Research Projects and Relevance to Nutrition:** The primary focus of Dr. Ard's research is related to developing effective lifestyle behavioral interventions for special populations including African Americans and older adults with diseases related to lifestyle behaviors. Previous clinical trials have consistently shown lower levels of effectiveness for African Americans attempting to modify their health behaviors. Dr. Ard proposes that the effectiveness of many interventions is modified by the cultural appropriateness of the intervention delivery and content. However, there are also questions relevant to the

physiologic response of African Americans and older adults to given dietary patterns. Through Dr. Ard's work, he hopes to establish intervention models that successfully create biobehavioral interventions that maximize weight loss and risk reduction, and minimize potential harm.

#### Investigator: Donna K. Arnett, PhD, MSPH

Primary University Title: Professor and Chair Department of Epidemiology

**Secondary University Appointments:** N/A

Background & Interests: Dr. Arnett joined UAB in 2004 as Professor and Chair of the Department of Epidemiology. Previous to this, Dr. Arnett held the Mayo Professor Chair at the University of Minnesota Department of Epidemiology. She received her PhD in 1992 from the University of North Carolina-Chapel Hill and trained as a Postdoctoral Fellow at UNC from 1992-1994. Dr. Arnett's early research resulted in establishing arterial stiffness as an important cardiovascular risk factor. At UMN, she ran the Minnesota Heart Survey and secured her first R01, HyperGEN: Genetics of Left Ventricular Hypertrophy, which evaluated the genetic contribution to enlargement of the left ventricle among families with hypertension. This study, now in its 15th year of continuous NIH funding, has reported numerous associations from candidate genes identified through linkage analysis and subsequent genome-wide association studies. Dr. Arnett has also been the PI for GenHAT, which builds upon the phenotypic resources of ALLHAT, the ambitious antihypertensive trial of over 42,000 participants treated with one of four common antihypertensive drugs. GenHAT's goal is to determine whether genetic variation interacts with antihypertensive medication to modify cardiovascular disease risk in hypertensive individuals. Dr. Arnett has been integrally involved in the Multiethnic Study of Atherosclerosis, pharmacogenetic studies of rheumatoid arthritis and warfarin response and initiated the Genetics of Lipid-Lowering Drugs and Diet Network (GOLDN) Study (described below). Dr. Arnett has over 300 peer-reviewed publications. She has held editorial positions with the American Journal of Epidemiology, Circulation, and the International Journal of Molecular Epidemiology and Genetics. She has won numerous awards, including the American Heart Association Distinguished Achievement Award. She holds fellowships with the Executive Leadership in Academic Medicine Program, the American Epidemiological Society, and the American College of Epidemiology. Dr. Arnett is currently President-Elect of the American Heart Association.

# **Funding Sources:**

Nutrition or Obesity Grants to Be Active during the Requested Funding Period (2012–2017):

- U01HL72524 (PI: Arnett). Period: 09/30/02–05/31/10 NCE. Title: Genetic and Environmental Determinants of Triglycerides.
- R01HL091357 (PI: Arnett). Period: 09/05/08–07/31/12. Title: Genome-wide Association: Triglyceride Response to Fenofibrate Therapy and Dietary Fat.
- R01HL104135 (PI: Arnett). Period: 08/15/10–05/31/14. Epigenetic Determinants of Lipids Response to Dietary Fat and Fenofibrate.

Description of Research Projects and Relevance to Nutrition: Begun in 2002, the GOLDN (Genetics of Lipid Lowering Drugs and Diet Network) Study is a pharmacogenetic research program lead by Dr. Arnett. GOLDN aims to characterize the genetic basis of the variable response of triglycerides and cholesterol to treatment with the drug fenofibrate. In a separate experimental intervention, GOLDN investigators are seeking to discover which gene variants might influence the response of blood lipids to the consumption of a high-fat meal. The GOLDN Study has spawned dozens of presentations and publications, most of which describe significant modifying effects of gene variants on fibrate treatment and diet in these environmental factors' influence on blood lipids. The first two phases of GOLDN used candidate gene, linkage, and genome-wide association approaches to finding potentially influential variants. In its latest phase, led by Dr. Arnett, GOLDN is identifying epigenetic alterations that influence lipid levels in response to GOLDN's interventions.

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# Investigator: Marcas M. Bamman, PhD

**Primary University Title:** Professor of Physiology and Biophysics

Secondary University Appointments: Professor of Medicine (Geriatrics) and Nutrition Sciences

**Background & Interests:** Dr. Bamman is Director of the UAB Center for Exercise Medicine and directs its two core facilities (Core Muscle Research Laboratory and Clinical Exercise Facility). He is a Fellow of the American College of Sports Medicine—the leading organization in exercise science and medicine that established the *Exercise is Medicine* initiative in 2007 in collaboration with the American Medical Association. He is also a standing member of the NIH Skeletal Muscle and Exercise Physiology Study Section and was an invited member to the NIH Roundtable on Mechanisms of Exercise Induced Health, sponsored by NIAMS in 2010. Dr. Bamman joined the UAB faculty in 1996 after conducting space flight and bed rest exercise countermeasures

research at NASA Johnson Space Center in Houston, Texas. He serves as Associate Director of the UAB Center for Aging and is a 2011 graduate of the UAB Healthcare Leadership Academy. In addition to the NORC, Dr. Bamman holds center appointments in the Center for Metabolic Bone Disease, Comprehensive Diabetes Center, and Center for Biophysical Sciences and Engineering. Dr. Bamman is nationally recognized for his work in exercise-mediated muscle adaptation and the biology of age-related muscle atrophy (sarcopenia), having been an invited speaker and guest lecturer at 20 universities, 11 national conferences, and two international conferences in the past six years. Dr. Bamman has maintained a strong commitment to research training and mentoring throughout his 15-year tenure at UAB. His laboratory is a popular training site for medical, undergraduate, and graduate students. He won the UAB President's Award for Excellence in Teaching (2005) and received the Argus Award for Best Course Director of Medical Physiology (2004–2007). He developed the curriculum and served as the founding Course Director of the Musculoskeletal and Skin Module in the medical school (2008–2010).

#### **Funding Sources:**

Nutrition or Obesity Grants to Be Active during the Requested Funding Period (2012–2017):

- F32AR060670 (PI: Merritt; Mentor: Bamman). Period: 01/01/11–12/31/12. Title: Regulation of Human Muscle Protein Metabolism Following Burn Injury.
- R01DK04977911 (PI: Hunter; Co-I: Bamman). Period: 09/30/10–07/31/14. Title: Exercise Intensity, Metabolic Rate, and Insulin Sensitivity.
- VA Merit Review, VA RR&D Service (PI: Bamman). Period: 07/01/10–06/30/13. Title: Understanding Muscle Regeneration Impairment in Aging Veterans.

Notable (Selected Only) Recently Expired Nutrition- or Obesity-Related Grants:

• R01AG017896 (PI: Bamman). Period: 04/01/07–03/31/12. Title: Maximizing Mechanisms of Muscle Hypertrophy to Combat Sarcopenia in Older Adults.

Description of Research Projects and Relevance to Nutrition: Mechanisms of adult skeletal myogenesis and muscle mass regulation remain the overarching areas of study in Dr. Bamman's laboratory, with a prominent emphasis on the aging muscle. Dr. Bamman's primary research objectives span three, interrelated focus areas: (i) to determine the cellular and molecular mechanisms driving muscle regeneration following damage or injury; (ii) to determine key processes responsible for myofiber hypertrophy in response to mechanical overload; and (iii) to better understand the primary etiology of muscle atrophy in acute (burn, trauma, disuse) and chronic (sarcopenia, cachexia) conditions. For obvious reasons, protein nutrition is a major point of emphasis in all of his studies. An aim of Dr. Bamman's VA Merit Review research is to identify key pro-inflammatory signaling processes in aging muscle that impair regeneration. As aging muscles atrophy, there is a concomitant accumulation of ectopic adipose tissue (i.e., inter-muscular fat). This ongoing project will advance our understanding of the interplay between adipose tissue accumulation in muscle and local inflammation, because the increase in inter-muscular adipose is thought to contribute factors to the local proinflammatory milieu that impair the regenerative capacity of skeletal muscle following injury or surgery. The investigators expect this impairment to be magnified in obese older adults. Dr. Bamman's translational research program takes advantage of cellular and molecular studies in the Core Muscle Research Laboratory and in vivo functional assessments in the Center for Exercise Medicine. Current approaches include muscle genomic, proteomic, and cell signaling studies, primary satellite cell culture experiments, and experiments in myogenic cell lines (e.g., C2C12 murine myoblasts).

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#### Investigator: Monica L. Baskin, PhD

Primary University Title: Associate Professor of Medicine

**Secondary University Appointments:** Department of Nutrition Sciences

**Background & Interests:** Dr. Baskin was recruited to UAB in 2003 as an Assistant Professor in the Department of Health Behavior (UAB School of Public Health) and was promoted to Associate Professor with tenure in October 2009. In December 2009, she moved to the Division of Preventive Medicine in the UAB School of Medicine. Dr. Baskin holds a doctorate in counseling psychology and is a licensed psychologist. She has won numerous awards such as the 2005–2006 Charles Barkley Health Disparities Research Award, the 2005–2006 UAB CNRC(now NORC) Named New Investigator Award, finalist for the 2007 ILSI North America Future Leader Award, and The Obesity Society's 2011 Diversity Tour Abstract Winner. She has numerous publications in the areas of health behavior, nutrition, and obesity. Dr. Baskin's main research interests include behavioral interventions for obesity prevention and management, environmental and policy influences on nutrition and physical activity, and community-based participatory research.

**Funding Sources:** 

Nutrition or Obesity Grants to Be Active during the Requested Funding Period (2012–2017):

U54CA153719 (Center PI: Partridge; Full Research Project PI: Baskin). Period: 09/01/10–08/31/15. Center Title: Deep South Network for Cancer Control; Full Research Project Title: Evidence-based Strategies Supporting Weight-Loss Among Overweight African American Women in the Deep South.

Notable (Selected Only) Recently Expired Nutrition- or Obesity-Related Grants:

- University of Pennsylvania/Robert Wood Johnson Foundation Subcontract. Period: 07/01/11–03/31/12.
   Title: Identifying Youth-Led Consumer Advocacy Strategies to Achieve Food Marketing Equity in Black Communities.
- R01MD003997 (PI: Baskin). Period: 09/25/09–04/30/12. Title: Sociocultural Influences on Dietary Intake among Black Women in the Deep South.

Notable (Selected Only) Pending Nutrition- or Obesity-Related Grants:

• R01CA160313 (PI: Baskin). Period: 04/01/12–03/31/17. Title: Promoting Weight Loss in African-American Cancer Survivors. *Priority Score* = 11; *Percentile Rank* = 5; *JIT requested*.

Description of Research Projects and Relevance to Nutrition: The current research conducted by Dr. Baskin seeks to better understand factors associated with weight management among African Americans. In particular, her research examines whether improvements to the built environment impacts weight control. Additionally, how (if at all) do social and cultural beliefs influence dietary intake among black women in the Deep South? In addition, Dr. Baskin is exploring potential approaches to consumer advocacy in which black youth seek to improve commercial food marketing environments in their community by deliberate and organized action. The combined research areas are instrumental in Dr. Baskin's ongoing interests in designing and implementing multi-level interventions to improve the diet and activity of groups with known health disparities.

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#### Investigator: Vera Bittner, MD, MSPH

**Primary University Title:** Professor, Division of Cardiovascular Disease, UAB School of Medicine **Secondary University Appointments:** N/A

Background & Interests: Dr. Bittner's research is focused on secondary prevention of coronary heart disease, in particular diet, exercise, and lipid-lowering therapy and cardiac rehabilitation, with an additional emphasis on coronary heart disease in women. A recognized leader in the field of preventive cardiology, she has helped create an environment for and provides guidance to future preventive cardiologists at UAB. Dr. Bittner attended medical school at Johann Wolfgang Goethe Universität in Frankfurt, Germany, and received her MD from University of South Alabama College of Medicine in 1981. Dr. Bittner completed her residency in internal medicine at North Carolina Baptist Hospital in Winston-Salem and a cardiology fellowship UAB. She is a professor of medicine, section head of preventive cardiology, and Director of the Cardiology Fellowship Program at UAB. Dr. Bittner is a fellow of the American College of Physicians, American College of Cardiology, American Heart Association, American Association of Cardiovascular and Pulmonary Rehabilitation, and National Lipid Association (NLA). She currently chairs the prevention committees of the ACC and AHA and serves as president of the NLA. She also has served as a reviewer for dozens of scholarly publications and currently sits on the editorial board of several national journals, including *American Heart Journal, Circulation, Journal of the American College of Cardiology, Journal of Cardiopulmonary Rehabilitation and Prevention*, and *Journal of Clinical Lipidology*.

# **Funding Sources:**

Nutrition or Obesity Grants to Be Active during the Requested Funding Period (2012–2017):

• R01HL080477 (PI: Safford). Period: 12/01/05–06/30/12. Title: Reasons for Geographic and Racial Differences in Stroke-Myocardial Infarction Study (REGARDS-MI).

Notable (Selected Only) Pending Nutrition- or Obesity-Related Grants:

• NIH/University of Vermont (Subcontract: Bittner). Period: 04/1/12–03/31/19. Title: Weight Loss and Exercise on Long-Term Cardiometabolic Events in Overweight CHD Patients.

**Description of Research Projects and Relevance to Nutrition:** Current industry-funded projects investigate the utility of various lipid-lowering regimens on the lipoprotein profile and on cardiovascular events in high risk subjects with coronary heart disease or at high risk for developing coronary heart disease. The NHLBI-funded studies investigate the associations and effects of weight loss, exercise training, and other lifestyle factors on risk of initial MI and on long-term safety and benefits in patients who have already sustained one or more MIs. These studies have a significant component of dietary counseling that also emphasizes weight management.

Moreover, increasing our understanding of the factors related to exercise adherence has obvious implications for obesity treatment and prevention.

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Investigator: Molly Bray, PhD

Primary University Title: Professor of Epidemiology

Secondary University Appointments: Professor of Genetics

Background & Interests: Dr. Bray was recruited to UAB in 2009 as a full Professor in the Department of Epidemiology, with a secondary appointment in the Department of Genetics. Additionally, Dr. Bray serves as the Director, Genomics Core Laboratories (Heflin Center). Dr. Bray earned a master's degree in Exercise Physiology from the University of Houston and a PhD in Human and Molecular Genetics from the University of Texas, and she completed her postdoctoral training at the University of Texas, Institute of Molecular Medicine. Dr. Bray's research focuses on the relationship between energy balance and lifestyle factors such as exercise, nutrition, and circadian patterns of behavior. Her recent findings related to how the timing and quality of energy intake affect weight gain and metabolic health have been featured on national and international news programs and myriad websites. Dr. Bray specializes in population-based genetic analyses of complex disease data and has considerable interest and experience in research pertaining to the genetics of obesity and obesity-related interventions. Dr. Bray's research has included investigations of aerobic fitness and resting and exercise energy expenditure in children and adolescents, as well as genetic linkage and association studies of obesity in family-based and unrelated subject samples.

# **Funding Sources:**

Nutrition or Obesity Grants to Be Active during the Requested Funding Period (2012–2017):

- R01DK062148 (PI: Bray). Period: 03/01/10–02/28/15. Title: Training Interventions and Genetics of Exercise Response.
- R01HL074259-09 (PI: Young). Period: 04/01/08–03/31/13. Title: Role of the Molecular Circadian Clock within the Heart.
- U01DK072493 (PI: Inge). Period: 04/01/11–03/31/16. Title: Longitudinal Assessment of Bariatric Surgery).

Description of Research Projects and Relevance to Nutrition: Dr. Bray leads the Training Interventions and Genetics of Exercise Response (TIGER) study, with a total planned cohort of more than 5,000 individuals. Participants in this study undergo 30 weeks of exercise training and are measured for multiple physiological parameters, including body composition, blood pressure, heart rate, aerobic capacity, and blood lipids, glucose, insulin, and adipokines. The goal of this project is to identify genes that mediate the physiological changes that occur following exercise training and the genetic factors that influence adherence to exercise. Dr. Bray also serves as the study geneticist for the Teen Longitudinal Assessment of Bariatric Surgery (Teen LABS) study, a multi-site observational study of the natural sequelae following bariatric surgery in adolescents. She is also the PI of a planned pedigree-based study of the genetics of early onset obesity in families identified through the Teen LABS study. Finally, in collaboration with Dr. Young, Dr. Bray's research includes studies of the timing of feeding and metabolic response using transgenic animal models of circadian clock disruption in specific peripheral tissues, including cardiomyocytes and adipocytes.

Investigator: Krista Casazza, PhD, RD

**Primary University Title:** Assistant Professor of Nutrition

**Secondary University Appointments: N/A** 

Background & Interests: Dr. Casazza joined UAB in 2006 as a Postdoctoral Fellow in the Department of Nutrition Sciences on the NORC's NIDDK-funded Obesity T32. She previously trained as a graduate student in dietetics and nutrition at Florida International University, Miami. Dr. Casazza has won numerous awards, including the 2011 Endocrine Society Early Investigator Award; the 2011 Torch Award for Distinguished Alumni, Florida International University; and the 2010 Huddleson Award, American Dietetic Association. She has numerous publications and has co-authored several book chapters, all in the area of nutrition and obesity. Dr. Casazza's main research interests include body composition during critical periods of development as it relates to obesity, type 2 diabetes, breast cancer, and osteoporosis in later life. The main questions addressed by her research are: (A) the effectiveness of a diet developed specifically for the unique metabolic characteristics of lean and obese peripubertal European- and African-American girls as they traverse puberty; (B) the contribution of various genetic, metabolic, and physiologic factors to bone and bone marrow adipose tissue, in an effort to gain insight into intricate networks of local and circulating factors affecting the maturation process and subsequent influence on cell differentiation; and (C) whether adiposity contributes to pubertal hormone concentration and breast development, thereby increasing breast cancer risk.

# **Funding Sources:**

Nutrition or Obesity Grants to Be Active during the Requested Funding Period (2012–2017):

- Diabetes Research Training Center (PI: Ramanadham). Period: 05/01/11–12/01/12. Title: Low Bone Mass in Diabetes: Importance of Signaling between Islet and Osteoblast.
- K99/R00DK83333 (PI: Casazza). Period: 06/01/09–05/31/13. Title: Puberty Related Intervention to Improve Metabolic Outcomes—The PRIMO Pilot Study.

**Description of Research Projects and Relevance to Nutrition:** Dr. Casazza's background is in nutrition and physiology, with a specific focus on critical periods of growth and development. Research interests reside in mechanisms underlying body composition and fuel utilization in early childhood, particularly as these mechanisms relate to the bone-fat interface and how it influences risk for obesity and related co-morbidities. In particular, she evaluates the contribution of various genetic, metabolic and physiologic factors to bone and bone marrow adipose tissue, in an effort to gain insight into intricate networks of local and circulating factors affecting the maturation process and subsequent influence on cell differentiation.

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#### Investigator: Susan L. Davies, PhD

Primary University Title: Associate Professor of Health Behavior

**Secondary University Appointments:** N/A

Background & Interests: Dr. Davies is an Associate Professor in the Department of Health Behavior and is affiliated with four UAB Centers; in addition to NORC, she is active in the Center for the Study of Community Health, the Minority Health Research Center, and the Center for AIDS Research. Dr. Davies' main research interests involve the interacting influences of the social environment and family relational issues on youth health behaviors and outcomes into adulthood. Her research activities focus on adolescent risk and protective behaviors that precipitate adverse outcomes, including obesity, depression, HIV, and early childbearing. Areas of pertinent expertise include 1) influence of family functioning and parent-child relationship dynamics on adolescent health and associated behaviors; 2) behavioral assessment of various psychosocial factors and associated contextual influences; 3) cognitive behavioral theory and methods that have established utility for investigating a wide range of health behaviors that recognize the influence of parents, peers, media influences and other community level factors; and 4) design, delivery and evaluation of tailored health promoting interventions and change processes within various social and structural contexts.

Dr. Davies recently received funding for a study to engage economically disadvantaged African American single mothers and their children in efforts to: recognize the social and economic costs of maternal depression on parenting, family functioning, and child psychosocial adjustment; develop a salient, acceptable intervention to improve *physical and emotional wellness* by incorporating mental health promotion activities together with behavioral targets of nutrition and physical activity. This approach is based on two assumptions: first, the intended audience may be more willing to participate if mental health promotion is part of a comprehensive "wellness" program (and not viewed as a depression treatment program); and second, because poor mental health undermines other behaviors (including binge eating, dietary habits, and physical activity), it is appropriate to address both behavioral antecedents and down-stream behaviors in one intervention.

# **Funding Sources:**

Nutrition or Obesity Grants to Be Active during the Requested Funding Period (2012-2017):

- U19DP002665 (PI: Davies). Period 09/30/10–09/29/12. Title: Healthy Passages II Longitudinal Study of Adolescent Health.
- U48DP001915 (PI: Tucker). Period 10/01/09–9/30/14. Community Influences Transitions of Youth: CITY Health.

**Description of research projects and relevance to nutrition:** Dr. Davies is the PI of Healthy Passages, a prospective study of adolescents and parents to investigate the impact of multiple positive and negative contextual factors on health behaviors and outcomes in a large multi-ethnic sample. Current research investigations include 1) examining neighborhood (e.g., physical and social disorder, social capital) and maternal (e.g., BMI, connectedness to child) contextual factors that predict children's physical activity, BMI, and social emotional competence in a large (N=5,000) multi-ethnic cohort of 5<sup>th</sup> graders and their primary caregivers living in three diverse US communities (Birmingham, Houston, and Los Angeles); 2) exploring neighborhood and school factors on child dietary intake patterns and BMI in the same cohort; and examining factors associated with families eating meals together and their influence on parent and child fruit and vegetable intake in a large (N=1,560) cohort of Birmingham families.

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#### **Investigator: Wendy Demark-Wahnefried PhD**

Primary University Title: Professor; Webb Endowed Chair

Secondary University Appointments: Associate Director, UAB Comprehensive Cancer Center

Background & Interests: Dr. Demark-Wahnefried focuses extensively on weight loss and gain and the dietary and exercise behaviors influencing these outcomes among persons with or recovering from cancer. Dr. Demark-Wahnefried was recently recruited (spring 2010) from M.D. Anderson Cancer Center, where she was a full Professor in the Division of Cancer Prevention and Population Sciences. Earlier in her career, she was at Duke University Medical Center. For the past two decades, her research career has spanned basic science studies and focused on determining mechanisms of action of food-related components on neoplastic progression, clinical research involving nutrition-related concerns of cancer patients, and determining effective lifestyle interventions that improve the overall health of cancer survivors and their families. Her laboratory has conducted some of the largest studies exploring metabolic and body composition changes in response to cancer treatment. An area of research in which Dr. Demark-Wahnefried has experienced particular success is the delivery of home-based lifestyle interventions among cancer survivors, where she has led and continues to lead multiple NIH-funded trials aimed at improving the diet and exercise behavioral of cancer survivors. She was named a Komen Professor of Survivorship for her work in this arena.

# **Funding Sources:**

Nutrition or Obesity Grants to be Active during the Requested Funding Period (2012–2017):

- R25CA047888 (PI: Demark-Wahnefried). Period: 09/01/07–08/31/12. Title: Cancer Prevention & Control Training Program.
- R01CA148791 (PI: Rock; UAB Site PI: Demark-Wahnefried). Period: 01/10/10–12/31/14. Title: Reducing Breast Cancer Recurrence with Weight Loss: A Vanguard Randomized, Controlled Trial.

Notable (Selected Only) Pending Nutrition- or Obesity-Related Grants:

- NIH/R01 (PIs: Basen-Engquist/Demark-Wahnefried). Period: 07/01/12–06/30/17. Title: NEXT Steps: RCT of Tailored Weight Loss Intervention for Endometrial CA Survivors.
- NIH/R01 (PIs: Demark-Wahnefried/Colditz (Washington University in St. Louis: Co-I: Bray). Period: 07.01.12-6/30/16. Title: Weight Loss Slows Breast Cancer via Methylation, Gene Expression & Hormones (PQ1).
- R25CA047888 (PIs: Demark-Wahnefried/Meneses). Period: 09/01/12–08/31/17. Title: Cancer Prevention & Control Training Program.

**Description of Research Projects and Relevance to Nutrition:** Dr. Demark-Wahnefried's current research interests include diet/hormonal and genetic interactions and their association with neoplasia (specifically breast and prostate cancer); dietary intervention to prevent chronic disease factors affecting compliance and recidivism; and lifestyle modification among cancer survivors.

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#### Investigator: Nefertiti H. Durant, MD MPH

Primary University Title: Assistant Professor of Pediatrics

Secondary University Appointments: Division of Preventive Medicine

Background & Interests: Dr. Durant was recruited to UAB in July of 2006 as an Assistant Professor in the Division of Pediatrics at the University of Alabama at Birmingham School of Medicine. Prior to coming to UAB, Dr. Durant completed her Adolescent Medicine Fellowship and her Pediatrics Health Services Research Fellowship at Children's Hospital Boston in July of 2006. Dr. Durant also has completed a Master of Public Health in Maternal Child Health at the Harvard School of Public Health, as well as the Commonwealth Funded Harvard University Minority Health Policy Fellowship. Dr. Durant has a secondary appointment at the UAB Division of Preventive Medicine. Additionally, she has appointments in the UAB Outcomes and Effectiveness Research and Education, the NORC, and the Minority Health Research Center. Dr. Durant's research interests include racial/ethnic disparities in overweight in women and the relationship of overweight to the built environment and physical activity. Dr. Durant's current research focus is promotion of physical activity and nutrition via innovative technologies, in adolescents, young adults, African-American women, and other underserved populations. Dr. Durant has expertise in formative data collection and analyses, recruitment and retention among young diverse populations, and physical activity measurement, including utilization of accelerometers and heart rate monitors to appropriately monitor physical activity.

# **Funding Sources:**

Nutrition or Obesity Grants to Be Active during the Requested Funding Period (2012–2017):

- RWJF663330 (PI: Durant). Period: 07/01/09–06/30/12. Title: Harnessing the Power of Technology: Weight Loss and Physical Activity in Young African American Women.
- AHA09SDG2250272 (PI: Durant). Period: 07/01/09–06/30/13. Title: FIT HARRT (Fitness with Technology— Heart Risk Factor Reduction Tool): Decreasing Cardiovascular Risk Factors in Young Overweight African American Women through a Technology Based Fitness Intervention.

**Description of Research Projects and Relevance to Nutrition:** Dr. Durant's research seeks to develop innovative, culturally relevant weight-loss intervention strategies that promote physical activity and healthy eating in overweight African-American women ages 19–30. Dr. Durant is interested in determining whether physical activity and nutrition interventions can be delivered via the Internet and other innovative technologies in this vulnerable population. In collaboration with Drs. Allison, Affuso, and Cherrington, Dr. Durant is developing and piloting prototypes for culturally adapted Internet-based interventions to promote physical activity and healthy eating among young, overweight African-American women.

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#### Investigator: Gareth R. Dutton, PhD

Primary University Title: Associate Professor of Medicine

Secondary University Appointments: N/A

Background & Interests: Dr. Dutton is an Associate Professor of Medicine in the Division of Preventive Medicine. He received his PhD in Clinical Psychology with a specialization in Behavioral Medicine from Louisiana State University in Baton Rouge and completed his pre-doctoral clinical internship at Brown University in Providence, RI. Dr. Dutton served as an Assistant Professor in the Florida State University College of Medicine in Tallahassee from 2005–2011. His research interests include behavioral/lifestyle interventions for weight loss, physical activity, and diabetes prevention. He has particular interests in interventions as they are implemented in applied and community-based settings and with underserved and minority populations. Related areas of interest include predictors of weight-loss maintenance, modifying maintenance programs to minimize weight regain following treatment, and the role of physicians in weight-loss counseling.

#### **Funding Sources:**

Nutrition or Obesity Grants to Be Active during the Requested Funding Period (2012–2017):

- MHRC Pilot Funding, no number assigned (UAB Intramural Funding) (PI: Dutton). Period: 10/01/11– 09/30/12. Title: An Obesity Prevention Program for African-American Female High School Students.
- NIH Funding, no number assigned (PI: Dutton). Period 07/01/11–01/30/15. Title: Improving Weight-Loss Maintenance through Alternative Schedules of Treatment.

**Description of Research Projects and Relevance to Nutrition:** The Minority Health and Health Disparities Research Center (MHRC) pilot grant will develop and provide preliminary evaluation of a health promotion program (i.e., healthy eating and increased activity) for teenage girls at risk for developing overweight/obesity. The NIDDK project titled "Improving Weight Loss Maintenance through Alternative Schedules of Treatment" is the transfer of Dr. Dutton's K23 award from his previous institution to UAB. This trial will examine the effectiveness and cost-effectiveness of a 12-month "clustered" scheduling of extended-care treatment sessions on weight-loss maintenance.

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#### Investigator: José R. Fernández, PhD

**Primary University Title:** Associate Professor and Vice Chair for Education–Department of Nutrition Sciences **Secondary University Appointments:** Section on Statistical Genetics, Department of Biostatistics

Background & Interests: Dr. Fernández is an Associate Professor in the Division of Physiology and Metabolism in the Department of Nutrition Sciences. He obtained his PhD in Biobehavioral Health from The Pennsylvania State University, training in genetics of complex traits and working with the three most commonly used models for genetic research: fruit flies, mice, and humans. He continued his academic training at the New York Obesity Research Center at Columbia University as a Postdoctoral Fellow focusing on genetics of obesity and receiving specialized training in statistical models to improve the identification of genetic and environmental influences on obesity-related characteristics. Dr. Fernández joined UAB in August 2001, bringing special expertise in the application of statistical models to detect genetic influences in obesity-related traits. He has been actively involved in The Obesity Society in a variety of committees and leadership roles and serves on the editorial board of the *International Journal of Obesity*. Dr. Fernández' research focuses on the identification of genes that contribute to racial differences in obesity, body composition, and diabetes by the application of the genetic admixture approach as a tool to decompose the genetic, social, and cultural components underlying these differences.

#### **Funding Sources:**

Notable (Selected Only) Pending Nutrition- or Obesity-Related Grants:

- R01HL112593 (PI: Fernández). Period: 2/1/12–01/31/17. Title: Social Discrimination and Genetic Ancestry in Pediatric Hypertension Risk.
- R01DK062148 (PI: Bray; Co-I: Fernández). Period: 03/01/10–02/28/15. Title: Training Interventions and Genetics of Exercise Response.
- R01DK084219 (PI: De Luca; Co-I: Fernández). Period: 05/01/10–04/31/14. Title: Genetic Control of Quantitative Traits Associated with the Metabolic Syndrome.

Description of Research Projects and Relevance to Nutrition: The factors underlying racial/ethnic differences in obesity and related comorbidities are still unclear. Dr. Fernández' projects investigate the effect of genetic and environmental parameters on racial/ethnic differences in diabetes-related traits by modeling individual estimates of genetic admixture and environmental measures of energy intake, energy expenditure and socioeconomic status on measures of fasting insulin, sensitivity to insulin, and initial phase of insulin secretion after exposure to glucose in a multiethnic sample of children. Many cancer-related outcomes seem to differ according to racial/ethnic classification and seem to be mediated by obesity. Consequently, Dr. Fernández has become interested in the use of genetic admixture and social/cultural factors to explore the role of obesity in endometrial and breast cancer, taking advantage of the accessibility of minority populations available at UAB.

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#### Investigator: Kevin R. Fontaine, PhD

Primary University Title: Professor of Health Behavior (effective 04/01/2012)

**Secondary University Appointments:** N/A

Background & Interests: Dr. Fontaine earned his MA in Counseling Psychology from Assumption College in Worcester, MA, and his PhD in Psychology from Victoria University, Manchester, UK. He then completed a postdoctoral fellowship in clinical obesity treatment at Johns Hopkins, where he went on to earn an MA in Science/Medical Writing. He will join UAB on April 1, 2012, as Professor in the Department of Health Behavior. Dr. Fontaine's research interests focus on: (1) the physical and emotional consequences of chronic diseases such as obesity and arthritis, (2) the association between obesity, body composition, and mortality, and (3) the effect of resistance exercise on body composition and systemic inflammation in persons with rheumatic disease. Trained as a psychologist, Dr. Fontaine has worked with hundreds of overweight and obese adults using a variety of treatment modalities, ranging from lifestyle modification to gastric bypass surgery. He is the author of more than 90 publications related to obesity, health-related quality of life, the association of body mass index (BMI) to mortality and life expectancy, and fibromyalgia.

# **Funding Sources:**

Nutrition or Obesity Grants to Be Active during the Requested Funding Period (2012–2017):

• R21DK077959 (PI: Fontaine). Period: 07/01/08–06/30/12. Title: Obesity and Mortality among Hispanics.

**Description of Research Projects and Relevance to Nutrition:** Dr. Fontaine's current research seeks to evaluate the association of BMI and indices of body composition on mortality among Hispanic adults residing in the U.S. He also has an interest in determining the effects of resistance exercise on body composition, disease activity, and inflammatory markers among overweight and obese individuals with rheumatic disease, as well as in evaluating the effects of carbohydrate-restricted diets on systemic inflammation among overweight and obese individuals with rheumatic diseases (e.g., rheumatoid arthritis, myositis, vasculitis).

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# Investigator: E. Michael Foster, PhD

Primary University Title: Professor of Health Care Organization and Policy

Secondary University Appointments: Senior Scientist, Center for AIDS Research

**Background & Interests:** Dr. Foster joined UAB's School of Public Health in the Department of Health Care Organization and Policy in summer 2011. He was trained as an economist, graduating with a PhD from the University of North Carolina, Chapel Hill, in 1990. He was then a postdoctoral researcher at the University of Pennsylvania. Dr. Foster has published more than 100 articles on health and health policy. His main areas of research are cost-effectiveness analysis and causal inference. The former includes the use of simulation modeling to examine the impact of universal and targeted health interventions on public health.

#### **Funding Sources:**

Nutrition or Obesity Grants to Be Active during the Requested Funding Period (2012–2017):

• R21HD071569 (PI: Foster). Period: 09/15/11-06/30/13. Title: The Childhood Obesity Policy and

Comparative Effectiveness Model (COPCEM).

Description of Research Projects and Relevance to Nutrition: The costs of obesity are high and rising and affect all ages, yet there is little information about the cost-effectiveness of obesity treatments and interventions. Although much work is being done in this area, much of it is piecemeal, with the studies involved not following a common methodology, making comparisons of cost-effectiveness across studies difficult. What is needed is a comprehensive approach to understanding obesity as a public health problem and an issue of societal resource allocation. The Childhood Obesity Policy and Comparative Effectiveness Model (COPCEM) presents such a framework and will refine, validate, and verify a hybrid discrete-event and agent-based simulation model. This project will develop, validate, and utilize a hybrid model combining discrete-event simulation (DES) and agent-based modeling (ABM) to examine obesity in children from a system perspective. DES is the best choice in situations where the model will be used for multiple resource questions, agents are autonomous, and resources are potentially constrained. Dr. Foster's model has four sub-models: (1) The epidemiological-risk model will model obesity status over time, reflecting transition probabilities as well as contextual factors, such as the built environment and school characteristics. (2) He will use the disease model to model health care costs for screening and treatment of hyperlipidemia, primarily, and other obesity-related conditions. For each period, each individual will accrue the expected value of costs from other health conditions related to obesity. (3) The medical-system model examines the effects of personal and community characteristics on the likelihood of seeing a physician and receiving different types of screening or treatment. (4) Finally, the child-adult model uses the outputs from his simulation and similar models that have been developed for adults to examine the effects of childhood obesity into adulthood.

Dr. Foster will use the model to examine three important policy-relevant questions: (1) What is the economic impact of health care reform (CHIPRA and PPACA) on childhood obesity and its costs to children, their families, taxpayers, and society? (2) What is a cost-effective method for screening and treatment for hyperlipidemia among children? (3)What is the cost-effectiveness of a school-based universal obesity prevention programs? Dr. Foster intends to develop this model with other populations, including older adults.

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# Investigator: Mona N. Fouad, MD, MPH

**Primary University Title**: Professor of Medicine; Director, Division of Preventive Medicine; Director, UAB Minority Health and Health Disparities Research Center (MHRC)

**Secondary University Appointments**: Co-leader, Cancer Control and Population Sciences Program, UAB Comprehensive Cancer Center; Scientist, Nutrition Obesity Research Center (NORC), Diabetes Research and Training Center (DRTC), Center for Outcomes and Effectiveness Research and Education (COERE), Center for Aging, Comprehensive Cancer Center, and Center for the Study of Community Health

**Background & Interests:** Dr. Fouad joined the UAB Department of Medicine, Division of Preventive Medicine in 1991. Since 2009, she has led the Division of Preventive Medicine as its Division Director. Dr. Fouad is recognized nationally as a leader in health disparities research and is a member of the NIH National Advisory Council on Minority Health and Health Disparities. She is PI on numerous federally funded projects that bring in more than \$46 million and Co-PI on additional grants worth approximately \$15 million. Most of this funding has a common theme of improving health and preventing disease in minorities. Dr. Fouad serves as PI of the UAB Diabetes Research and Training Center Community Engagement Core, the UAB Minority Screening Center of the Prostate, Lung, Colorectal, Ovarian Cancer (PLCO) Screening Trial and *GO*-ing Forward.

# **Funding Sources:**

Nutrition or Obesity Grants to Be Active during the Requested Funding Period (2012–2017):

- N01CN75022 (PI: Fouad). Period: 09/30/97–09/29/14. Title: Prostate, Lung, Colorectal and Ovarian (PLCO) Cancer Screening Trial Expansion for Minority Enrollment.
- RC2MD004778 (PI: Fouad). Period: 09/28/09–07/31/12; Title: GO-ing Forward.

Description of Research Projects and Relevance to Nutrition: The PLCO Trial is a large-scale, randomized study to determine whether certain screening tests can identify cancers early and reduce deaths. PLCO participants in both arms of the trial completed food frequency questionnaires. This diet history data in combination with height/weight measurements, cancer incidence rates, and biologic samples provides a valuable resource for investigators studying the relationships between obesity, diet, and cancer. The goal of GO-ing Forward is to develop a comprehensive and effective multisystem measurement model to understand the underlying causes of the social determinants of obesity and its relation to health disparities. Specifically, it focuses on adopting a systematic approach to identify the gaps in measuring, understanding, and interpreting the social determinants of obesity in urban environments, represented by Fairfield and Forestdale. The

development, implementation, and evaluation of the project will be conducted by a diverse coalition, including members of academic institutions, community organizations and agencies, and lay individuals. By adopting such a multisystem, trans-disciplinary approach, the project will identify patterns and pathways, which will make it possible to understand the underlying causes and interactions of the social determinants of obesity. The **Community Engagement Core** (CE Core) of the DRTC develops, implements, and evaluates a community-based infrastructure to maintain linkage (engagement) between DRTC researchers and targeted communities, including community-based organizations, community leaders, potential research subjects, and community health-care systems and providers. This protocol will facilitate the development, implementation, and evaluation of a diabetes Community Health Advisor (CHA) training program. The CE Core emphasizes racial/ethnic disparities for diabetes, which disproportionately affects minority populations. Educational nutrition information is distributed to the community as part of this project. Training on healthy eating and exercise is part of the CHA training.

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# Investigator: W. Timothy Garvey, MD

Primary University Title: Butterworth Professor; Chair of the Department of Nutrition Sciences

Secondary University Appointments: Medicine, Cell Biology, Pathology

Background & Interests: Dr. Garvey earned his MD from St. Louis University in 1978, completing residency training in Internal Medicine at Washington University and a clinical fellowship in Endocrinology at the University of California, San Diego. He has held faculty posts at UCSD and Indiana University School of Medicine and, from 1994–2003, was Director of the Division of Endocrinology at the Medical University of South Carolina. In 2003, he moved to UAB as Department Chair and has been Associate Director of the NORC and Director of the DRTC. He is internationally recognized for his research in the metabolic, molecular, and genetic pathogenesis of insulin resistance, obesity, metabolic syndrome, and type 2 diabetes. Dr. Garvey has served on national research review committees for the NIH, the JDRF, the ADA, and the VA Merit Review Program and on multiple editorial boards and is a member of the ASCI, AAP, TOS, and ADA. Since 1978, he has directed an independent laboratory supported by the NIH (NIDDK, NHLBI), the VA, the AHA, JDRFI, ADA, industry, Gates Foundation, and other agencies.

Funding Sources: Nutrition or Obesity Grants to Be Active during the Funding Period (2012–2017):

- R01DK083562 (PI: Garvey). Period: 08/01/09–07/31/13. Title: NR4A Orphan Receptors and Insulin Resistance.
- Department of Veterans Affairs, Merit Review Research Grant (PI: Garvey). Period: 10/01/05–09/30/10 and 10/01/10–09/30/14. Title: Pathogenesis of the Metabolic Syndrome.
- Bill & Melinda Gates Foundation, Grand Challenges Explorations Grant: OPP1043461 (PI: Khaled, Co-PI: Garvey). Period: 11/01/11–04/30/13. Title: Healthy Growth of Infants by Treating Maternal Anemia.
- R01DK078328 (PI: Adams; subcontract PI: Garvey). Period: 08/04/09–09/30/12. Title: Identification of Muscle Specific Biomarkers of Fatty Acid Beta Oxidation.
- R01DK084350 (PI: Sale; subcontract PI: Garvey). Period: 07/01/09–06/30/12. Title: Genetic Contributions to Diabetes and Dyslipidemia in African Americans.

Description of Research Projects and Relevance to Nutrition: Dr. Garvey's studies involve the cellular and molecular biology of cell and animal models, as well as metabolic investigations of human subjects. He has brought basic technology directly to the study of human patients, and the combined approach of human physiology, genetics, and basic cell and molecular biology has provided the laboratory with a flexible capability for hypothesis testing. His work has been essential to understanding the role of the glucose transport system and glucose transporter proteins in human insulin resistance. Key research includes: (1) the molecular basis of insulin resistance in human muscle and fat tissue, based on the identification of dysregulated genes in microarray studies; (2) the role of secreted factors from adipose tissue in the metabolic syndrome trait cluster; (3) effects of adiponectin and its multimeric forms on adipocyte and macrophage cell biology; (4) Project Sugar, a genetics study among Gullah-speaking African Americans; and (5) optimal diagnostic criteria for metabolic syndrome in European and African Americans.

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#### Investigator: Brian F. Geiger, EdD, FAAHE

Primary University Title: Professor, Department of Human Studies

Secondary University Appointments: N/A

**Background & Interests:** Dr. Geiger is a senior member of the faculty and representative to the Executive Committee for the doctoral program in Health Education/Health Promotion, a joint offering of three academic

units (UAB College of Arts & Sciences, UAB School of Public Health, UA College of Human Environmental Sciences). He is the PI of HealthyME HealthyU©, a statewide collaborative to assess health information and clinical service needs among individuals with disabilities and their caregivers. This collaborative has resulted in multi-media educational programs disseminated to these audiences as well as students in health professions and clinical service providers. The focus of new titles under development is healthy eating and everyday fitness behaviors for consumers with intellectual disabilities. Dr. Geiger has mentored master's- and doctoral-level student research since 1993, earning the Dean's Excellence in Mentorship Award from the UAB Graduate School in 2009. Additionally, he has supervised student scholarly activities for the UAB School of Medicine, UAB School of Health Professions, University of South Alabama, and Wallace State Community College.

# **Funding Sources:**

Nutrition or Obesity Grants to Be Active during the Requested Funding Period (2012–2017):

• CDC & Lions Clubs International Foundation (PI: Bushong). Period: 5/01/10–4/30/12. Title: Healthy Athletes Development Grant.

Description of Research Projects and Relevance to Nutrition: There is a need to enhance nutrition and physical activity knowledge and skills among individuals with disabilities and their caregivers. Dr. Geiger's collaborative team of researchers and educators conducted statewide assessment. Their purpose was to determine barriers and opportunities to educating Alabama consumers with intellectual and physical disabilities about healthy lifestyles. Results were used to develop printed and media resources disseminated through state and nonprofit agencies, universities, and professional organizations without charge to four key audiences (consumers, family and other caregivers, students in health professions, and clinicians). Dr. Geiger has actively engaged undergraduate and graduate health education and medical students in all research and training activities.

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#### Investigator: Barbara A. Gower, Ph.D.

Primary University Title: Professor of Nutrition

Secondary University Appointments: Physiology and Biophysics

Background & Interests: Dr. Gower received her BS in Microbiology from The Pennsylvania State University and her PhD in Biology (Reproductive Physiology/Endocrinology) from the University of Utah. She then conducted postdoctoral work in Endocrinology at the University of Delaware and in Human Metabolism at UAB. She joined the faculty of the Department of Nutrition Sciences in 2007 and holds appointments in the Department of Physiology and Biophysics, the UAB Center for Aging, the UAB Nutrition Obesity Research Center (NORC), the UAB Center for Metabolic Bone Disease (CMBD), and the UAB Diabetes Research and Training Center (DRTC). Dr. Gower serves as Director of the Metabolism Core for UAB's NORC and Center for Clinical and Translational Science (CCTS) and of the Human Physiology Core for UAB's DRTC. Her research focus is on the interplay between endocrinology and metabolism and their relation to chronic metabolic disease. Dr. Gower's major research areas are: 1) determining how physiologic, genetic, and lifestyle factors contribute to greater risk for type 2 diabetes in African Americans and 2) exploring the role of diet quality in determining insulin sensitivity and beta-cell function.

#### **Funding Sources:**

Nutrition or Obesity Grants to Be Active During the Requested Funding Period (2012–2017):

- R01DK049779 (PIs: Hunter/Gower). Period: 09/15/09–06/30/14. Title: Exercise Intensity, Metabolic Rate & Insulin Sensitivity.
- R01AG033094 (PIs: Ard/Locher). Period: 09/15/09–06/30/14. Title: Calorie Restriction and Changes in Body Composition, Disease Risk, Function, & Quality of Life in Older Adults.

Notable (Selected Only) Pending Nutrition- or Obesity-Related Grants:

• R01 (Pls: Gower/Quon). Period: 07/01/12–06/30/17. Title: Race/Adiposity Interactions Regulate Mechanisms Determining Insulin Sensitivity.

**Description of Research Projects and Relevance to Nutrition:** Dr. Gower is conducting research to determine: 1) if diet quality can improve reproductive and metabolic outcomes among women with polycystic ovary syndrome (PCOS) and 2) the mechanisms through which exercise intensity affects insulin sensitivity in African-American and European-American women. Her goal and future research emphasis is to develop lifestyle interventions that are "personalized" and take into account such factors as ethnicity and individual differences in physiology.

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#### Investigator: George Howard, DrPH

Primary University Title: Professor and Chair, Department of Biostatistics

Secondary University Appointments: N/A

Background & Interests: Dr. Howard joined UAB in 1999 as Chair of the Department of Biostatistics. Previously, he was at Wake Forest University for approximately 25 years, and he received his training in Biostatistics from the University of North Carolina. Dr. Howard has had a long-term interest in advancing the understanding of racial and geographic disparities in stroke mortality, where differences in nutrition and diet has long been a prominent hypothesis. In this effort, he is the PI of the REasons for Geographic And Racial Differences in Stroke (REGARDS) Study. As part of the evaluation, food frequency and measures of adiposity have been collected, and the association of these assessments with subsequent heart disease and stroke (as well as intermediate measures such as associations with incident and prevalent hypertension and diabetes) are in analysis. Demonstrating the commitment to nutritional pathways as a potential mechanism, the study has added Dr. Judd, a Nutritional Epidemiologist, to be the lead analyst for the entire study. In conjunction with Dr. Ard (also a NORC investigator), Dr. Howard is also a co-investigator in an General Mills-funded ancillary study to REGARDS to facilitate the coding (through the Block system) and reporting of the food frequency data. Jointly supported by both REGARDS and the ancillary study, analysis has already begun on regional and racial disparities in "healthy lifestyle choices," including diet and adiposity (and also smoking and exercise), geographic variations in diet potentially contributing to geographic disparities in cardiovascular diseases, and specific foods (including fish) to stroke risk and cognitive decline. Dr. Howard was previously the PI of the Coordinating Center for the Insulin Resistance Atherosclerosis Study (IRAS), the Autoimmune Ear Disease (AIED) Study, and the Prospective Randomized Evaluation of the Vascular Effects of Norvasc Trial (PREVENT) and Co-Pi in the Southeastern Consortium on Racial Differences in Stroke (SECORDS).

# **Funding Sources:**

Nutrition or Obesity Grants to Be Active during the Funding Period (2012–2017):

- R01NS41588 (PI: Howard). Period: 09/01/01–11/30/12. Title: Etiology of Geographic and Racial Differences in Stroke (REGARDS).
- NIH/Georgetown University U54NS057405 (PI: Howard). Period: 09/30/07–08/31/12. Title: Stroke Disparities Program.

**Description of Research Projects and Relevance to Nutrition:** Despite racial and geographic disparities being associated with a public health burden in excess of \$6.3 billion annually, the underlying contributors remain a mystery. Diets (and contributions of obesity) are among the leading hypotheses for these disparities. REGARDS will directly assess this hypothesis by assessing these factors and following the cohort forward for subsequent events.

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#### Investigator: Gary R. Hunter, PhD

**Primary University Title:** Professor Human Studies **Secondary University Appointments:** Nutrition Science

Background & Interests: Dr. Hunter is well established as a leading authority in exercise science, muscle metabolism, and regulation of body composition. He earned his PhD in Exercise Physiology at Michigan State University. He then served as Director of the Wellness Program at the University of Wisconsin-Madison before joining the faculty at UAB in 1984, where he is currently Professor of Human Studies and Nutrition Sciences and Senior Scientist in the Centers for Aging and Diabetes Research and Training Center. Dr. Hunter's human research portfolio includes more than 200 peer-reviewed publications, with the past 19 years focused primarily on metabolic regulation during exercise, body composition and energy expenditure, exercise and dietary weight-loss interventions in premenopausal obese African-American and European-American women, and exercise treatment strategies for sarcopenic older adults. His most recent completed project in older women was aimed at the role chronic inflammation has in impaired exercise training adaptations among older women. His primary ongoing project will test the effect an acute bout of high-intensity exercise has on energy expenditure, insulin sensitivity, mitochondria function, and muscle signals. Exercise science has consistently been central to Dr. Hunter's research.

#### **Funding Sources:**

Nutrition or Obesity Grants to Be Active during the Funding Period (2012–2017):

- R01DK049779 (PI: Hunter). Period: 10/31/10–07/31/14. Title: Exercise Intensity, Metabolic Rate & Insulin Sensitivity.
- R01DK062148 (PI: Bray; Co-I: Hunter). Period: 06/14/2010–05/31/15. Title: Training Interventions and Genetics of Exercise Response (TIGER).

- R01AG027084 (PI: Hunter). Period: 09/01/05–08/31/12. Title: Frequency of Aerobic/Resistance Training in Older Women.
- R01AG033094 (Pls: Ard/Locher; Co-I: Hunter). Period: 09/15/09–08/31/14. Title: Calorie Restriction & Changes in Body Composition, Disease, Function, & QoL in Older Adults.
- R01DK078328 (PI: Adams; Co-I: Hunter). Period: 06/01/08–05/31/12. Title: Identification of Muscle-Specific Biomarkers of Fatty Acid-Oxidation.

**Description of Research Projects and Relevance to Nutrition:** Dr. Hunter's work is directly about obesity, weight loss, exercise, and body composition.

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#### Investigator: Edmond Kabagambe, DVM, PhD

**Primary University Title:** Associate Professor, Department of Epidemiology

Secondary University Appointments: N/A

Background & Interests: Dr. Kabagambe joined UAB in 2005 as Assistant Professor in the Department of Epidemiology. He was born in Uganda and attended Makerere University, where he trained as a veterinarian. He was retained as an Assistant Lecturer in the Department of Veterinary Public Health and Preventive Medicine, where he did large-animal clinical work and research in food-borne diseases. In 1995, he joined the Department of Epidemiology and Community Health at Louisiana State University (LSU) and obtained an MS in Epidemiology. In 1997, Dr. Kabagambe joined the USDA Animal and Plant Health Inspection Service in Fort Collins, Colorado, for additional training in food safety and quantitative epidemiology under the mentorship of Dr. Scott J. Wells. In 1998, he returned to LSU and obtained a PhD in Epidemiology in 2000 under the mentorship of Dr. James E. Miller. In 2000, he joined the Department of Nutrition at Harvard School of Public Health as a Postdoctoral Fellow in nutritional epidemiology under the mentorship of Dr. Hannia Campos. In 2003, he returned to Makerere University and served as a Senior Lecturer in Public Health and Preventive Medicine. In 2004, he returned to the Department of Nutrition at Harvard School of Public Health, where he did research on diet, lipids, genes, and cardiovascular disease. Dr. Kabagambe's research focuses on the effect of nutrition and genetics on lipids, drug response, diabetes and cardiovascular disease in the U.S., Africa, and Central American populations. His current work includes investigations on the role of genetic polymorphisms on fatty acid and cholesterol metabolism, effects of alcohol on cardiovascular disease, and genetic determinants of lipid response.

#### **Funding Sources:**

Nutrition or Obesity Grants to Be Active during the Requested Funding Period (2012–2017):

- R21DK84560 (PI: Kabagambe). Period: 07/01/10–06/30/12. Title: Pretreatment Genotyping at APOA5 and GCKR Loci and Response to Fenofibrate Therapy.
- AHA0635323N (PI: Kabagambe). Period: 07/01/06–06/30/12. Title: Alcohol-Metabolizing Genes, Lipids, Inflammatory Markers and Myocardial Infarction.
- NIH/Massachusetts General Hospital. (Pl of subcontract: Kabagambe). Period: 07/01/11–06/30/16. Title: Common Genetic Variation and Quantitative Diabetes Traits.

Notable (Selected Only) Pending Nutrition- or Obesity-Related Grants:

• R01HL113316 (PI: Kabagambe). Period: 04/01/12–03/31/17. Title: MicroRNAs, DNA Methylation and Structural Changes Influencing HDL-Cholesterol.

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#### Investigator: Jong-Eun Kim, PhD

Primary University Title: Associate Professor of Mechanical Engineering

**Secondary University Appointments:** N/A

**Background & Interests:** Dr. Kim was recruited to UAB in 2003 as an Assistant Professor in the Department of Mechanical Engineering, and he was promoted to Associate professor in 200 Dr. Kim has had significant experience in the field of computational mechanics. His PhD dissertation work at the University of California at Davis was analysis and design optimization for a high-speed rotor blade system using various computational methods. During his postdoctoral training at Mississippi State University, he developed a novel pre-processing system for computational simulations. He was a lead engineer of a crashworthiness program charged with overseeing the research on computational vehicle crashworthiness and optimization before he joined UAB. After joining UAB, Dr. Kim formed the research area and group "Computational Structural BioMechanics" based on a strategic focus area of the Department of Mechanical Engineering. Dr. Kim is working in a wide spectrum of fields, including computational modeling and simulation. Currently, he focuses on computational modeling and simulation of human musculoskeletal system and obesity-related motor vehicle crash injuries.

#### **Funding Sources:**

Nutrition or Obesity Grants to Be Active during the Requested Funding Period (2012–2017):

 R21HD067784 (PI: Kim). Period: 12/10/10–11/30/12. Title: Risk and Injury Severity of Obese Child Passengers in Motor Vehicle Crashes.

Description of Research Projects and Relevance to Nutrition: The goal of the current research conducted by Dr. Kim is to advance our understanding of the injury mechanisms of obese children when they are exposed to high-speed impact environments. The motivation of the study is that it is questionable as to whether current child protective and restraint systems that are optimized for the standard size (non-obese) children are safe enough for obese children. Since no physical surrogates (i.e., crash dummies) for obese children are available, and experiments on pediatric cadavers may not generally be feasible, computational modeling and simulation methods are used to achieve the goal of the study. This study is the first attempt to examine the safety of obese children using biofidelic computational models and crash simulations. Successful completion of the study will have a broad impact. This effort will reveal unique injury mechanisms sustained by obese children in unintentional accidents. The outcomes of the study would draw public attention to another health risk of childhood obesity and also provide guidelines for reengineering devices, systems, and regulations to improve safety for the rapidly increasing obese child population. His work has potential applicability for aging, as well.

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#### Investigator: Cora E. Lewis, MD, MSPH

**Primary University Title:** Professor of Medicine **Secondary University Appointments:** Public Health

**Background & Interests:** An internist and epidemiologist, Dr. Lewis has considerable experience in conducting long-term epidemiologic studies and clinical trials, including expertise in recruitment and retention in large, long-term studies, measures of body composition and fat distribution, population surveys, disease outcomes, lifestyle assessments, and epidemiologic methodology. She has served as assistant editor of *Annals of Epidemiology*, has served on review committees for NIAMS, NHLBI, and NIA, and has served in several leadership roles on collaborative studies and in national organizations, including the American Heart Association Council on Epidemiology and Prevention (Program Committee chair and chair of the council). Her research interests include a focus on the epidemiology of obesity and its long-term health effects.

# **Funding Sources:**

Nutrition or Obesity Grants (Selected) to Be Active during the Requested Funding Period (2012–2017):

- U01DK57008 (PI: Lewis). Period: 09/30/99–07/31/13. Clinical Center for Look AHEAD: Health in Diabetes.
- R01HL098445 (PI: Carr, Subcontract PI: Lewis). Period: 04/01/10–03/31/14. Longitudinal Changes in Pericardial Adiposity and SubClinical Atherosclerosis–Field Center.
- NHLBINO1HC48047 (PI: Lewis). Period: 02/01/89–06/30/13. Title: Coronary Artery Risk Development in Young Adults (CARDIA): Field Center.
- U01AG18947 (PI: Lewis). Period: 01/01/01–06/30/14. Title: Multicenter Osteoarthritis Study (MOST) Renewal.
- U01AR45632 (PI: Shikany). Period: 09/30/99–07/31/12. Title: Osteoporotic Fractures in Men (MrOS).
- N01HC95256 (CO-PIs: Oparil, Lewis). Period: 08/31/09–08/30/1 Title: Systolic Blood Pressure Intervention Trial (SPRINT) Clinical Center Networks.

Description of Research Projects and Relevance to Nutrition: Dr. Lewis has published many papers from the multi-center Coronary Artery Risk Development in Young Adults (CARDIA) study, a long-term epidemiologic study of the development of cardiovascular risk factors in a diverse cohort of young adults over time, describing the emerging obesity epidemic, the relative contributions of aging and secular trends, and the lifestyle factors associated with long-term weight change. Dr. Lewis serves as PI of the NHLBI-funded CARDIA field center in Birmingham, as well as of the field center for the NHLBI-funded Visceral Fat, Metabolic Rate, and CHD Risk in Young Adults, the NIAID-funded Fat Redistribution & Metabolic Changes in HIV Infection, the NHLBI-funded Women's Health Initiative, and the NIDDK-funded Look AHEAD trial (Action for Health in Diabetes) involving the long-term benefits and risks of weight loss in type 2 diabetes.

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# Investigator: Lisa C. McCormick, DrPH

**Primary University Title:** Assistant Professor

**Secondary University Appointments:** Clinical Assistant Professor, Global Environmental Health Sciences, Tulane University

Background & Interests: Dr. McCormick is an Assistant Professor at the UAB School of Public Health in the Department of Health Care Organization and Policy. She has been involved in public health workforce development, training, and outreach for more than 20 years. Prior to becoming a faculty member in 2010, she worked directly with federally funded public health training and outreach centers and has managed all of UAB's Preparedness Center and Public Health workforce development activities since 2002. Dr. McCormick is Director of the HRSA funded Alabama Public Health Training Center (AL PHTC) at UAB. The AL PHTC partners with the Mississippi Department of Health and the Alabama Department of Public Health to assess the technical, scientific, managerial, and leadership needs of those providing nutrition and obesity prevention services in the medically underserved areas of the south central region. Dr. McCormick is also the Associate Director of the South Central Preparedness and Emergency Response Learning Center and has participated as Investigator or PI on numerous other federal and state awards, including the Jefferson County Department of Health's CDC-funded Communities Putting Prevention to Work against Obesity award.

#### **Funding Sources:**

Nutrition or Obesity Grants to Be Active during the Requested Funding Period (2012–2017):

• UB6HP22824 (PI: McCormick). Period: 09/01/11–08/31/15. Title: Affordable Care Act (ACA) Public Health Training Centers.

Description of Research Projects and Relevance to Nutrition: As Director of the Alabama Public Health Training Center, Dr. McCormick works with academic and practice partners to assess the technical, scientific, managerial, and leadership workforce development and technical assistant needs of nutrition service providers, including those with responsibilities in obesity prevention, WIC, and nutritional/health education. Using assessment results, competency-based training will be developed targeting those needs and delivered via distant learning modalities such as online courses, satellite broadcasts, live and archived webcasts, and case-based coaching sessions. Trainings also will address identified policy and practice prescriptions taken from research to field implementation. Dr. McCormick also works with academic partners to: 1) expand public health education opportunities through the offering of a dual graduate degree in public health and nutrition; 2) create opportunities for faculty to mentor public health students with interest in nutrition and obesity prevention on semester-long practice projects designed around identified public health needs in medically underserved areas of Alabama, Mississippi, and Louisiana; and 3) create competency-based field placement experience for students in agencies providing nutrition and obesity prevention services.

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# Investigator: Nir Menachemi, PhD

**Primary University Title:** Professor of Health Care Organization and Policy

**Secondary University Appointments:** School of Health Professions (Health Administration), School of Business (Management)

**Background & Interests:** Dr. Menachemi was recruited to UAB in 2007 as an Associate Professor in the Department of Health Care Organization and Policy. Dr. Menachemi's training is in health services administration with a concentration in strategic management. Additionally, he holds a master's degree in public health with a concentration in health policy. As such, his research typically focuses on how policies at the society or organizational level impact population outcomes or other important firm-level performance measures. Recently, Dr. Menachemi became interested in policy issues surrounding nutrition and obesity.

#### **Funding Sources:**

Nutrition or Obesity Grants to Be Active during the Requested Funding Period (2012–2017):

• Jefferson County Department of Health (PI: Menachemi). Period: 08/01/11–07/31/12. Title: JCDH and School of Public Health Academic Health Department Partnership for Research.

**Description of Research Projects and Relevance to Nutrition:** Dr. Menachemi is the PI on the evaluation component of a large CDC-funded initiative in Jefferson County, Alabama, focusing on policy changes designed to reduce obesity in Birmingham and surrounding areas. Moreover, he is interested in how green spaces and other aspects of the built environment influence physical activity and obesity risk.

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# **Investigator: Max Michael, MD**

**Primary University Title:** Dean, School of Public Health and Professor, Department of Health Care Organization and Policy

Secondary University Appointments: Professor, School of Medicine

**Background & Interests:** Dr. Michael was recruited to UAB as Dean of the School of Public Health in 2001. Prior to his appointment, he served as the CEO and Medical Director of Cooper Green Mercy Hospital, Jefferson County's municipal hospital. Dr. Michael served in a variety of capacities at Cooper Green Mercy

Hospital, including Chief of the Medical Staff and Chair of the Department of Medicine. He continues to practice Internal Medicine at the hospital on a part-time basis. Dr. Michael's interests are public health policy, access to care, the social determinants of health and disease, and health systems reform.

#### **Funding Sources:**

Nutrition or Obesity Grants to Be Active during the Requested Funding Period (2012–2017):

 U48DP001915 (PI: Michael). Period: 09/30/09–09/29/14. Title: City Health-Center for the Study of Community Health Category 1. The major goal of this project is to build strong capacity in the communities within which we collaborate in research, training, and dissemination programs for risk reduction and building an infrastructure that provides the CHP, CDC, and our community partners with a strong and broad base for further collaboration.

Description of Research Projects and Relevance to Nutrition: Since 2003, Dr. Michael has served as the Director of the Center for the Study of Community Health, a CDC-funded Prevention Research Center. Until 2009, the Center's activities focused on community-based interventions in several small communities in Alabama's Black Belt designed to improve lifestyle, including development of a cookbook, funding for a walking track, and healthy eating classes. Since 2009, the Center's activities have begun to address health disparities among emerging adults in Birmingham's core neighborhoods. The community partner for these activities is Congregations for Public Health (CPH), a 501(c)(3) organization of six African-American churches with a mission to address public health issues within a one-mile radius of the church. In 2009, Dr. Michael was part of the founding Leadership Team for Jefferson County's highly successful Communities Putting Prevention to Work grant, which funded tobacco-free initiatives (approximately \$7 million over three years) and obesity-reduction strategies (approximately \$6.5 million over three years) within the metropolitan area.

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# Investigator: Belinda L. Needham, PhD

Primary University Title: Assistant Professor, Department of Sociology

Secondary University Appointments: N/A

**Background & Interests:** Dr. Needham earned her MA and PhD in Sociology from the University of Texas, Austin, and completed her postdoctoral work in Population Health at the University of California, San Francisco and Berkeley (Robert Wood Johnson Health and Society Scholars Program). Her research focuses on the link between mental and physical health across the life course. She is particularly interested in identifying developmental processes by which social inequality shapes inequalities in health. Dr. Needham's work is grounded in the social structure and personality perspective, which attempts to uncover the ways in which social structural variables, such as gender, race/ethnicity, and class, influence individual personality, behavior, and well-being.

#### **Funding Sources:**

Nutrition or Obesity Grants to Be Active during the Requested Funding Period (2012–2017):

• NIH-University of California (San Francisco) 6433SC (PI: Needham). Period: 12/01/10–08/31/13. Title: Social Status, Cellular Aging, and Mortality.

**Description of Research Projects and Relevance to Nutrition:** Dr. Needham's work on social status and telomere length examines diet, exercise, and body composition as key mechanisms linking social status to cell aging. Additionally, her work examines the association between symptoms of depression and obesity. Along with changes in physical activity, changes in appetite and eating behavior (i.e., increased consumption of high-fat, high-calorie foods) are thought to contribute to the association between depressive symptoms and changes in body mass index over time.

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# Investigator: Suzanne Oparil, MD

**Primary University Title:** Professor of Medicine and Director, Vascular Biology and Hypertension Program, Division of Cardiovascular Disease, Department of Medicine

Secondary University Appointments: Physiology & Biophysics, Senior Scientist, Center for Aging

**Background & Interests:** Dr. Oparil is Director of the Vascular Biology and Hypertension Program in the Division of Cardiovascular Disease, Department of Medicine at UAB. She is a practicing cardiologist with a special interest in the fundamental mechanisms of cardiovascular disease and in applying this information to the development of novel treatments. She participates in the design, recruitment, evaluation, and dissemination of results in multiple large multicenter clinical trials of antihypertensive and other cardiovascular therapies. Dr. Oparil has served as member of numerous Steering Committees in important hypertension outcome trials, including LIFE, ALLHAT, and, most recently, SPRINT. In the latter trial, Dr. Oparil is PI/Director of the UAB Clinical Center Network. Dr. Oparil also serves as Co-Chair of JNC 8; the Joint National Committee

charged by NHLBI with developing U.S. guidelines for the Prevention, Detection, Evaluation, and Treatment of High Blood Pressure. She has published more than 685 journal articles, books, and book chapters on topics in clinical cardiology, atherosclerosis, heart failure, vascular biology, and hypertension. Dr. Oparil has received many honorary memberships, lectureships, and distinguished awards for her contributions to hypertension research.

#### **Funding Sources:**

Nutrition or Obesity Grants to Be Active during the Requested Funding Period (2012–2017):

- HHSN268200900047C SPRINT (PI: Oparil). Period: 09/14/09–09/13/1 Title: Systolic Blood Pressure Intervention Trial (SPRINT).
- T32HL007457 (PD/PI: Oparil). Period: 07/01/08–06/30/16. Title: Mechanisms of Hypertension and Cardiovascular Diseases.
- R01HL087980 (PD/PI: Oparil). Period: 01/01/09–12/31/12. Title: O-GlyNAcylation: Novel Mechanism of Estrogen-Induced Vasoprotection.

Description of Research Projects and Relevance to Nutrition: Dr. Oparil is a cardiologist with a special interest in the fundamental mechanisms of cardiovascular disease and in applying this information to the development of novel treatments. Her research ranges from molecular and cellular studies to whole animal studies to clinical trials. She has made multiple innovative discoveries with major clinical impact: 1) observing that angiotensin-converting enzyme (ACE) is involved in vascular disease, leading to the development of ACE inhibitors; 2) identifying endothelin as the major mediator of pulmonary hypertension and pulmonary vascular disease, leading to the development of a class of drugs that provides hope for patients with pulmonary hypertension; and 3) defining novel pathways by which blood vessels are protected from injury by estrogens, providing crucial information on potential targets for future gene therapy. Dr. Oparil also has a longstanding interest in the sexual dimorphism of cardiovascular disease and the exciting new line of investigation centering around the role of protein O-GlcNAc modification as a vasoprotective and anti-inflammatory signaling mechanism in the vasculature. Her laboratory focuses on O-GlcNAc modification as a target of estrogen action in normal and injured arteries. They have demonstrated that O-GlcNAc modification of proteins is associated with a profound reduction in inflammation and neointima formation in injured arteries and an attenuation in inflammatory mediator expression in TNF-α stimulated isolated smooth muscle cells. Studies in progress have demonstrated that these effects are mediated through alterations in NF<sub>k</sub>B signaling. Dr. Oparil has partnered with many faculty and mentored many trainees.

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# Investigator: Chandrika Piyathilake, PhD Primary University Title: Professor of Nutrition Secondary University Appointments: N/A

Secondary University Appointments: N/A

**Background & Interests:** Dr. Piyathilake is a tenured Professor in the Department of Nutrition Sciences and a Senior Scientist of the UAB NORC, Comprehensive Cancer Center, and the Minority Health Research Center. She trained as a dental surgeon initially in Sri-Lanka and then completed her master's degree in International Health and her PhD in Nutritional Biochemistry at UAB. Her postdoctoral training focused on diet and cancer prevention with a special interest in nutrient-related intermediate endpoint biomarkers of cancer. Her research goals are to systematically develop promising dietary interventions for cancer prevention while understanding the underlying molecular mechanisms of action.

# **Funding Sources:**

Nutrition or Obesity Grants to Be Active during the Requested Funding Period (2012–2017):

• R01CA102489 (PI: Piyathilake). Period: 01/01/2006–05/31/2012. Title: HPV Clearance by Folic Acid Supplementation.

Notable (Selected Only) Pending Nutrition- or Obesity-Related Grants:

- R21CA164396 (PI: Piyathilake). Period: 09/01/11–8/31/13. Title: Cervical Cancer Preventive Measures Based on HPV 16 Epigenome.
- R01DK095849 (PI: Piyathilake). Period: 07/01/12–06/30/17. Title: Diet-Related Disease Pathways Affected by Dietary Patterns.
- DP1OD009469 (PI: Piyathilake). Period: 09/30/12–07/31/17. Title: Nutritional Regulation of the Human Newborn Epigenome and Phenotypic Outcomes.
- NIH/MD Anderson (Subcontract PI: Piyathilake). Period: 09/01/11–08/31/16. Title: Using Innovative Technology to Minimize Weight Retention in Post-Partum Women.

Description of Research Projects and Relevance to Nutrition: Dr. Piyathilake's studies began by examining whether specific micronutrients play an independent role in the development of CIN 2+ among HR-HPV-positive women enrolled in an observational study Atypical Squamous Cells of Undetermined Significance-Low-Grade Squamous Intraepithelial Lesion Triage Study conducted by the National Cancer Institute. The results from these studies demonstrated that higher circulating concentrations of folate are associated with a lower likelihood of becoming HR-HPV positive and of having a persistent HR-HPV infection, and when infected, a greater likelihood of clearing HR-HPV. These studies also have demonstrated that women with lower folate status and positive for any 13 types of HR-HPV were two times more likely to have CIN 2+). More important, these studies also demonstrated that women with lower folate and positive for HPV-16 were nine times more likely to have CIN 2+, strongly suggesting a specific effect of folate on HPV 16, the most commonly found and most carcinogenic type of HPV. The outcomes generated by her studies in relation to folate and HPV natural history and HPV associated risk of developing CIN 2+ have resulted in a NCI-funded supplementation trial to investigate the effect of supplementation with folic acid (synthetic form of folate) on the clearance of HR-HPVs and the prevention of the development of CIN 2+ (R01 CA102489). These ongoing studies also have addressed concerns raised about the possible adverse effects of exposure to higher folate as a result of the U.S. folic acid fortification program. Her studies are the first to demonstrate that exposure to higher folate is beneficial rather than harmful for primary prevention of cervical cancer, especially among women with sufficient vitamin B12 status, and these beneficial effects are likely to be mediated via higher global DNA methylation status of peripheral blood mononuclear cells (PBMCs) and its most likely positive influence on immune response.

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#### Investigator: Michael S. Saag, MD

**Primary University Title**: Professor of Medicine, Department of Medicine/Division of Infectious Diseases **Secondary University Appointments**: Professor School of Public Health; Director, UAB Center for AIDS Research; Senior Scientist Center for Aging; Senior Scientist Comprehensive Cancer Center; Senior Scientist Center for the Study of Community Health; Senior Scientist Minority Health and Research Center; Senior Scientist Center for Outcomes and Effectiveness Research and Education

Background & Interests: Dr. Saag completed his Internal Medicine Residency and postdoctoral fellowship at UAB prior to his recruitment in 1987 as an Assistant Professor of Medicine/Infectious Diseases. He is the founding Director of the UAB 1917 HIV Clinic, which contains a unique HIV electronic medical record and extensive database being used by the UAB Center for AIDS Research to conduct outcomes research in HIV (<a href="www.uab1917cliniccohort.org">www.uab1917cliniccohort.org</a>). In 2000, he was among the original founding members of the CFAR Network of Integrated Clinical Systems (CNICS), and he took over as PI of the group in 2004. The CNICS Network is the first electronic medical records—based resource network poised to integrate clinical data from the large and diverse population of HIV-infected persons in the modern HAART era. Dr. Saag has served on the Board of Directors of the American Board of Internal Medicine (and as Chair of the Infectious Disease Subspecialty Board) and the NIH Office of AIDS Research Advisory Council. Dr. Saag's multifaceted research expertise has resulted in numerous publications, which include exploration of the relationship of HIV infection with body composition, bone density, and nutrition. Dr. Saag's main nutrition-related research interests include chronic diseases in patients living with HIV. He is involved in the development of nutrition interventions to treat obesity, cardiovascular disease, and metabolic syndrome in this patient population, many of whom are aging.

#### **Funding Sources:**

Nutrition or Obesity Grants to Be Active during the Requested Funding Period (2012–2017):

- R24Al067039 (PI: Crane). Period: 02/11/11–08/31/16. Title: Body Morphology Abnormalities and Patient Reported Outcomes: Depression, Adherence, Health-Related Quality of Life, Substance Use, Physical Activity, and Sexual Risk Behavior.
- R24Al067039 (PI: Blashill). Period: 06/08/11–08/31/16. Title: Impact BMI, Depression, and HIV Self-Care Behaviors among MSM.

**Description of Research Projects and Relevance to Nutrition:** Dr. Saag's current nutrition-related HIV research focuses on the interaction of HIV infection and body composition on chronic disease risk. Patients with HIV experience increased risk of osteoporosis, and Dr. Saag is working with Dr. Amy Warriner, also of the UAB Department of Medicine, to investigate the etiology of this relationship. He also has explored the effects of HIV infection and HIV medications on changes in body composition (fat mass, lean mass, and bone density) in a multi-site, longitudinal study. He has further collaborated with colleagues in the CNICS network to study the relationship of HIV treatment regimens with lipid levels. Dr. Saag's research also includes an international

focus, as he works with Dr. German Henostroza in Zambia to evaluate the associations of serum vitamin D levels and body fat mass with success in tuberculosis (TB) treatment for patients co-infected with TB and HIV.

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Investigator: Monika M. Safford, MD

Primary University Title: Associate Professor of Medicine

**Secondary University Appointments:** N/A

**Background & Interests:** Dr. Safford joined UAB in 2003 as an Assistant Professor in the Division of Preventive Medicine of the Department of Medicine. Dr. Safford has an active program in studies of the cardiometabolic syndrome, including her NIH-funded R01 "REasons for Geographic And Racial Differences in Stroke–Myocardial Infarction (*REGARDS-MI*)" study, an ancillary study to *REGARDS*. This national cohort numbers 30,239, includes 41% African Americans, and includes the Block Food Frequency Questionnaire. The processing of these data has only recently been completed, and they have begun to be used to, for example, describe dietary contributors to the Stroke Belt such as fried fish. Numerous reports from REGARDS have examined components of the metabolic syndrome and obesity in relation to health outcomes. Dr. Safford also leads a community-based intervention research program targeting underserved, rural communities to test interventions designed to promote healthy living, including optimizing diets and weight through lifestyle modification. She is concluding the Peers for Progress–funded *Encourage* study and will be fielding the *Encourage-2* study in 2012. Dr. Safford also has been a Co-Investigator on the *Look AHEAD* study of the long-term health effects of weights loss and was a *Women's Health Initiative* Investigator, participating in numerous studies of dietary components on cardiovascular disease outcomes.

# **Funding Sources:**

Nutrition or Obesity Grants to Be Active during the Requested Funding Period (2012–2017):

- HL080477 (PI: Safford). Period 09/01/11–08/31/16. Title: REGARDS-MI-2.
- R18HS019239 (PI: Safford). Period 09/29/10–09/28/13. Title: AHRQ CERs to Improve Quality of Life for People with Chronic Pain and Diabetes.
- U01NS041588 (PI: Howard). Period 05/01/08–04/30/13. Title: The Reasons for Geographic And Racial Differences in Stroke-2 Study
- U01DK57008 (PI: Lewis). Period 09/30/03–08/31/13. Title: Clinical Center for Look AHEAD: Health in Diabetes.

**Description of Research Projects and Relevance to Nutrition:** Dr. Safford's current research includes studies of the health effects of weight loss, interventions to improve quality of life and functioning as well as diabetes self-care practice including healthy diets and optimizing weight, and observational studies examining associations between clinical and physiologic characteristics of community dwellers and long-term health outcomes, particularly relating to cardiometabolic outcomes. Her research program is focused on understanding and eliminating racial disparities in health outcomes. Much of her work involves older populations.

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#### Investigator: Bisakha Sen. PhD

Primary University Title: Associate Professor of Healthcare Organization & Policy

**Secondary University Appointments: N/A** 

Background & Interests: Dr. Sen is an Associate Professor in Department of Healthcare Organization and Policy, specializing in health economics, labor economics, and applied econometrics. Her research interests include obesity and obesogenic behaviors. She has several on-going projects on obesity-related issues using various large, national level secondary datasets such as the associations between family connectivity and obesity-risk among adolescents, perceived neighborhood safety and obesity-risk among children, parental work patterns and obesity risk among children, and the effects of economic downturns on obesogenic behaviors such as food intake and physical activity among different demographic groups. My research utilizes large, secondary datasets such as the different National Longitudinal Survey datasets, the American Time Use Survey, the Consumer Expenditure Survey and the Youth Risk Behavior Surveys.

#### **Funding Sources:**

Nutrition or Obesity Grants to Be Active during the Funding Period (2012–2017):

RC2MD004778 (PI: Fouad). Period: 09/30/09–09/29/12. Title: GO-ing Forward.

**Description of Research Projects and Relevance to Nutrition:** Dr. Sen's Robert Wood Johnson Foundation—supported project (completing in 2012) "Did the Recent Changes in Macro-Economic Conditions Affect Physical Activity?" explores the relationship between gasoline prices and physical activity among adults

and youth and how that relationship varies across race-ethnicity as well as by socio-economic status (SES). The goal of her two-year research study, GO-ing Forward, with Dr. Fouad is to develop a comprehensive and effective multisystem measurement model to understand the underlying causes of the social determinants of health and their relation to health disparities, with a specific focus on obesity. Dr. Sen is doing program evaluations for CCPW-Obesity, an initiative that addresses reduced obesity and increased physical activity in Jefferson County, AL.

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Investigator: James M. Shikany, DrPH

Primary University Title: Associate Professor of Medicine

Secondary University Appointments: N/A

Background & Interests: Dr. Shikany is an Associate Professor in the Division of Preventive Medicine, UAB School of Medicine. He arrived at UAB in 1993, after earning a Public Health doctorate from the UCLA School of Public Health. Besides his primary appointment at UAB, Dr. Shikany is a Senior Scientist in the Diabetes Research and Training Center; Scientist in the Center for Aging, Center for Cardiovascular Biology, and Center for Exercise Medicine; and Associate Scientist in the NORC, Comprehensive Cancer Center, and Minority Health & Research Center at UAB. Dr. Shikany's professional efforts have been in the area of clinical research. His research interests are wide ranging but center on the association between diet and the epidemiology and prevention of chronic disease, including cancer and cardiovascular disease. He has current and previous research funding from NIH, Department of Defense, American Heart Association, and American Cancer Society. Specific research foci include glycemic index and glycemic load, dietary fats, nutritional antioxidants, obesity, optimal dietary patterns, and novel methods of dietary assessment. Several of his projects have focused on the influence of glycemic index and glycemic load on various components of the metabolic syndrome, including insulin sensitivity, blood lipids, and markers of inflammation. Still other studies have concentrated on specific nutrients and disease prevention, such as selenium and vitamin E and prostate cancer. Others have focused on optimal diets for the prevention and treatment of obesity. Several of Dr. Shikany's previous and current studies seek ways to improve dietary assessment methodology, especially in neglected populations, such as rural African Americans. Dr. Shikany has performed several scientific activities on a national level. He has been a member and Chair of the Behavioral Science, Epidemiology & Prevention peer-review study group of the American Heart Association and is a member of an NIH peer-review study group. Dr. Shikany has authored more than 75 publications in peer-reviewed journals and has delivered a multitude of scientific conference presentations in the area of nutrition and chronic disease. He also is a frequent reviewer for numerous scientific journals.

# **Funding Sources:**

Nutrition or Obesity Grants to Be Active during the Requested Funding Period (2012–2017):

- NIHCA37429 (PI: Shikany). Period: 09/30/00–09/29/12. Title: Study Center for the Selenium and Vitamin E Cancer Prevention Trial (SELECT).
- Medifast (PI: Allison). Period: 09/14/10-09/13/12. Title: Medifast 5&1 Randomized Clinical Trial.

**Description of Research Projects and Relevance to Nutrition:** Dr. Shikany's current nutrition-related projects include randomized controlled trials of dietary interventions. SELECT is a Phase III, double-blind, placebo-controlled clinical trial designed to assess the effect of selenium and vitamin E (individually and in combination) on the incidence of prostate cancer as determined by routine clinical management. The Medifast 5&1 trial is a single site, 2 parallel arm, randomized, controlled trial comparing the effectiveness of the Medifast 5&1 Plan to a food-based, reduced-energy diet plan. The study will be conducted over 52 weeks, including a 26-week weight-loss phase and a 26-week weight-maintenance phase.

Investigator: Daniel L. Smith, Jr., Ph.D.

Primary University Title: Instructor, Department of Nutrition Sciences

**Secondary University Appointments:** N/A

**Background & Interests:** Dr. Smith is a Faculty Instructor in the Department of Nutrition Sciences and an affiliate member of the UAB Center for Aging. He completed graduate training in 2007 at the University of Virginia, where he studied the genetic and molecular basis of calorie restriction using the chronological aging yeast model. He subsequently completed postdoctoral training at UAB with Drs. Nagy and Allison as a T32 trainee, where he studied the effects of nutrition and metabolism on obesity-related outcomes and longevity, including studies of calorie restriction mimetics, brown adipose tissue, and diet-induced obesity animal models. His research focuses on the effects of nutrition and metabolism in aging and disease, using both calorie restriction and diet-induced obesity models.

#### **Funding Sources:**

Nutrition or Obesity Grants to Be Active during the Requested Funding Period (2012–2017):

- The Obesity Society–Early Career Research Grant (PI: Smith). Period: 09/12/11–09/11/12. Title: Reduced Ambient Temperature as a Confounding Agent in Obesity Drug Discovery.
- R01AG033682 NIA (PI: Allison; Co-I: Smith). Period: 3/15/10–2/28/15. Title: Body Composition, Energetics, and Longevity.

**Description of Research Projects and Relevance to Nutrition:** Dr. Smith's current research as a co-Investigator with Drs. Allison and Nagy uses a mouse model of diet-induced obesity to determine the health and longevity effects of weight loss or weight cycling (yo-yo dieting) after the establishment of obesity. Studies with Dr. Nagy include the application and development of non-invasive, magnetic resonance imaging for *in vivo* assessment of brown adipose tissue amount and functional characteristics. This work complements a newly funded project where the ambient temperature-induced, hypermetabolic state of rodents in animal facilities may be influencing body weight and composition results in weight-loss drug discovery.

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#### Investigator: Bonnie A. Spear, PhD, RD

Primary University Title: Professor, Department of Pediatrics

Secondary University Appointments: Nutrition Sciences, School of Public Health

**Background & Interests:** For the past 31 years, Dr. Spear has worked in the area of pediatric and adolescent nutrition as a faculty member in the UAB Department of Pediatrics. For the past 18 years, she has served as the Project Director (PI) for a MCHB Nutrition Training Grant training more than 40 nutrition professionals to become leaders in the field of pediatric/adolescent nutrition. Over the past 15 years, her emphasis has been on the prevention and treatment of pediatric obesity. Her area of expertise is in community prevention and intervention. For example, in partnership with the Alabama State Health Officer and the Alabama Director of Nutrition and Physical Activity, she initiated the development and served as Co-Chair of the Alabama Obesity Task Force, which developed the strategic plan for obesity prevention and intervention in Alabama. In collaboration with the Maternal and Child Health Bureau, the Centers for Disease Control and Prevention, and the American Medical Association, she served as the lead author on the *Expert Committee Recommendations for the Treatment of Child and Adolescent Obesity* released in *Pediatrics* in December 2007, which provides the framework for clinical care in obesity. Also, with colleagues from UAB and Samford University, she developed and pilot tested the Healthy Eating Active Living (HEAL) curriculum in eight 5<sup>th</sup> grade PE classes in Alabama.

# **Funding Sources:**

Nutrition or Obesity Grants to Be Active during the Requested Funding Period (2012–2017):

- UB6HP22824 (PI: McCormick). Period: 09/01/11–08/31/15. Title: Health Resources and Service Administration (HRSA) Affordable Care Act Public Health Training Center.
- T79MC00011 (PI: Spear). Period: 07/01/08–06/30/13. Title: Leadership Education Excellence in Pediatric Nutrition.

**Description of Research Projects and Relevance to Nutrition:** Childhood Obesity continues to increase. Looking for ways to improve clinical care is the focus of Dr. Spear's research. Over the past year, she has investigated the use of hand-held indirect calorimetry as a way to individually assess the energy needs of adolescents in an outpatient clinic. The findings show that current predictive equations do not accurately estimate energy needs and that indirect calorimetry is a better tool to use in a clinical setting, and her research will continue in this area.

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Investigator: Trygve Tollefsbol, PhD, DO
Primary University Title: Professor of Biology
Secondary University Appointments: N/A

**Background & Interests:** Dr. Tollefsbol joined UAB in 1998 as an Assistant Professor in the Department of Biology. Dr. Tollefsbol previously trained as a graduate student in molecular biology at The University of North Texas Health Sciences Center, Fort Worth, and pursued his postdoctoral training at Duke University in 1982. Dr. Tollefsbol has won numerous awards, such as the 2010 best paper award in obesity and nutrition by UAB-based investigators (Science Unbound Foundation). Dr. Tollefsbol has been invited to speak in such countries as China, Singapore, India, Germany, Greece, Switzerland, The Netherlands, and the United Arab Emirates on nutrition and cancer prevention and has served as a reviewer for more than 80 different international journals. He has many publications and has co-authored several book chapters, all in the area of nutrition and obesity.

Dr. Tollefsbol's main research interests include nutrition as a cancer preventive and glucose restriction in aging and cancer prevention. The main questions addressed by his research are (A) the effects of epigenetic-modifying bioactive food components on breast cancer prevention; (B) the effects of caloric restriction on the epigenetics of cancer prevention; and (C) the impact of caloric restriction on the epigenetics of aging.

#### **Funding Sources:**

Nutrition or Obesity Grants to Be Active during the Requested Funding Period (2012–2017):

• American Institute for Cancer Research (PI: Tollefsbol). Period: 01/01/11–12/31/12. Title: Green Tea Polyphenols in the Prevention of Breast Cancer Initiation.

Notable (Selected Only) Pending Nutrition- or Obesity-Related Grants:

- R01CA129415 (PI: Tollefsbol). Period: 04/01/12–03/31/17. Title: Epigenetics of Breast Cancer Prevention (R01 renewal).
- R01AT007037 (PI: Tollefsbol). Period: 04/01/12–03/31/17. Title: Chemopreventive Epigenetics of Sulforaphane.

**Description of Research Projects and Relevance to Nutrition:** The current research conducted by Dr. Tollefsbol seeks to develop translational approaches for dietary chemoprevention of breast cancer. The major focus is dietary approaches using bioactive components to correct epigenetic aberrations in early breast cancer. We also are exploring dietary intervention into transgenerational epigenetics or early administration of bioactive dietary components to reduce breast cancer incidence later in life. Additional studies are to further explore novel *in vitro* approaches to caloric restriction of human cells to elucidate the molecular mechanisms of caloric restriction in humans and assess the effectiveness of caloric restriction on human cells. He also is exploring transgenerational aspects of caloric restriction, especially as it pertains to epigenetics.

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#### Investigator: Laura Kelly Vaughan, PhD

Primary University Title: Assistant Professor of Biostatistics

Secondary University Appointments: N/A

**Background & Interests:** Dr. Vaughan joined UAB in May 2005 as a Postdoctoral Fellow in the Department of Biostatistics, Section on Statistical Genetics. In October 2008, she became an Assistant Professor, also in Biostatistics. Her doctoral training was in population genetics and biochemistry, and she gained additional training in statistical genetics methodologies through her postdoctoral work. She then received a Mentored Career Development (K01) Award from the NIDDK to gain additional training in computational biology. Her research focuses on the integration of molecular, biochemical and genetic knowledge into the analysis of complex genomics data through the use of pathway and network methodologies.

#### **Funding Sources:**

Nutrition or Obesity Grants to Be Active during the Requested Funding Period (2012–2017):

 Mentored Research Scientist Career Development Award K01DK080188 (PI: Vaughan). Period: 09/01/08– 08/31/12. Title: Cluster Based Selection of Candidate Genes in Genome Wide Association Studies.

Description of Research Projects and Relevance to Nutrition: The relationship between nutrition, obesity, and other related metabolic diseases is complex. To best gain an understanding of the underlying etiology, we must move toward a systems view of these complex traits. A logical step in this direction is the integration of existing knowledge into the analysis of genetic data. Dr Vaughan's primary interest lies in this area. She has received a Mentored Career Development Award from the NIDDK to develop methodologies to capture biological information in the genetic analysis of complex traits. One of the specific aims of Dr. Vaughan's application was to apply these methods to real datasets in obesity research. Dr. Vaughan notes that obesity research is particularly well suited for the type of analysis she proposes. Obesity is a complex phenotype, with many sub-phenotypes. It is expected that a large number of genes, each with small effect contribute to a phenotype such as body mass index (BMI). Utilizing cluster analysis in GWA studies should enable researchers to discover patterns of connected genes contributing to obesity. Additionally, she has been actively involved in the application of current methods to applied questions. She has built several collaborations where she makes a significant contribution through the use of computational approaches such as pathway analysis. An example of this can be seen in her participation in a NIH application to investigate the role of Vitamin D and Osteocalicin in Cardiovascular Disease in the Jackson Heart Study. One of the Aims of this grant is to build a network that models the relationship of genetic variants, vitamin D status, CVD risk factors and CVD incidence. This collaboration is the result of Dr Vaughan participating as a faculty member in the NSF Short Course on Statistical Genetics and Statistical Genomics.

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7. Relevant Cohorts and Databases Available to Support Program. There are numerous opportunities for translational nutrition and aging research initiatives with datasets emanating directly from work of UAB investigators. Dr. Locher has had four studies supported by the National Institutes on Aging (one ongoing). All data from these studies are available to trainees and have been used by them to support dissertation research and publications. In this section, a sampling of internationally and nationally recognized datasets analyzing diverse aging populations are presented that are especially relevant for the proposed program.

# **UAB Study of Aging (SOA)**

The UAB Study of Aging (Allman, PI; Locher, Co-I) is a prospective, observational study of a population-based sample of 1000 community-dwelling Medicare beneficiaries, stratified by sex, race, and urban/rural residence now beginning its 3<sup>rd</sup> cycle of R01 funding from the National Institute on Aging. The hypothesis underlying this major research initiative is that potentially modifiable factors predict mobility (life-space) trajectories associated with aging among community-dwelling African Americans and whites. The focus of the third cycle of funding is on nutritional factors that are associated with mobility trajectories as well as transitions of care. Drs. Allman and Locher have mentored junior investigators using this cohort, including those focused on nutrition and aging.

#### The Osteoporotic Fractures in Men (MrOS) Study

The Osteoporotic Fractures in Men (MrOS) Study (Lewis, CE PI) funded by the National Institute of Arthritis and Musculoskeletal and Skin Diseases, the National Institute of Aging, and the National Cancer Institute, began in July 1999. MrOS a 7-year multi-center prospective, longitudinal, observational study examining risk factors for vertebral and all non-vertebral fractures in older men, and of the sequelae of fractures in men enrolled approximately 6000 men aged 65 and older). The specific aims of the MrOS study include: (1) to define the skeletal determinants of fracture risk in older men. (2) to define lifestyle (including nutritional) and medical factors related to fracture risk, (3) to establish the contribution of fall frequency to fracture risk in older men, (4) to determine to what extent androgen and estrogen concentrations influence fracture risk, (5) to examine the effects of fractures on quality of life, (6) to identify sex differences in the predictors and outcomes of fracture, (7) to collect and store serum, urine and DNA for future analyses as directed by emerging evidence in the fields of aging and skeletal health, and (8) define the extent to which bone mass/fracture risk and prostate diseases are linked. A new grant application is being written (Dr. James Shikany, PI and Drs. Lewis and Kilgore as Co-Is) to link MrOS data with Medicare claims data to examine the association between nutrition factors and health outcomes and health service utilization and costs. This is precisely the emphasis of the Translational Nutrition and Aging Program and Dr. Lewis is extremely supportive of the program (especially in light of her other studies described right below). Drs. Lewis and Shikany and other UAB faculty have mentored junior investigators using this cohort.

#### The Multicenter Osteoarthritis Study (MOST) Study

Since inception in 2002, The Multicenter Osteoarthritis Study (MOST) Study, funded by a grant from the National Institute on Aging (Cora Elizabeth Lewis PI, UAB), is a cohort of 3,026 adults aged 50 to 79 years from the community with either symptomatic knee osteoarthritis or high risk of knee osteoarthritis based on obesity, knee pain, or previous knee injury. This large, multifaceted and comprehensive study of persons with knee OA, or at high risk of disease, examines the relation of potentially important risk factors to the development or progression of a major disabling disease and to provide new insights into disease biology and potential opportunities for prevention. Dr. Lewis and other have mentored junior investigators using this cohort.

# **Coronary Artery Risk Development in Young Adults (CARDIA)**

The Coronary Artery Risk Development in Young Adults (CARDIA) Study examines how heart disease develops in adults. In 1986, it began with a group of 5,115 African-American and Caucasian men and women aged 18-30 years. The participants were selected so that there would be approximately the same number of people in subgroups of race, gender, education (high school or less and more than high school) and age (18-24 and 25-30) in Birmingham, AL; Chicago, IL; Minneapolis, MN; and Oakland, CA. These same participants were asked to participate in follow-up examinations during 1987-1988 (Year 2), 1990-1991 (Year 5), 1992-1993 (Year 7), 1995-1996 (Year 10), 2000-2001 (Year 15), and 2005-2006 (Year 20). A majority of the group has been examined at each of the follow-up examinations (90%, 86%, 81%, 79%, 74%, and 72%, respectively). The study is ongoing and evaluates processes of aging. While the specifics of each examination has differed somewhat, data have been collected on a variety of factors believed to be related to heart disease.

These include conditions with clear links to heart disease such as blood pressure, cholesterol and other lipids. Data have also been collected on physical measurements such as weight and skinfold fat, as well as lifestyle factors such as substance use (tobacco and alcohol), dietary and exercise patterns, behavioral and psychological variables, medical and family history, and other chemistries (e.g., insulin and glucose). In addition, subclinical atherosclerosis was measured via echocardiography during Years 5 and 10, computed tomography during Years 15 and 20, and carotid ultrasound during Year 20. Drs. Drs. Safford, Lewis, and K. Saag have mentored trainees at UAB using CARDIA data.

#### (ENCOURAGE): Evaluating Community Peer Advisors and Diabetes Outcomes in Rural Alabama

ENCOURAGE (PI: M Safford, supported by NIDDK) is a group-randomized, controlled implementation trial in partnership with the UAB DRTC and established community coalitions. It is designed to improve diabetes health outcomes in adult patients with uncontrolled diabetes living in Alabama's Black Belt region. Peer advisors with diabetes or familiar with its management will counsel and link patients to clinical care and community resources. Part of the 12-month, weekly intervention for 8 weeks, followed by monthly contacts for the remainder of the year, is empowering/activating patients to self-manage their diabetes. Four community coordinators, 36 peer advisors, and 424 research participants were enrolled for the full study. The infrastructure established through the initial study has led to four additional projects. The first is examining the cost-effectiveness of using peer advisors. The second will assess peer support intervention for patients with diabetes and chronic pain. The third will examine peer advisor roles and integration into a larger health care team. Finally, investigators will look to implement the program in Birmingham. All of these projects will provide trainees with the opportunity to conduct research in disadvantage areas and engage both patients and peer advisors in patient centered research related to nutrition and aging.

# Reasons for Geographic And Racial Differences in Stroke (REGARDS)

Funded in 2003 (R01) by the National Institute of Neurological Disorders and Stroke, the Reasons for Geographic And Racial Differences in Stroke (REGARDS) cohort, is a prospective study of 30,000 Caucasian and African American adults many of whom reside in the southern "Stroke Belt" and who have an increased risk for osteoporosis based on their age. G. Howard, Chairman of the UAB Department of Biostatistics and a PCOR mentor, is the principal investigator of the REGARDS study. The purpose of the REGARDS project is to understand why people in some parts of the country develop more strokes than people in other parts of the country, and why African-Americans develop more strokes than whites. Participants are randomly sampled with recruitment by mail then telephone, where data on stroke risk factors, sociodemographic, lifestyle (including nutritional), and psychosocial characteristics are collected. Written informed consent, physical and physiological measures, and fasting samples are collected during a subsequent in-home visit. Participants are followed via telephone at 6-month intervals for identification of stroke events. The novel aspects of the REGARDS study allow for the creation of a national cohort to address geographic and ethnic differences in stroke.

Multiple ancillary sub-studies are being conducted and supported by NIH. For example, Safford is conducting REasons for Geographic And Racial Differences in Stroke-Myocardial Infarction study. She and colleagues are examining mechanisms to explain regional and racial differences in acute coronary heart disease mortality, comparing whether mechanisms operate differently in African Americans and Whites. This is an ancillary study to the REGARDS study, which is providing infrastructure to follow 30,239 community-dwelling individuals longitudinally; about half are African Americans. Dr. David Roth (one of Dr. Locher's closest collaborators formerly at UAB and now Director of the Johns Hopkins Center on Aging and Health) and UAB colleagues are linking REGARDS data and Medicare Claims to study caregiving issues. Numerous UAB faculty are available to mentor junior investigators using this cohort to study translational nutrition and aging matters.

# **Systolic Blood Pressure Intervention Trial (SPRINT)**

The University of Alabama at Birmingham serves as one of the NIH/NHLBI Clinical Center Networks (CCN) for the Systolic Blood Pressure Intervention Trial (SPRINT): Co-PI, Lewis. SPRINT is a randomized, multi-center clinical trial testing the effects of intensive lowering of systolic blood pressure (SBP) on preventing cardiovascular disease (CVD). Approximately 7,500 participants will be randomized into either the lower SPB goal of less than 120 mmHg (intensive treatment group) or the standard SPB goal of less than 140 mmHg (control group). Participants will be 55 years or older with SPB greater than or equal to 130 mmHg and at least one additional CVD risk factor. Other objectives include (stage 3 CKD subgroup of ~3,500 persons)

determining whether treating to a lower SBP goal will reduce CVD and renal disease progression, determine the relative impact of the two treatment strategies on QOL and compare their relative cost effectiveness, and to test whether treating to a lower SBP will reduce the rate of age-related cognitive impairment. The UAB CCN plans to recruit from 16 sites located in the Southeast including the states of Alabama, Mississippi, Louisiana, Tennessee, Texas, and Florida. Nutrition related data is collected.

#### **UAB 1917 HIV Clinic Cohort**

The 1917 clinic cohort is a prospective, observational HIV clinical cohort study established in 1992 through support by CFAR. It includes extremely well characterized patients (>7000 overall, 1700 active). In 1999, the database was expanded to include real-time collection of clinic utilization data, thereby allowing cost / expenditure analyses. In August 2004, the UAB 1917 Clinic deployed a client-server based point-of-care electronic medical record system (1917 EMR) developed within the clinic to its own specifications. The 1917 EMR system allows for real-time collection of medication, laboratory, clinical, behavioral, and health care utilization data. Over the years numerous clinical and behavioral comparative effectiveness studies have been conducted through the cohort. These include evaluation of the "efficacy vs. effectiveness" of initial ART regimens in patients treated in clinical trials vs. routine care. Many HIV patients are living into older adulthood. This database has tremendous opportunities to study aging related matters. Of note is that nutritional data is collected and at least two UAB trainees are currently using this data.

The UAB 1917 Clinic Cohort, is housed at the UAB 1917 HIV/AIDS Clinic on a Dell PowerEdge 2300 server, which is part of a seven server farm that provides the 1917 Clinic IT infrastructure. This structure allows for flexible and comprehensive data query capabilities. The current storage capability exceeds 500 GB and contingency/disaster recovery procedures are in place with remote real-time back-up of data at two additional sites. Over 100 users utilizing our 93 personal computers (including 4 computers dedicated to trainees) regularly access the applications housed in this secured environment. Additionally, 7 exam rooms are outfitted with touch screen computers linked to a web-based platform for completion, transmission and secure storage of Patient Reported Outcomes (PROs) questionnaires completed routinely during clinic visits. Shared conference rooms, fax machines, scanners, and copy machines are co-located and readily available to 1917 Clinic Cohort personnel and trainees on the first floor of the Community Care Building. Several faculty are available to mentor junior investigators using this Cohort.

#### Healthcare Cost and Utilization Project (HCUP)

The Healthcare Cost and Utilization Project (HCUP) is a family of health care databases and related software tools developed through a Federal-State-Industry partnership to build a multi-State health data system for health care research and decision making. HCUP is sponsored by the Agency for Healthcare Research and Quality (AHRQ) as part of its mission to improve the quality, safety, efficiency, and effectiveness of the Nation's health care system.

HCUP databases bring together the data collection efforts of State data organizations, hospital associations, private data organizations, and the Federal government to create a national information resource of patient-level health care data. HCUP includes the largest collection of longitudinal hospital care data in the United States, with all-payer, encounter-level information beginning in 198 These databases enable research on a broad range of health policy issues, including cost and quality of health services, medical practice patterns, access to health care programs, and outcomes of treatments at the national, State, and local market levels. It is possible to evaluate nutritional processes of care and outcomes.

The Lister Hill Center at UAB (Morrisey, Director) has HCUP and National Impatient Sample (NIS) data through 200 It is available to all Lister Hill scholars and Scholars and trainees through a sponsoring Lister Hill Scholar. Drs. Morrisey and Menachemi have expertise and experience mentoring junior investigators using this data.

# **Atlanta Census Research Data Center (ACRDC)**

Located at the Federal Reserve Bank of Atlanta, the Atlanta Census Research Data Center (ACRDC) seeks to provide qualified researchers in Atlanta, and around the Southeast, with the opportunity to perform statistical analysis on non-public Census microdata. The ACRDC, establish 2011, is 1 of 8 centers in the United States and is a partnership between the U.S. Census Bureau and a consortium that includes Georgia State

University, the Federal Reserve Bank of Atlanta, the Centers for Disease Control and Prevention (CDC), Emory University, Georgia Tech, the University of Alabama at Birmingham (Morrisey, Site-PI), and the University of Georgia. There are four general categories of data on which qualified researchers may perform statistical analysis inside the secure ACRDC: 1) Economic Data; 2) Demographic Data; 3) Mixed Data; and 4) Health data. Dr. Morrisey and his colleagues are available to work with Scholars interested in using this data.

#### **Cancer Care Outcomes Research and Surveillance Consortium (CanCORS)**

UAB serves as a Primary Data Collection and Research (PDCR) site in the NCI-funded Colorectal and Lung Cancer CanCORS consortium (Fouad, PI). This research consortium of eight grantees measures the quality of cancer care and associated health outcomes in the United States. The project supports prospective research in a cohort of approximately 10,000 patients with newly diagnosed lung cancer or colorectal cancer recruited from geographically diverse populations and health care systems. Nutrition-related data is collected. The UAB PDCR site is for newly diagnosed cases of both lung and colorectal cancer with special emphasis on African Americans. Dr. Fouad is an author of the publication that introduced the goals and methods of the Consortium to the broader community of cancer researchers and clinicians; several manuscripts elucidating the findings of the consortium with regards to ovarian cancer and the recruitment of patients to cancer clinical trials are in the process of being submitted for publication. Dr. Fouad has mentored junior investigators using this cohort.

#### Pharmaco-Epidemiology and Economics Research (PEER) Unit Medicare/Medicaid Database Group

UAB faculty (especially Drs. Kilgore, Delzell, and Curtis) have considerable experience in managing and analyzing the Medicare 5% sample and (50 state) Medicaid (MAX) data. Work to date has predominately focused on the epidemiology of osteoporosis, bone mass measurement, and the longitudinal comparative effectiveness and safety of biologic medicines. The data management and analysis team includes two statisticians, two senior systems analysts and five additional analysts. Data management and analysis tasks and resolution of study design and statistical analysis issues are coordinated through weekly Medicare/Medicaid Data Group meetings, attended by investigators and project staff.

One strength of Medicare and Medicaid is that the computerized pharmacy records provide an objective, detailed, high-quality, and relatively low-cost measure of drug exposure. Inpatient, outpatient, nursing home, and other files provide information on outcomes and other important study variables. Although the limitations of these data always must be considered, Medicare and Medicaid databases have long been recognized as an essential resource for pharmacoepidemiology and health services research.

CMS encourages researchers to use its diagnosis and treatment database. They will provide a file that contains all records submitted with date of birth, gender and date of death information. The Medicare ID returned on this file is an encrypted ID that contains no identifying information including no component of the SSN. The encryption is uniquely created for this proposed study and does not correspond in any way to Medicare data obtained for other studies. CMS has well established, secure procedures for linking research subjects' identifiers to Medicare files for purposes such as this. They uniquely encrypt IDs for each project. Thus, the Medicare data received cannot be combined with Medicare data from any other source or project without CMS approval and assistance.

The Medicare component of this resource includes (1) 1999-2008 claims on a national sample of over 3.3 million beneficiaries, including all claims from inpatient, outpatient, physician, skilled nursing, home health and hospice providers; (2) Medicare data on over 18,000 subjects included in a large prospective cohort study of stroke and other medical conditions; (3) Medicare data on subjects with autoimmune disorders included in a large retrospective cohort study; and (4) Medicare data linked to Surveillance Epidemiology and End Results (SEER) cancer registry data on over 400,000 cancer patients diagnosed during the period 1999-2005. The Medicaid database includes: (1) national claims data on over 55 million beneficiaries for 1999-2002; (2) claims data on over 490,000 Medicare/Medicaid dual-eligible beneficiaries for 2003-2005; and (3) claims data on subjects included in the special cohorts mentioned above. In addition, we have Medicare Part D data for 2006-2007 on the 5% national sample of beneficiaries, and we have Medicare Current Beneficiary Survey access to care and cost to use data for 1999-2005 and the provider of service national database for 1999-2006.

Computing resources are housed in the Multimedia Information and Technology services facility in the School of Public Health. The facility is locked and all servers and drives are physically secured. Entry into sensitive

areas requires appropriate identification and passwords for access. Computing resources available for the group consist of several Dell PowerEdge (PE) servers, tape drive units, and software for word processing, data management, and statistical analyses. The primary file server on which analyses will be run is a Dell PE 6950 with 32gb of RAM and four, dual-core processors running Microsoft Windows 2003 Enterprise Edition. Approximately 20tb of disk space is available for data storage and is optimized for storing large SAS datasets across separate drive arrays. A Dell robotic tape library is used to back up data on a nightly basis. Additional Dell servers are used for Active Directory, Web server, and other system management tasks. Software available for projects includes SAS versions 9.1.3 and 9.2, R version 2.1, Stata version 10, Microsoft Office 2003 & 2007, and other utility software.

Data security and integrity is accomplished by a combination of hardware and software protocols. Comodo and Microsoft firewall software packages are used to prevent access from unauthorized computers. Microsoft Forefront is used to provide anti-virus protection. Access to the server is restricted to computers located on the UAB campus with specific IP addresses. Data containing individually identifiable data are stored in encrypted, password-protected datasets that can only be accessed through a Remote Desktop Connection to the server. Data integrity is accomplished by a nightly backup routine and by replicating the data to a secure, off-site server. The UAB Office of Internal Audit conducted an audit of the facility where the data are housed. Based on their recommendations, additional security protocols were implemented and the User Authorization Agreement was amended to reflect stricter CMS guidelines. The auditor was pleased with the attention to detail and also gave suggestions for maintaining a secure environment. All project personnel are required to have current IRB and HIPPAA training and will be signatories to Data Use Agreements in order to access any research identifiable data.

This data is made available from a tremendous investment (representing a contract worth ~\$14 million) from Amgen, Inc. that supports its existence into 2019—a clear demonstration of the confidence that a private industry has that UAB is exceptional in analyzing large administrative databases.

Of relevance especially for this application is that Drs. Locher and Kilgore (and others) have collaborated extensively using Medicare claims data to evaluate nutritional processes of care, practice variation and outcomes in work that was supported by NCI (PI: Kilgore) and the American Cancer Society (PI: Locher). Dr. Locher and Kilgore have created novel methods and algorithms to identify nutritional processes of care related to use of nutritional support and have mentored one graduate student in developing an algorithm to distinguish between short and long-term nursing home stays. This is precisely some of the kind of work that will be promoted in the proposed program.

8. Summary. Our institution is a world-class research institution well-recognized for its supportive environment in facilitation of multi-disciplinary collaborations. Dr. Locher occupies leadership positions in the the Center for Aging, the Nutrition and Obesity Research Center, the Center for Outcomes and Effectiveness Research and Education, and Lister Hill Center for Health Policy. All of these Centers and its leaders have committed their support to the Translational Nutrition and Aging Research Program. Our institution is an environment that strongly fosters collaborative and interdisciplinary work, and Dr. Locher has fully taken advantage of the opportunities provided at UAB. Additionally, UAB has an exceptionally strong record in research training for junior faculty, and pre- and post-doctoral fellows. In sum, UAB is comprised of a solid team of investigators and educators who are invested in this program, this area of research, and each other and are imminently well-poised to carry out the proposed leadership award focused on translational nutrition and aging.

# **Equipment**

No special equipment is required for this award.

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#### 6. Mentoring Plan

6.1. Description of Existing Mentoring Opportunities. The University of Alabama at Birmingham (UAB) is a leading academic institution in education and training and attracts a strong pool of pre-doctoral trainees, post-doctoral fellows, and junior faculty, many of whom are interested in the study of translational nutrition and aging research (exemplars described below). Education and training strengths include: 1) 36 doctoral programs in public health, nutrition, medical sociology, psychology, nursing, joint health sciences, and health services—some ranked among the top ten programs nationally (with 2,428 students enrolled in 2011); 2) residencies, fellowships, and post-doctoral positions across all disciplines within the School of Medicine—with some ranked among the top ten programs, including geriatrics and nutrition (with 1200 trainees enrolled in 2012); 3) 34 T32 or K12 training grants (7 of which the Candidate serves on as a Primary Mentor/See Table 3 below.); 4) several large P30 and similar Center Grants with training components (Nutrition Obesity Research Center, Resource Center for Minority Aging Research, Minority Health and Health Disparities Research Center, Comprehensive Cancer Center, Diabetes Research Training Center); 4) a HRSA-supported Geriatric Education Center; and 5) a Gerontology Education Program. All of these programs provide unique opportunities for training, including stipends and/or specialized training specific to the program's content area. These are all described in detail in the Facilities and Other Resources Section.

Table 3. UAB T32 and K12 Training Grants Supported by the Department of Health and Human Services

Project Title	Institute	Project Number	Project Director
UAB OBESITY TRAINING PROGRAM	NIDDK	5T32DK062710-08	ALLISON, DAVID B
UAB PRE-DOCTORAL TRAINING PROGRAM IN OBESITY-RELATED RESEARCH	NHLBI	5T32HL105349-02	ALLISON, DAVID B
UAB CENTER FOR CLINICAL AND TRANSLATIONAL SCIENCE (CCTS) T32 (TL1)	NCRR	5TL1RR025775-04	GUAY-WOODFORD, LISA M
UAB CENTER FOR CLINICAL AND TRANSLATIONAL SCIENCE (CCTS) KL2 COMPONENT	NCRR	5KL2RR025776-04	GUAY-WOODFORD, LISA M
UAB HEALTH SERVICES & OUTCOMES RESEARCH TRAINING PROGRAM	AHRQ	5T32HS013852-09	SAAG, KENNETH G
UAB T32 IN COMPARATIVE EFFECTIVENESS RESEARCH	AHRQ	1T32HS019463-01	SAAG, KENNETH G
UAB K 12 IN COMPARATIVE EFFECTIVENESS RESEARCH	AHRQ	1K12HS019465-01	SAAG, KENNETH G

A description of several selected trainees involved in translational nutrition and aging research who are participating in the different programs is provided next to give a sense of the gestalt of the current environment.

David L. Buys, PhD: Dr. Buys earned his PhD in Medical Sociology in 2011 and worked as a Graduate Student Assistant for Dr. Locher while pursuing his degree. He is currently a T32 Post-doctoral Fellow in the Health Services and Outcomes Research Training Program with Dr. Locher serving as his Primary Mentor and Drs. Meredith Kilgore, PhD (Health Care Organization and Policy) and Casey Borch, PhD (Medical Sociology) serving as Co-Mentors. The T32 affords Dr. Buys a stipend, structured training activities focused on health services research, and some monies to support travel, coursework, and books. Dr. Buys is interested in studying neighborhood context, nutritional services and food insecurity, and transitions of care using large databases, including Medicare administrative claims files. He has had one paper accepted for publication in Public Health Nutrition<sup>22</sup>; one paper under review at the Journal of Aging and Social Policy (having received an invitation to revise and resubmit) (Buys DR, Borch C, Kilgore ML, Zizza C, Locher JL. A state-level examination of the effects of expenditures on home delivered and congregate meal programs on rates of nursing home residency), and a third under review at The Gerontologist that relied upon data from the UAB Study of Aging (Buys DR, LaGory M, Borch C, Drentea P, Sawyer P, Allman R, Locher JL. Neighborhood context as a predictor of skilled nursing facility placement among older adults: The importance of place). All are related to translational nutrition and aging research. Dr. Buys is working on preparation of a K99/R00 to be submitted to NIA in June of 2012 related to neighborhood context, transitions of care, and nutritional support. He is additionally collaborating with Benjamin Taylor, MD MPH, Chief Quality and Safety Officer for UAB Hospital, on that effort.

Michelle Chang: Ms. Chang is enrolled in the UAB University Honors Program and the Early Medical School Acceptance Program. Ms. Chang is majoring in Molecular Biology with minors in Chemistry, Gerontology, and Studio Art. She is the Awardee of the 2011-2012 Aging Scholarship sponsored by the Gerontology Education Program. This scholarship requires completion of a research project and supports Michelle's tuition and monies for travel to present her research at a national meeting. Her research project, "An Evaluation of the SPOONS Program (a feeding assistance program) on an Acute Care for Elders (ACE) Unit," follows an independent course of study conducted over nearly two years with her co-mentors, Julie Locher, PhD and Kellie Flood, MD (Director of the ACE Unit at Highlands Hospital).

Shawona C. Daniel, MSN, CRNP: Ms. Daniel is an Assistant Professor of Nursing at Tuskeegee University who teaches in the Baccalaureate-Nursing Program with a focus on Adult Health and Chronic Conditions. She is currently enrolled in the PhD Adult Primary Care Nursing Program. Ms. Daniel's Primary Mentor is Dr. Karen Meneses (Associate Dean for Research in the School of Nursing); and her Co-Mentors are Orlando Gutierrez, MD (nephrologist with a focus on outcomes research) and Dr. Locher. Ms. Daniel's dissertation will focus on nutrition, chronic illness, patient outcomes, and health service utilization in individuals with end stage renal disease (many of whom are older adults) living in the community. Ms. Daniel's research and training is not currently supported by any program or funds, but is currently preparing a Ruth L. Kirschstein National Service Award for Individual Predoctoral Fellowships to Promote Diversity in Health-Related Research (F31) to be submitted to the National Institute of Nursing Research in August of 2012.

Kenneth P. Kell, M. Eng.: Mr. Kell is a doctoral student in the Department of Nutrition Sciences with José R. Fernández (Vice Chair for Education in the Department of Nutrition Sciences) serving as his primary mentor. He is a currently a T32 Pre-doctoral Fellow in the Nutrition and Obesity Training Program. The fellowship provides Mr. Kell with a stipend, training and research experience in nutrition and obesity, tuition, and a small sum to support travel and books. Mr. Kell's Co-Mentors are Jamy Ard, MD (Assistant Dean for Clinical Services, School of Health Professions) and Julie Locher, PhD. Kenneth is interested in evaluating the cost effectiveness of obesity interventions (using data from the NIA-funded Crossroads Study, a weight loss intervention involving adults of both genders and various races, aged 65 and older where Drs. Ard and Locher serve as Co-PI) and other commercially available obesity interventions (e.g. EatRight® and OptiFast®-programs that Dr. Ard directs, including at the national level). Mr. Kell's background in operations research and modeling and simulation make him particularly well-suited for this undertaking. Additionally, Dr. Stephen Mennemyer, a health economist, with much experience in modeling long-term costs and outcomes has agreed to consult with Kenneth in these studies related to aging and nutrition.

Jeannine Clunk Lawrence, PhD: Dr. Lawrence is an Assistant Professor and junior faculty member in the Department of Human Nutrition and Hospitality Management at the University of Alabama (in Tuscaloosa). As a registered dietitian with a PhD, she is an advanced-level practitioner with almost 10 years of training and experience in nutrition research. Dr. Lawrence has expertise in body composition analyses, nutrient intake assessment, and interpretation of serum analyte data. She has authored four first author papers on these topics. Having become increasingly more interested in matters related to nutrition and aging, she is currently a trainee in the Geriatric Education Center (GEC) Faculty Scholars Program with Dr. Locher serving as her Primary Mentor. Dr. Locher is expected to complete a scholarly research project as part of this two-year program (which she has just begun); but she does not receive any funds to complete this project. She is using data from Dr. Locher's study of eating behaviors in homebound older adults to analyze the association between various micronutrients and patient outcomes.

These brief descriptions of only a sample of current trainees demonstrate that the proposed Program in Translational Nutrition and Aging Research has a robust pool of mentees to select from for inclusion. They represent a breadth of: 1) disciplinary backgrounds (medical sociology, nursing, engineering, medicine, nutrition sciences), 2) training levels (pre-doctoral, post-doctoral, and junior faculty); 3) gender and ethnic diversity; and 4) institutional (e.g., Tuskeegee University, UAB, and University of Alabama at Tuscaloosa) and community- and health-related organizational involvement.

Dr. Locher and faculty at UAB have a personal commitment to increase participation of trainees from under-represented racial and ethnic groups; individuals with disabilities; and individuals from economically, socially, culturally, or educationally disadvantaged backgrounds. We are also committed to promoting gender diversity as well. UAB's institutional stance on equity and diversity and its position as one of the major research institutions in the Southeast are key to the success of our programs' successful history for diversity recruitment and retention.

These biographies also clearly illustrate the breadth of investigators and training programs available and willing to provide broad-based support for trainees interested in Translational Nutrition and Aging Research. Programs vary in terms of financial support (with the T32, K12, and Medicine Fellowships providing the most financial support in terms of stipends, tuition, and monies for travel and books) and education experiences (where <u>all</u> training is concentrated in particular areas specific to the degree or training program). They all, though, provide a solid foundation for the proposed Program in Translational Nutrition and Aging Research.

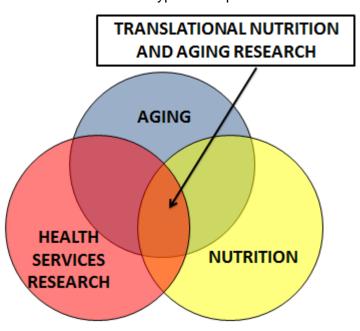
6.2. Plans for Providing Mentoring and Research Opportunities During the Award Period. Dr. Locher proposes to provide coordination of activities of mentors and trainees engaged in Translational Nutrition and

Aging Research by formalizing currently non-existent or informal relations. This is desperately needed in order to more efficiently and effectively work together to build networks and utilize common resources (including knowledge). For example, despite the obvious overlap between the trainees described above, none of them (with the exception of David Buys, who works very closely with Dr. Locher) is aware of the others or their work. The proposed program will serve as an organizing hub to coordinate and expand research across disciplines and training programs. The proposed program will not duplicate existing training programs; rather it will expand existing resources and connect researchers and trainees in an effort to offer opportunities to focus attention more comprehensively and systematically on translational nutrition and aging research.

Because of her growing reputation for providing outstanding mentorship leading to success of mentees, Dr. Locher has increasingly been sought out by potential mentees to serve as a mentor (See Appendix II.). It is no exaggeration that Dr. Locher is solicited at least once a week to serve as a mentor for some training program or graduate committee available on campus (and frequently by senior faculty for their own mentees). The K07 will allow Dr. Locher the opportunity to create a structure for sharing or delegating mentorship among several, diverse faculty. Dr. Locher will meet initially with potential program participants to discuss past research experience, current research interests, and future goals. She will then match mentees with appropriate mentors consistent with research interests and goals.

The Mentoring Plan consists of: 1) the adoption of a Team Science Approach for trainees, 2) creation of structured venues for ongoing interaction, 3) sponsorship of an Annual Research Retreat, 4) sponsorship of a Visiting Scholars Program, and 5) sponsorship of research development awards for pilot grants and travel.

**6.2.1. Team Science Approach.** The Program in Translational Nutrition and Aging Research is at the intersection of three broad areas of inquiry: 1) aging, 2) nutrition, and 3) health services research. In June of 2009, Academy Health, with support from the Robert Wood Johnson Foundation and The Commonwealth Fund, convened a high-level summit of key leaders in the field of health services research (including from NIH) to examine and make recommendations regarding the data and methods challenges of conducting quality health services research of the type we expect to encounter in this Program.<sup>23</sup> One of the major challenges



raised in the summit was the difficulty of communication among different disciplines when conducting research focused on quality of care. The group pointed out that health services research "requires researchers understand the wide range of disciplinary perspectives on the suitability of different analytic techniques and to generate new methods to address emerging questions."

Particularly novel about the proposed program and consistent with the recommendation of the Academy Health Summit, Dr. Locher proposes to adopt a "team science" approach to be used in all mentoring activities.<sup>24</sup> She is committed to work together in an

interdisciplinary manner across many diverse disciplines across campus, and will combine the expertise of both clinical and health services researchers. Specifically, as described in Section 11.3.3.1, Dr. Locher will create and maintain (with support from her Program Manager) a web-based catalog of current research and research opportunities in the area of Translational Nutrition and Aging; and as described in Section 11.3.7, she will identify relevant training programs available for trainees. Dr. Locher will meet personally with potential mentees to help match mentors and mentees. She will purposefully select mentors who represent diverse disciplines. A Primary Mentor and Co-mentor(s) will be recommended who represent to the extent possible all three intersecting areas. Dr. Locher has a long and extended history of working in partnership with MD, RN, and RD colleagues in fruitful collaborations. In fact, in 2010, she was nominated by her colleagues to receive

the inaugural Sam Brown Bridge Builder Award, an award for faculty who "demonstrate a deep and abiding commitment to facilitating collaboration and partnership across campus in ways that enhance the research and /or teaching activities of the university." For potential mentees who are not already participating in a formal training program, she will encourage them to apply in one of the relevant programs most consistent with their backgrounds and interests. Of note, all of the training programs in which Dr. Locher participates already adopt some elements of a team science approach to learning and research. The Program in Translational Nutrition and Aging Research may serve as a pipeline into existing training programs and/or may expand the capacity of some of those programs with additional opportunities and resources.

Regarding future training opportunities, the following should be noted: 1) two relevant training grants are currently under review—one for junior faculty focused on patient centered outcomes (PI: K. Saag, Primary Mentor: J. Locher), one for post-doctoral fellows focused on cancer survivorship (PI: M. Fouad, Internal Advisory Committee Member and Primary Mentor: J. Locher), and 2) two training grants will be submitted (both in May, 2012)—one for post-doctoral fellows focused on nutrition and the other also for post-doctoral fellows focused on nutrition and obesity (PI: D. Allison, Associate Director for Enrichment and Primary Mentor: J. Locher).

6.2.2. Structured Venues for Ongoing Interaction. Mentors and trainees engaged in Translational Nutrition and Aging Research will complete a Mentoring Contract (See Appendix V.) that will establish expectations for the relationship, which will be tailored to the circumstances and the training program. The Mentoring Contract will establish the frequency with which mentors and mentees will meet wherein they will focus on establishing research and training goals and how to go about meeting them. The Mentoring Contract will be used ideally to: 1) establish career goals, 2) identify training needs, 3) identify a research project, 4) identify papers to write, and 5) establish a timeline for submission of abstracts, papers, and grants. The Mentoring Contract will be used subsequently to review ongoing progress. Dr. Locher (as she currently does) will meet weekly with her own primary mentees. She will limit the number of primary mentees to 3-4 per year in order ensure sufficient attention and support.

Additionally, Dr. Locher will meet with trainees as a group three times a year. The first meeting will inform trainees of the goals of the program and of opportunities and resources available to them (including research and training opportunities, both intramural and extramural). Subsequent meetings will consist of trainee presentations of ongoing research-in-progress. Mentors will be strongly encouraged to attend these sessions as well.

Mentors and trainees will additionally be encouraged to attend and present their own work at seminars, conferences, and workshops as part of well-established and ongoing programs of the Center for Aging, Nutrition and Obesity Research Center (NORC), Center for Outcomes and Effectiveness Research and Education (COERE), and Lister Hill Center for Health Policy (described throughout the application). Both the Centers for Aging and the NORC sponsor weekly scientific seminar series; all Centers sponsor special conferences; the NORC and Lister Hill Center sponsor career development and methodological workshops; and the Lister Hill Center and COERE co-sponsor Works-In-Progress where researchers can present study proposals or analytical challenges that they wish to receive feedback. Finally, trainees will be encouraged to participate in one or more of the Integrated Curriculum activities previously described in detail in Section 4.2. At a minimum, trainees (especially those who receive support) will be required to enroll in the one-credit hour online course sponsored through the Gerontology Education Program. Of additional and related note, it is highly probable that potential trainees will be recruited from those who participate in these structured activities.

6.2.3. Annual Research Retreat. Establish annual UAB-wide research retreat for mentors and trainees. A half-day Annual Research Retreat for trainees of the NIH- and AHRQ-supported fellowships (as well as any others) who are engaged in Translational Nutrition and Aging Research will be held. The retreat will be an occasion for trainees to meet other trainees, mentors, and interested faculty and senior staff in a more relaxed setting. The Retreat will be held off-campus at a location such as the Birmingham Botanical Gardens, Vulcan Park and Museum, or the Civil Rights Institute. Lunch will be served and will be supported with discretionary funds contributed by the Nutrition and Obesity Research Center (NORC). Research abstracts for poster and oral presentations will be solicited; and key leaders and organizations at UAB and in Alabama will be involved in planning, along with the assistance of the Internal Advisory Committee. At the Retreat, trainees will have the opportunity to present and discuss their research. Research prizes of ~\$500.00 for best abstracts will be awarded. These monies will also be provided by discretionary monies from the NORC. A mentor in the

Program in Translational Nutrition and Aging will be invited to be the keynote speaker at the Retreat. The announcement for the retreat will be distributed widely throughout UAB and throughout the state.

- 6.2.4. Visiting Scholars Program. The External Advisory Committee is comprised of five members who represent thought leaders in translational nutrition and aging researchers throughout the United States and Canada. They are described in multiple places throughout the application. Members of the Committee have agreed to serve as Visiting Scholars once during their service on the Committee. It is anticipated that the Program will sponsor one Visiting Scholar per year. The Visiting Scholar will present a Scientific Seminar, have lunch with trainees, and meet individually with trainees (as well as with established investigators and mentors, if desired). This career-building activity will promote collaboration and stimulate interest in translational nutrition and aging research. It is also an opportunity for the Visiting Scholars to share experiences and advice to trainees.
- **6.3. Sponsorship of Research Development Awards.** The Program in Translational Nutrition and Aging Research will sponsor solely or in collaboration with other entities pilot grants and travel awards for trainees.
- 6.3.1. Pilot Grants. The Pilot Grant Program is designed to provide support for pilot projects of primarily junior investigators and occasionally more senior investigators who are new to research in the translational nutrition and aging field. The overarching goal is to provide trainees with funding that will facilitate receipt of extramural support for a Translational Nutrition and Aging Research project. An annual Request for Applications will be issued across the entire UAB campus and to partnering institutions soliciting five-page applications with supporting materials to the program. Applications will be submitted to Dr. Locher and then reviewed using an NIH style review by two or more anonymous expert reviewers, including especially members of the Internal Advisory Committee. After completion of the reviews, the Internal Advisory Committee will meet to assess the reviews of the projects and make the final selections. Projects are selected for support based on the reviews and relevance to the mission of the Program in Translational Nutrition and Aging Research. Junior investigators who are pre-doctoral trainees and post-doctoral fellows will be required to identify a senior faculty mentor to help them make constant progress with their projects.

One to two pilot grants will be awarded to one to two new trainees per year, depending upon matching funds. It is likely that we will leverage these funds with other intramural opportunities. Specifically, at UAB, there is an annual call for pilot proposals wherein participating centers/programs can choose to pool their resources and co-sponsor meritorious applications. It is also possible to partner exclusively with particular centers (e.g., the Center for Aging or NORC). \$18,000.00 is allocated for pilot awards in this proposal. Additionally, Drs. Allison, Allman, and Ginter have committed to provide \$50,000.00 per year in unrestricted matching funds that could support these activities. The decision to fund one or two pilots or to partner with other entities will depend upon the merits of the applications received. Funds cannot be used to support the salary for either trainees or mentors, but can be used to support data collection and/or management, statistical support, and necessary supplies and/or equipment. Additionally, over the years, we will monitor diversity of applicant recipients to ensure promotion of research across multiple disciplines.

Awardees will be expected to provide a final report at the end of their one-year period of funding. It will be possible to request an extension with a progress report. Awardees will be expected to present their research at one of the structured venues for ongoing interaction. Applications will be evaluated based upon the expectation that pilot monies will ultimately lead to submission/funding of a larger extramurally supported project. This expectation will be made clear to applicants.

- **6.3.2. Travel Awards.** Two travel awards not to exceed \$1,500.00 will be made available to trainees to assist with expenses related to participation in professional conferences and/or academic training activities. Requirements for eligibility to receive consideration for the award are the same as those for the Pilot Grant and primarily that the activity be associated with Translational Nutrition and Aging Research. Trainees who are supported by training grants that provide travel monies will be encouraged to use those resources first in order to allow those without such resources who are participating in the program to have travel opportunities, as well. Dr. Locher, in collaboration with members of the Internal Advisory Committee, will select those who receive sponsored travel awards.
- **6.4. Evaluation of Mentoring Plan.** There are two related components to the evaluation of the Mentoring Plan: 1) evaluation of individual trainees and 2) evaluation of the overall Program.
- 6.4.1. Evaluation of Individual Trainees. Evaluation of trainees will take place on an ongoing basis by mentors and co-mentors and will take place in the context of individual meetings. The Mentoring Contract will

form the basis upon which progress toward meeting goals are met. Ongoing review of progress with abstract submissions, manuscript writing, and grant preparation will occur. Trainees will be encouraged to continue meeting goals. In cases where progress is not occurring, problems will be identified and potential solutions will be sought. The Candidate will review progress of trainees every six months based upon a progress report of benchmarks initially established in the Mentoring Contract.

6.4.2. Evaluation of the Overall Mentoring Plan. The overarching goal of this K07 Academic Career Leadership Award is to develop a sustainable Program in Translational Nutrition and Aging based at the University of Alabama at Birmingham (UAB) and in partnership with organizations and individuals within the state of Alabama who have an interest in collaborating on nutrition and aging research initiatives. Central to this goal involves strong mentorship that leads to increasing active engagement in Translational Nutrition and Aging Research. Overall success of the Mentoring Plan will be evaluated based upon: 1) success in recruitment of high caliber trainees; 2) retention of committed trainees in the program; 3) extent of diversity among trainees in terms of scientific disciplines; 4) extent of diversity among trainees in terms of inclusion of underrepresented racial and ethnic groups, individuals with disabilities, and individuals from economically, socially, culturally, or educationally disadvantaged backgrounds; 5) number of abstracts accepted for presentation at national and international meetings; 6) number of peer-reviewed papers accepted for publication; and 7) growth in extramural research support in terms of number of applications and amount awarded, with a particular focus on receipt of awards appropriate for trainees and junior faculty.

OMB Number: 4040-0001 Expiration Date: 06/30/2011

# RESEARCH & RELATED Senior/Key Person Profile (Expanded)

		PROFILE - Pro	ject Director/Pri	ncinal Invest	tigator			
Prefix: Dr.	* First Name:		ject Director/i ii	incipal invest	Middle Na	me: I		
* Last Name: Lock		ourre			1	ffix:		
		Discontinu		Donartment:				
	ociate Professor/		,	Бераппепи.	Geriatrics		25.31.1	
	University of A	abama at Birmi	.ngham			Division: School of	Medicine	
	ard Avenue South							
Street2: CH19 2			0	- 55				
* City: Birmin			County/ Parish:	Jefferson	D			
	labama				Province:	0.1		
* Country: USA: 1					* Zıp / Postal	Code: 352942041		
* Phone Number: 2		Fax N	lumber: 205-97!	5-5870				
* E-Mail: jlocher								
Credential, e.g., a	gency login: Jlocher							
* Project Role:	PD/PI		Other Project I	Role Categor	y:			
Degree Type:	Ph.D							
Degree Year:	1999							
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		PRO	FILE - Senior/Ke	y Person <u>1</u>				
Prefix: Dr.	* First Name	David			Middle Na	me: B		
* Last Name: Alli	ison				Su	ffix:		
Position/Title: Prof	fessor/Director/A	ssociate Dean		Department:	Public Hea	ılth		
Organization Name	University of A	labama at Birmi	ngham			Division:		
* Street1: 1530 3	ord Ave South							
Street2:								
* City: Birmin	gham		County/ Parish:					
* State: AL: A	labama				Province:			
* Country: USA: 1	UNITED STATES				* Zip / Postal	Code: 352940022		
* Phone Number: 2	05-975-9169	Fax N	lumber:					
* E-Mail: dalliso:	n@uab.edu							
Credential, e.g., a	gency login: Dalliso	n1						
* Project Role:	Other (Specify)		Other Project	Role Catego	<b>y:</b> Internal	Advisory Commi	ttee Member	
Degree Type:	PhD							
Degree Year:	1990							
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Key Personnel Page 70

# RESEARCH & RELATED Senior/Key Person Profile (Expanded)

PROFILE - Senior/Key Person 2								
Prefix: Dr.	* First Name: Richard				Middle Name: M			
* Last Name: All						ıffix:		
Position/Title: Pro	fessor/Director			Department:				
Organization Name	e: University of A	labama at Birn	mingham			Division:		
* Street1: 1530 3	3rd Avenue South							
Street2:								
* City: Birmir	ngham		County/ Parish:					
* State: AL: A	labama				Province:			
* Country: USA:	UNITED STATES				* Zip / Posta	l Code: 352942041		
* Phone Number: 2	205-934-9261	Fax	Number:					
* E-Mail: rallman	n@uab.edu							
Credential, e.g., a	agency login: ALLMAN							
* Project Role:	Other (Specify)		Other Project	t Role Catego	ry: Interna	l Advisory Commit	tee Member	
Degree Type:	MD							
Degree Year:	1980							
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			OFILE - Senior/K	ey Person 3				
Prefix: Dr.		e: Barbara			Middle Na			
* Last Name: Gow				<u> </u>		ıffix:		
l —	fessor/Director			Department	Nutrition			
l	e: University of A	labama at Birn	mingham			Division:		
-	3rd Avenue South							
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* City: Birmir			County/ Parish:					
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* Phone Number: 2 * E-Mail: bgower@		Fax	Number:		7			
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			PROFILE - Senior/	Key Person 4	_			
Prefix: Dr.	* Fir	st Name: Micha	el		Middle Na	ame: A		
* Last Name: Mo	rrisey				S	uffix:		
Position/Title: Pr	ofessor/Dire	ctor		Department	:Health Ca	re Org & Policy		
Organization Nan	ne: University	of Alabama	at Birmingham			Division:		
* Street1: 1530	3rd Avenue S	South						
Street2:								
* City: Birmi	ingham		County/ Parisl	n:				
* State: AL:	Alabama				Province:			
* Country: USA:	UNITED STAT	ES			* Zip / Posta	al Code: 352940022		
* Phone Number:	205-975-8966	;	Fax Number:					
* E-Mail: morris	sey@uuab.edu							
Credential, e.g.,	agency login:							
* Project Role:	Other (Speci	lfy)	Other Proje	ct Role Catego	ory: Interna	l Advisory Commit	ttee Member	
Degree Type:	PhD							
Degree Year:	1979							
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* Last Name: Sa				Donartmant		uffix:		
Position/Title: Pr			at Birmingham	Department	Medicine	Division:		
* Street1: 1530			at Birmingham			DIVISION.		
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* E-Mail: ksaag@						J		
Credential, e.g.,	agency login: k	ensaag						
* Project Role:	Other (Speci	lfy)	Other Proje	ct Role Catego	ory: Interna	l Advisory Commit	ttee Member	
Degree Type:	MD							
Degree Year:	1986							
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				Danaan C				
			FILE - Senior/Key F	Person 6	1			
Prefix: Dr.	* First Name:	Connie			│ Middle Na			
* Last Name: Bal	Les				Su	ıffix:		
l —	ofessor/Associate D	irector	De	epartment:	Medicine			
Organization Nam	e: Duke University					Division:		
* Street1: Duke	Box 3003							
Street2:								
* City: Durha	m		County/ Parish:					
* State: NC: N	North Carolina				Province:			
* Country: USA:	UNITED STATES				* Zip / Posta	l Code: 277103003		
* Phone Number:	919-660-7519	Fax N	lumber:					
* E-Mail: connie	.bales@duke.edu							
Credential, e.g.,	agency login: CWBALES							
* Project Role:	Other (Specify)		Other Project Ro	le Catego	ry: External	l Advisory Commit	tee Member	
Degree Type:	PhD							
Degree Year:	1981							
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		PRO	FILE - Senior/Key F	Person 7				
Prefix: Dr.	* First Name:	Gordon			Middle Na	me: L		
* Last Name: Jen	nsen				Su	ffix:		
Position/Title: Pro	ofessor/Head		De	epartment:	Nutrition			
Organization Nam	e: Pennsylvania Sta	te University				Division:		
* Street1: 110 C	handlee Laboratory							
Street2:								
* City: Unive	rsity Park		County/ Parish:					
* State: PA: I	Pennsylvania				Province:			
* Country: USA: UNITED STATES  * Zip / Postal Code: 168026109								
* Phone Number:	814-865-0108	Fax N	lumber:					
* E-Mail: glj1@ps	su.edu					•		
Credential, e.g.,	agency login:							
* Project Role:	Other (Specify)		Other Project Ro	le Catego	ry: Externa	l Advisory Commit	tee Member	
Degree Type:	PhD MD							
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Key Personnel Page 73

		P	ROFILE - Senior/K	ey Person 8				
Prefix: Dr.	* First Nam	e: Heather			Middle Na	me: H		
* Last Name: Ke	ller				Su	ıffix:		
Position/Title: Pr	ofessor/Research (	Chair		Department:	Kinesiolo	9Y		
Organization Nan	ne: University of W	Jaterloo				Division:		
* Street1: 200 t	University Avenue	West						
Street2:								
* City: Water	rloo		County/ Parish:					
* State:					Province:			
* Country: CAN:	CANADA				* Zip / Posta	l Code:		
* Phone Number:	519-888-4567	F	ax Number:					
* E-Mail: hkelle	er@uwaterloo.ca							
Credential, e.g.,	, agency login:							
* Project Role:	Other (Specify)		Other Project	Role Catego	ry: Externa	l Advisory Commit	tee Member	
Degree Type:	PhD							
Degree Year:	1997							
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		Р	ROFILE - Senior/K	ey Person 9				
Prefix: Dr.	* First Nam	e: Joseph			Middle Na	me: R		
* Last Name: Sh	arkey				Su	ıffix:		
Position/Title: Pr	ofessor/Director			Department:	Social and	d Behavioral Heal	lth	
Organization Nan	ne: Texas A & M Uni	versity				Division:		
* Street1: MS 12	266							
Street2:								
* City: Colle	ege Station		County/ Parish:					
* State: TX:	Texas				Province:			
* Country: USA:	UNITED STATES				* Zip / Posta	l Code: 778431266		
* Phone Number:	979-458-4268	Fa	ax Number:					
* E-Mail: jrshar	rkey@srph.tamhsc.e	du						
Credential, e.g.,	, agency login: sharke	У						
* Project Role:	Other (Specify)		Other Project	Role Catego	ry: Externa	l Advisory Commit	tee Member	
Degree Type:	PhD							
Degree Year:	2002							
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PROFILE - Senior/Key Person 10						
Prefix: Dr. * First Name: Nancy	Middle Name: S					
* Last Name: Wellman	Suffix:					
Position/Title: Retired Professor/Director	Department: Dietetics and Nutrition					
Organization Name: Florida International University	Division:					
* Street1: OE 200						
Street2:						
* City: Miami County	/ Parish:					
* State: FL: Florida	Province:					
* Country: USA: UNITED STATES	* Zip / Postal Code: 331990001					
* Phone Number: 305 348-1517 Fax Number:						
* E-Mail: wellman@fiu.edu						
Credential, e.g., agency login:						
* Project Role: Other (Specify) Other	r Project Role Category: External Advisory Committee Member					
Degree Type: PhD						
Degree Year: 1987						
*Attach Biographical Sketch 1244-NSW JLL K07.pdf Add Attachment Delete Attachment View Attachment						
Attach Current & Pending Support						

Key Personnel Page 75

Provide the following information for the key personnel and other significant contributors. Follow this format for each person. **DO NOT EXCEED FOUR PAGES.** 

NAME	POSITION TITLE
Locher, Julie L.	Associate Professor of Medicine and Public Health
eRA COMMONS USER NAME	Associate Director, UAB Nut. Obesity Research Ctr.
JLocher	Director, Public Policy and Aging Program

EDUCATION/TRAINING (Begin with baccalaureate or other Initial professional education, such as nursing,						
INSTITUTION AND LOCATION	DEGREE (if applicabl e)	YEAR(s)	FIELD OF STUDY			
University of Pittsburgh at Johnstown	BA	1986	Sociology			
University of Pittsburgh	MA	1988	Sociology			
University of Alabama at Birmingham	PhD	1999	Medical Sociology			
University of Alabama at Birmingham	MSPH	2005	Health Policy and Outcomes			

#### A. Personal Statement

I am a Medical Sociologist and Health Services Researcher. My primary area of research focuses on social and environmental factors, including community and health care practices and policies that affect eating behaviors and nutrition-related health outcomes in older adults and in older cancer patients and survivors. My research as Principal Investigator has been consistently funded by the National Institute on Aging since 2001. Much of my work in this area has been observational involving original collection of data, but now increasingly includes interventional research evaluating patient-centered outcomes and costs of care and health services research utilizing large databases. All of my work involves collaboration with investigators representing diverse, multidisciplinary backgrounds within and outside UAB. I have much experience in mentoring junior faculty and pre- and post-doctoral fellows. This past year, I received the Graduate Dean's Award for Excellence in Mentorship. I teach the graduate level courses: Patient-Based/Centered Health Outcomes and Aging Policy.

#### **B.** Positions and Honors

#### **Positions and Employment**

1986	Graduate Teaching Assistant, Dept of Sociology, University of Pittsburgh, Pittsburgh, PA
1987 – 1988	Graduate Research Assistant, University Center for Social and Urban Research, Risk
	Analysis and Risk Management Program, University of Pittsburgh, Pittsburgh, PA
1989 – 1992	Research Associate, Division of Geriatrics, University of Pittsburgh, Pittsburgh, PA
Aug. '92 – Mar.'00	Research Associate, Division of Gerontology and Geriatric Medicine, University of
	Alabama at Birmingham (UAB), Birmingham, AL
April '00 – Oct. '08	Assistant Professor (Primary), Division of Gerontology, Geriatrics, and Palliative Care;
	Graduate Faculty (Secondary); and Sociology (Secondary), UAB, Birmingham, AL
	(Promotion from non-tenure to tenure earning track June, 2005)
April '00 – present	Scientist, Center for Aging, UAB, Birmingham, AL
Jan. '02 – present	Associate Scientist, Nutrition and Obesity Research Center, UAB, Birmingham, AL
July '03 – present	Associate Scholar, Lister Hill Center for Health Policy, UAB, Birmingham, AL
Aug. '04-Oct. '08	Assistant Professor (Secondary), Dept of Healthcare Organization and Policy, UAB,
	Birmingham, AL
Oct. '07 – present	Director, Public Policy and Aging Program, UAB, Birmingham, AL
Oct. '08 – present	Associate Professor (Primary with Tenure), Division of Gerontology, Geriatrics, and
	Palliative Care; Department of Health Care Organization and Policy (Secondary);
	Graduate Faculty (Secondary); and Sociology (Secondary), UAB, Birmingham, AL
Oct. '11—present	Associate Director of Enrichment, UAB Nutrition and Obesity Research Center

#### Other Experience and Professional Memberships

1995-date American Sociological Association

1993-date Gerontological Society of America (Co-Chair, Nutrition Interest Group since 2004)

2007-date Academy Health

2008-date Member, Editorial Board of Journal of Nutrition in Gerontology and Geriatrics

2009 NIH Peer Review Committees: SEPs/SRG 2009/10 ZRG1 PSE-C (58) and PSE-J (58)

2010-date Member, Centers for Disease Control Healthy Aging Nutrition Workgroup

2011 Member, AARP Drive to End Hunger Researcher Roundtable

2011-date Planning Committee for IOM Workshop on Nutrition and Healthy Aging in the Community

Н	onors	
4	005	

1985	Alpha Kappa Delta, International Sociology Honor Society
1986	Social Sciences Division Scholar
1995	Dean's Research Award, UAB School of Social and Behavioral Sciences
2002	Fellowship, National Institutes of Health Summer Institute on Design and Conduct of
	Randomized Clinical Trials Involving Behavioral and Social Interventions
2010	Champion for Change Award, AARP
2011	UAB Graduate Dean's Award for Excellence in Mentorship

#### C. Selected Peer-reviewed Publications (Selected from > 60 publications, Mentees underlined)

#### **Most Recent**

- 1. <u>Yang Y</u>, Brown CJ, Burgio KL, Kilgore ML, Ritchie CS, Roth DL, West DS, **Locher JL**. Undernutrition at baseline and health services utilization and mortality over a 1-yr period in older adults receiving Medicare home health services. *J Am Med Directors Assoc.* 2011 May;12(4):287-94. [PMID: 21527170/PMCID: In Process]
- 2. **Locher JL**, Bonner JA, Carroll WR, Caudell JJ, Kilgore ML, Ritchie CS, Roth DL, <u>Tajeu G</u>, Yuan Y, Allison JJ. Gastrostomy tube placement and use in head and neck cancer patients. *Head Neck*, In Press. [PMID: 21604317/ PMCID: Supported by Non-NIH Funds/American Cancer Society]
- 3. **Locher JL**, Bales CW, <u>Ellis AC</u>, <u>Lawrence JC</u>, Newton L, Ritchie CS, Roth DL, <u>Buys DL</u>, Vickers KS. A theoretically based behavioral nutrition intervention for community elders at high risk: the B-NICE randomized controlled clinical trial. *J Nutr Gerontol Geriatr*, 2011 Oct;30(4):384-402.[PMID: Not Yet Assigned/PMCID: In Process]
- 4. <u>Buys DR</u>, <u>Robinson CO</u>, Marler M, Hamlin C, **Locher JL**. A faith-based initiative to recruit volunteers for a home-delivered meals program serving homebound older adults: a theoretically-derived model. *Public Health Nutr.* 2011 Aug; 14(8):1473-8. [PMID: 20955644/PMCID: Supported by Non-NIH Funds/Lucille Beeson Trust]
- 5. <u>Zu B</u>, Houston DK, **Locher JL**, Ellison KJ, Gropper SS, Buys D, Zizza CA. Higher Healthy Eating Index-2005 Score is associated with better physical performance. *Journal of Gerontology: Medical Sciences*, In Press. [PMID: Not Yet Assigned/PMCID: Supported by Non-NIH Funds]

#### Additional Recent Publications (in chronological order)

- 6. **Locher JL**, Ritchie CS, Roth DL, Baker PS, Bodner EV, Allman RM. Social isolation, support, and capital and nutritional risk in an older sample: ethnic and gender differences. *Soc Sci Med.* 2005 Feb; 60(4):747-61. [PMID: 15571893/PMCID: PMC2763304]
- 7. **Locher JL**, Roth DL, Ritchie CS, <u>Cox K</u>, Sawyer P, Bodner EV, Allman RM. Body mass index, weight loss, and mortality in community-dwelling older adults. *J Gerontol A Biol Sci Med Sci.* 2007 Dec;62(12):1389-92. [PMID: 18166690/PMCID: <u>PMC2750037</u>]
- 8. **Locher JL**, Ritchie CS, <u>Robinson CO</u>, Roth DL, West DS, Burgio KL. A multi-dimensional approach to understanding under-eating in homebound older adults: the importance of social factors. *Gerontologist*. 2008 Apr;48(2):223-34. [PMID: 18483434/PMCID: <u>PMC2756416</u>]
- Locher JL, Robinson CO, Bailey A, Carroll WC, Heimburger D, Magnuson S, Saif MS, Ritchie CS. The contribution of social factors to undereating in older adults with cancer. J Support Oncol. 2009 Sep-Oct;7(5):168-73. [PMID: 19831160/PMCID: In Process]
- Locher JL, Ritchie CS, Roth DL, Sen B, Vickers Douglas K, Vailas LI. Food choice among homebound older adults: motivations and perceived barriers. *J Nutr Health Aging*. 2009 Sept 24;13(8):659-64 [PMID: 19657547/PMCID: PMC2749957].

- 11. <u>Heersink J</u>, Brown C, DiMaria-Ghalili, RA, **Locher JL.** Undernutrition in hospitalized older adults: patterns and predictors, outcomes, and opportunities for intervention with a focus on processes of care. *J Nutr Elderly.* 2010 Jan;29(1):4-41. [PMID: 20391041]
- 12. <u>Sun Y</u>, Roth, DL, Ritchie CS, Burgio KL, **Locher JL.** Reliability and predictive validity of caloric intake measures from the 24-hour dietary recalls of homebound older adults. *J Am Diet Assoc.* 2010 May;110(5):773-8. [PMID: 20430140/ PMCID: PMC2869206]
- 13. **Locher JL**, Robinson CO, Bailey A, Carroll WC, Heimburger D, Saif MS, <u>Tajeu G</u>, Ritchie CS. Disruptions in the organization of meal preparation and consumption among older cancer patients and their family caregivers. *Psychooncology*. 2010 Sept;19(9):967 74. [PMID: 19950254/PMCID: In Process]
- 14. Flood KL, Brown C, Carroll MB, & Locher JL. Nutritional support processes of care for older adults admitted to an oncology-acute care for elders unit. *Critical Rev Oncol Hematol.* 2011 Apr;29(1):73-8. [PMID: 20299236]
- 15. **Locher JL**, Bonner JA, Carroll WR, Caudell JJ, Keith JN, Kilgore ML, Ritchie CS, Roth DL, <u>Tajeu G</u>, Allison JJ. Prophylactic percutaneous endoscopic gastrostomy tube use in head and neck cancer patients: a systematic review and call for evidence-based practice. *J Parenteral Enteral Nutr.* 2011; 35(3):365-74. [PMID: 21527598]

## D. Research Support

**Ongoing Research Support** 

R01 AG033094 (Locher JL & Ard J) 07/01/09 – 06/30/14 NIH/NIA

Calorie Restriction and Changes in Body Composition, Disease Risk, Function, & Quality of Life in Older Adults The purpose of this randomized clinical trial is to compare the effects of changes in diet composition alone or combined with weight loss with an exercise only control intervention on body composition, disease risk function, and quality of life in obese older adults with co-morbid conditions.

R21AG027560 (Locher JL)

08/01/08 - 07/31/12

NIH/NIA

A Multi-Component Behavioral Nutrition Intervention for Homebound Elderly

The purpose of this randomized controlled trial is to evaluate the efficacy and feasibility of a multi-level self-management intervention to improve caloric intake and nutritional health in homebound older adults.

5P30DK056336 (Allison DB)

06/0100 - 05/31/12

NIH/NIDDK

**UAB Nutrition Obesity Research Center** 

Inaugurated through NIH funding in 2000 and supported by UAB's formal system of University-wide Interdisciplinary Research Centers, our NORC fosters multidisciplinary, collaborative approaches to basic, clinical, and translational nutrition research, with an emphasis on obesity. A growing focus is on aging.

(Gower B, Locher JL-Co-PI)

09/01/11 - 08/31/13

Egg Nutrition Center/American Egg Board

An Egg-Based Breakfast Maintains Metabolic Flexibilty in Older Adults

The purpose of this randomized controlled trial is to evaluate the possible metabolic mechanisms by which an egg-based diet explains weight loss in older adults. Mulitple outcomes will be assessed.

R01 AG15062 (Allman RM)

09/03/98-07/31/14

NIH/NIA

Mobility among Older African Americans and Whites

The purpose of this study is to examine mobility among older adults and predictors, including nutrition-related predictors, of mobility decline.

UB6HP22824 (McCormick L)

09/01/11-08/31/15

(HRSA)

Affordable Care Act Public Health Training Center

The purpose of this grant is to strengthen the technical, scientific, managerial, and leadership competence of the public health workforce, specifically those working in the medically underserved areas of Alabama and Mississippi, for improved health outcomes. Focus areas include: HIV/AIDS prevention and care services; obesity prevention and nutrition services; maternal child health leadership and management; and formation, leadership, and management of collaborative networks. Dr. Locher leads initiatives related to obesity prevention and nutrition services in the community.

### **Relevant Completed Research Support**

K01AG00994 (Locher JL) 09/15/01 - 08/31/07 NIH/NIA

Eating Behaviors in Homebound Older Adults

The purpose of this Mentored Research Scientist Development Award was to provide the PI with training and research experience in the area of aging with a focus on nutritional issues in older adults who are experiencing acute or chronic illness.

RSGHP CPHPS-116828 (Locher JL) 01/01/09 – 12/31/11 American Cancer Society

Prophylactic PEG Tube Placement in Treatment of Head and Neck Cancer Patients

The purpose of this study is to examine practice variation associated with prophylactic PEG tube placement in the treatment of head and neck cancer patients, factors associated with practice variation, and outcomes associated with prophylactic PEG tube placement.

R03AG023314 (Locher JL)

01/01/04 - 12/31/06

NIH/NIA

Eating and Quality of Life in Older Adults with Cancer

The purpose of this study was to investigate social and environmental factors related to food and eating in community-dwelling older adults with cancer, their caregivers, and their health care providers.\_\_\_\_\_

R21DE014999 (Gilbert G)

09/15/02-08/31/06

NIH/NIDCR

Oral Health/OHRQOL among Low-SES Rural Adults

The purpose of this study was to investigate the influence that oral health has on oral health-related quality of life (OHRQOL), nutritional status, and life-space mobility among low socioeconomic status rural adults. This study was an ancillary study to 2R01AG015062, Mobility Among Older African Americans and Whites.\_\_\_\_\_

R21 CA112668 (Kilgore ML)

07/01/05-06/30/07

NIH/NCI

The Balanced Budget Act of 1997 and Home Care for Cancer

The purpose of this study was to examine the effects of the Balanced Budget Act of 1997 on home health services utilization, costs, and outcomes in older adults with cancer using the SEER-Medicare database.

U18 HS016956-01 (Saag K)

09/30/07 - 09/29/11

AHRQ

Deep South Musculoskeletal CERTs (DSMC)

The long-term goal of this grant is to provide continued support of the Center for Education and Research on Therapeutic of Musculoskeletal Disorders. The goal of the sub-study that Dr. Locher is a Co-Investigator on is to develop a high-intensity intervention to improve osteoporosis care and test a novel intervention in a group-randomized trial of 28 home health offices and 1,000 patients referred to home health care with a history of fracture. Outcomes and costs will be assessed using Medicare administrative claims data.

(No Grant Number) (Locher JL)

08/01/06-07/30/08

Lucille Beeson Trust

Faith-Based Support Teams Providing Homebound Older Adults Nutritional Assistance

This project applied a Support Team model wherein existing social capital among religious faith communities, and social networks within those organizations, was joined with a local Meals On Wheels program to create a sustainable meal delivery route to vulnerable homebound older adults in one at-risk neighborhood.

Provide the following information for the key personnel and other significant contributors in the order listed on Form Page 2.

Follow this format for each person. **DO NOT EXCEED FOUR PAGES.** 

NAME	POSITION TITE	_E			
David B. Allison		Distinguished Professor; Associate Dean for			
eRA COMMONS USER NAME Dallison1		Science; Director, Office of Energetics Director, Nutrition Obesity Research Center			
EDUCATION/TRAINING (Begin with baccalaureate or other initial professional education, such as nursing, and include postdoctoral training.)					
INSTITUTION AND LOCATION	DEGREE (if applicable)	MMYY	FIELD OF STUDY		
Vassar College, Poughkeepsie, New York	B.A.	May 1985	Psychology		
Hofstra University, Hempstead, New York	M.A	Aug 1987	Clinical Psychology		
Hofstra University, Hempstead, New York	Ph.D.	Jul 1990	Clinical Psychology		
Johns Hopkins University School of Medicine	Post-doc	Aug 1991	Behavioral Pediatrics		

#### A. Personal Statement

Dr. Allison's research interests include obesity, quantitative genetics, clinical trials, and statistical and research methodology. In recent years, his work has involved several major areas: (a) The relations among body weight, body composition, caloric intake, and changes thereof with longevity in animal models and humans; (b) The genetic and environmental influences on obesity and related traits; (c) Statistical methods for genetic and epidemiologic studies; (d) Design, implementation, and analysis of randomized controlled trials for weight loss; and (e) Research integrity. In addition, attesting to his organizational abilities, he has also served as principal investigator or co-principal investigator for over a half dozen successful NIH R13-funded conferences, edited 5 books, initiated 4 successful NIH funded T32 training programs as a principal investigator, and served as the director of several NIH and NSF-funded national short courses on statistical genetics.

#### B. Positions and Selected Honors.

Post-Doctoral Fellowship - New York Obesity Research Center, St. Luke's/Roosevelt Hospital, Columbia University College of Physicians & Surgeons - 1991-1994.

September 1994 to April 1999 -- Assistant Professor of Clinical Psychology (in Psychiatry), Columbia University College of Physicians and Surgeons.

April 1999 to March 2001 -- Associate Professor of Medical Psychology (in Psychiatry), Columbia University College of Physicians and Surgeons.

June 1994 to March 2001 -- The NY Obesity Research Center, Saint Luke's/Roosevelt Hospital Center. Position: Associate Research Scientist.

March 2001 to 2011 -- University of Alabama at Birmingham. Professor (with Tenure) of Biostatistics; Head, Section on Statistical Genetics & Director, Nutrition Obesity Research Center, Dept of Nutrition Sciences

Spring 2011 to Present -- University of Alabama at Birmingham. Distinguished Professor, Associate Dean for Science of School of Public Health, Director, Office of Energetics, and Director, Nutrition Obesity Research Center.

#### Honors & Awards (Selected from ~ 30)

Appointed Distinguished Professor by the Board of Trustees of The University of Alabama at Birmingham, 2011. Dr. Allison was on the 21<sup>st</sup> person in the history of UAB to be awarded this honor.

Selected as the 2011 Distinguished Faculty Lecturer by the University of Alabama at Birmingham. The award recognizes faculty who have advanced the frontiers of science or otherwise made a significant contribution to the health of people. This has been called the highest award a faculty member at UAB can receive.

Elected as fellow of the American Association for the Advancement of Science (AAAS), 2009.

Received the 2009 TOPS Research Achievement Award from the Obesity Society. Recognizes an individual for singular achievement or contribution to obesity research.

Recipient of the 2009 American Society of Nutrition's Centrum Center for Nutrition Science Award. Given in recognition of recent investigative contributions of significance to the basic understanding of human nutrition.

- Recipient of the 2006 Presidential Award for Excellence in Science, Mathematics and Engineering Mentoring (PAESMEM). Administered by the National Science Foundation, the award was accompanied by a Presidential certificate and a personal visit with President Bush in the Oval Office.
- Recipient of 2002 Andre Mayer Award from the International Association for the Study of Obesity (IASO). International award given once every four years for outstanding achievement by an investigator under age 40.
- Recipient of the 2002 Lilly Scientific Achievement Award from the North American Association for the Study of Obesity (NAASO). Annual award signifying outstanding achievement by an investigator who is within 15 years of having received their doctoral degree.
- Recipient of the 1999 Award for Outstanding Achievement in Health Psychology from the Health Psychology Division of the American Psychological Association.

Recipient of the 1996 Neal Miller Early Career Award from the Academy of Behavioral Medicine.

#### C. Selected publications (selected from >425)

- 1. Allison, D. B., Heshka, S., Sepulveda, D. & Heymsfield, S. B. (1993). Counting Calories? Caveat Emptor. *Journal of the American Medical Association*, *270*, 1454-1456.
- 2. Comuzzie, A. G., & Allison, D. B. (1998). The search for human obesity genes. *Science, 280,* 1374-1377.
- 3. Heymsfield SB, Allison DB, Vasselli, JR, Pietrobelli, AP, Greenfield D, & Nuñez C. (1998). Garcinia Cambogia: A Randomized-Double Blind Controlled Trial of A Potential Anti-Obesity Agent. *Journal of the American Medical Association*, 280:1596-1600.
- 4. Allison, D. B., Mentore, J. M., Heo, M. Chandler, L., Cappelleri, J. C., Infante, M., & Weiden, P. (1999). Antipsychotic-induced weight gain: a comprehensive research synthesis. *American Journal of Psychiatry*, *156*: 1686-1696.
- Allison, D. B., Fontaine, K. R., Manson, J., Stevens, J., & Van Itallie, T. B. (1999). Annual deaths attributable to obesity in the United States. *Journal of the American Medical Association*, 282:(16), 1538
- 6. Faith, M. S., Berman, N., Heo, M., Pietrobelli, A., Gallagher, D., Epstein, L. H., Eiden, M. T., & Allison, D. B. (2001). Effects of Contingent-TV on Physical Activity and TV-Viewing in Obese Children. *Pediatrics*, *107*, 1043-1048.
- 7. Fontaine, K. R., Redden, D. T., Wang, C., Westfall, A. O., & Allison, D. B. (2003). Years of Life Lost Due to Obesity. *Journal of the American Medical Association*, 289, 187-193.
- 8. Wang, C., Weindruch, R., Fernandez, J. R., Coffey, C. S., Patel, P., & Allison, D. B. (2004). Caloric Restriction and Body Weight independently Affect Longevity in Wistar Rats. *International Journal of Obesity*, 28, 357-62.
- 9. Olshansky, S. J., Passaro, D., Hershow, R., Layden, J., Carnes, B. A., Brody, J., Hayflick, L., Butler, R. N., Allison, D. B., & Ludwig, D. S. (2005). A Potential Life Expectancy Decline in the United States in the 21st Century? *New England Journal of Medicine*, *352*, 1138-1145.
- 10. Vasselli, J. R., Weindruch, R., Heymsfield, S. B., Pi-Sunyer, F. X., Boozer, C. N., Yi, N., Wang, C., Pietrobelli, A., Allison, D. B. (2005). 'Intentional' Weight Loss Reduces Mortality Rate in a Rodent Model of Dietary Obesity. *Obesity Research*, *13*(4):693-702.
- 11. Faith, M. S., Fontaine, K. R., Baskin, M. L., & Allison, D. B. (2007). Toward the reduction of population obesity: macrolevel environmental approaches to the problems of food, eating, and obesity. *Psychological Bulletin*, 133(2):205-226.
- 12. Gadbury GL, Supapakorn T, Coffey CS, Keith SW, & Allison DB. (2008). Application of potential outcomes to an intentional weight loss latent variable problem. *Statistics and Its Interface*, 1, 87-98. <a href="http://www.intlpress.com/SII/p/2008/1-1/SII-1-A8-Gadbury.pdf">http://www.intlpress.com/SII/p/2008/1-1/SII-1-A8-Gadbury.pdf</a>
- Colman, R. J., Anderson, R. M., Johnson, S. C., Kastman, E. K., Kosmatka, K. J., Beasley, T. M., Allison, D. B., Cruzen, C. Simmons, H. A., Kemnitz, J. W., Weindruch, R. (2009). Caloric restriction delays disease onset and mortality in rhesus monkeys. *Science*. Jul;325(5937), 201-204. PMCID: PMC2812811.
- 14. Smith, D. L., Elam, C. F., Mattison, J. A., Lane, M. A., Roth, G. S., Ingram, D. K., & Allison, D. B. (2010). Metformin Supplementation and Lifespan in Fischer-344 Rats. *Journal of Gerontology: Series A, Biological Sciences and Medical Sciences*. May;65(5):468-474. Epub 2010 Mar 19. PMCID: PMC2854888.

15. Zhu, S. Kim, J., Ma, X, Shih, A., Laud, P. W., Pintar, F., Shen, W., Heymsfield, S. B., & Allison, D. B. (2010). BMI and Risk of Serious Upper Body Injury Following Motor Vehicle Crashes: Concordance of Real-World and Computer-Simulated Observations. *PLoS Medicine, Mar* 30;7(3):e1000250. PMCID: PMC2846859.

#### 5 Papers highlighting methodologic contributions

- 1. Mehta, T., Tanik, M. & Allison, D. B. (2004). Toward Sound Epistemological Foundations of Statistical Methods for High Dimensional Biology. *Nature Genetics*, *36*, 943-947.
- 2. Coffey, C. S., Gadbury, G. L., Fontaine, K. R., Wang, C., Weindruch, R., & Allison, D. B. (2005). The Effects of Intentional Weight Loss as a Latent Variable Problem. *Statistics in Medicine*, *24*, 941-954.
- 3. Allison, D. B., Cui, X., Page, G. P, & Sabripour, M. (2006). Microarray Data Analysis: From *Dis-*array to Consolidation & Consensus. *Nature Reviews Genetics*. *7*, *55-65*.
- 4. Ioannidis, J. P. A., Allison, D. B., Ball, C. A., Coulibaly, I., Cui, X., Culhane, A. C., Falchi, M., Furlanello, C., Game, L., Jurman, G., Mehta, T., Mangion, J., Nitzberg, M., Page, G. P., Petretto, E., van Noort, V. (2009). Repeatability of published microarray gene expression analyses. *Nature Genetics*, Feb;41(2):149-55. Epub 2008 Jan. http://www.nature.com/ng/journal/v41/n2/pdf/ng.295.pdf (Public Access Policy N/A).
- 5. de los Campos, G., Gianola, D., & Allison, D. B. (2010). Predicting genetic predisposition in humans: the promise of whole-genome markers. *Nature Reviews Genetics*, Dec;11(12):880-6. <a href="http://www.nature.com/nrg/journal/v11/n12/pdf/nrg2898.pdf">http://www.nature.com/nrg/journal/v11/n12/pdf/nrg2898.pdf</a> (Public Access Policy N/A).

#### 5 Papers highlighting ability to participate in or lead large or complex research groups

- Tschöp, M., Chandler, P. C., Oswald, K. D., Benoit, S. C., Seeley, R. J., Kinzig, K. P., Moran, T. H., Beck-Sickinger, A. G., Koglin, N., Rodgers, R. J., Blundell, J. E., Ishii, Y., Beattie, A. H., Holch, P., Allison, D. B., Birringer, M., Kreuzer, O., Schindler, M., Arndt, K., Rudolf, K., Mark, M., Raun, K., Madsen, K., Wulff, B. S., Stidsen, C. E., Halem, H., Taylor, J., Dong, J., Datta, R., Culler, M., Craney, S., Flora, D., Smiley, D., Heiman, M. L., Ortmann, S., Thöne-Reineke, C., Klaus, S., Joost, H. G., Castañeda, R., & Hagan, M. M. (2004). Does gut hormone PYY3-36 decrease food intake in rodents? *Nature, 430, 1 p following 165; discussion 2 p following 165.*
- Keith, S., Redden, D. T., Katzmarzyk, P., Boggiano, M. M., Hanlon, E. C., Benca, R. M., Ruden, D., Pietrobelli, A., Barger, J., Fontaine, K. R., Wang, C., Aronne, L. J., Wright, S., Baskin, M., Dhurandhar, N., Lijoi, M. C., Grilo, C. M., De Luca, M., Westfall, A. O., & Allison, D. B. (2006). Putative Contributors to the Secular Increase in Obesity: Exploring the Roads Less Traveled. *International Journal of Obesity*, 30(11):1585-94.
- 3. Allison DB, Downey M, Atkinson RL, Billington CJ, Bray GA, Eckel RH, Finkelstein EA, Jensen MD, Tremblay A. (2008). Obesity as a disease: a white paper on evidence and arguments commissioned by the council of the obesity society. Obesity. Jun; 16(6):1161-1177. Epub 2008 May <a href="http://www.nature.com/oby/journal/v16/n6/pdf/oby2008231a.pdf">http://www.nature.com/oby/journal/v16/n6/pdf/oby2008231a.pdf</a> (Public Access Policy N/A)
- 4. Klimentidis Y.C., Beasley T.M., Lin H., Murati G., Glass G.E., Guyton M., Newton W., Jorgensen M., Heymsfield S.B., Kemnitz J., Fairbanks L., Allison, D.B. (2010). Canaries in the Coal Mine: A Cross-Species Analysis of the Plurality of Obesity Epidemics. *Proceedings of the Royal Society B: Biological Sciences*. Published online 24 November 2010. doi: 10.1098/rspb.2010.1890. PMCID: PMC3081766
- Gadde, K. M., Allison, D. B., Ryan, D. H., Peterson, C. A., Troupin, B., Schwiers, M. L., Day, W. D. (2011). Effects of low-dose, controlled-release, phentermine and topiramate combination therapy over 56 weeks on weight and associated comorbidities in overweight and obese adults: a multicentre, randomised, placebo-controlled, phase 3 trial. *Lancet*, 377: 1341–1352. (Public Access Policy N/A)

#### D. Research Support.

In the past three years, Dr. Allison has worked on projects in four primary areas: (a) The relations among body weight, body composition, caloric intake, and changes thereof with longevity in animal models and humans; (b) The genetic and environmental influences on obesity and related traits; (c) Statistical methods for genetic studies; and (d) Clinical trials of weight loss methods. *Some* of the grants supporting these projects are summarized below.

# (a) Relations among body weight, body composition, caloric intake, and changes thereof with longevity.

NIH P30DK056336 (Allison)

06/01/00 - 06/30/12

UAB CLINICAL NUTRITION RESEARCH UNIT

This research center supports all aspects of research on nutrition with an emphasis on obesity.

NIH R01 R01AG033682 (Allison)

02/15/10 - 02/14/15

Body Composition, Energetics, and Longevity.

The goal of this study is to examine the effects of repeated weight loss and regain on longevity in mice.

NIH P01 AG11915 (Weindruch)

07/01/99 - 06/30/10

Dietary Restriction and Aging in Rhesus Monkeys

The goal of this study is to examine the effects of caloric restriction on longevity in rhesus monkeys.

NIH R01DK076771 (Allison)

08/15/07 - 06/30/11

Obesity & Mortality

To elucidate the relations between obesity indices and mortality indices in the US population.

#### (b) Genetic & environmental influences on obesity and related traits.

NIH R01DK52431 (Leibel/Allison/Chung – multiple PI)

8/01/03 - 11/30/13

Molecular Genetic Analysis of Human Obesity

To evaluate the association of obesity candidate genes with obesity phenotypes.

NIH R01DK074842-01A1 (Boyer)

09/13/07-08/31/12

Genetics of Obesity in Yup'ik Eskimos

Conduct linkage genome scan & exhaustive gene-based candidate gene association study related to obesity.

#### (c) Statistical methods for genetic studies.

NIH R01GM077490 (Allison)

9/01/07 - 08/31/11

Genome-wide Structured Association Testing & Regional Admixture Mapping

Developing, evaluating, and applying enhanced methods in the context of genome-wide association studies.

NSF 0650606 (Allison)

09/01/08 - 08/31/10

Short Course on Statistical Genetics and Statistical Genomics

This course provides introductory/advanced statistical methodologies in genetics to investigators nationwide.

#### (d) Clinical trials.

NIH R01DK078826 (Allison)

3/01/09-2/28/12

Design Issues in Obesity RCTs: Building an Evidence Base

To use meta-analytic and raw data pooling methods to evaluate merits of various design feature in obesity RCTs.

Jason Pharmaceuticals (Allison)

09/14/10 - 09/13/12

Medifast, Inc.

Randomized Clinical Trial of the Medifast 5&1 Plan

To conduct a randomized controlled trial of a weight loss program.

Provide the following information for the Senior/key personnel and other significant contributors in the order listed on Form Page 2. Follow this format for each person. **DO NOT EXCEED FOUR PAGES.** 

NAME Richard Mark Allman  eRA COMMONS USER NAME (credential, e.g., agency login) ALLMAN	Professor a GRECC, U	POSITION TITLE Professor and Director, Birmingham/Atlanta VA GRECC, UAB Center for Aging & Division of Gerontology, Geriatrics, and Palliative Care		
EDUCATION/TRAINING (Begin with baccalaureate or other initial residency training if applicable.)				
INSTITUTION AND LOCATION	DEGREE (if applicable)	MM/YY	FIELD OF STUDY	
West Virginia University, Morgantown, WV	BA	05/77	Biology	

INSTITUTION AND LOCATION	(if applicable)	MM/YY	FIELD OF STUDY
West Virginia University, Morgantown, WV	BA	05/77	Biology
West Virginia University, Morgantown, WV	MD	05/80	Medicine
West Virginia University, Morgantown, WV	Residency	06/83	Internal Medicine
Johns Hopkins University, Baltimore, MD	Fellowship	06/85	Internal Medicine & Clinical Epidemiology

#### A. Personal Statement

I have had a long-standing interest in the nutrition and obesity and its impact on the health and function of older adults. My research program focuses on risk factors for mobility loss and interventions designed to optimize mobility among all older adults and to reduce health disparities between older African Americans and Whites. As a result of this focus, much of my work has included projects focusing on cardiovascular disease and CV risk factors associated with obesity including hypertension, diabetes, and changes in oral health. I have provided leadership for the development of interdisciplinary research programs in aging at the University of Alabama at Birmingham (UAB) since 1990. I currently serve as director of the Birmingham/Atlanta VA Geriatric Research, Education, and Clinical Center (GRECC), the Division of Gerontology, Geriatrics, and Palliative Care, and the Center for Aging, one of 25 University-wide Interdisciplinary Research Centers (UWIRCs). I have provided leadership for the start-up and operation of three externally funded interdisciplinary research programs including the Hartford Foundation funded Southeast Center of Excellence in Geriatric Medicine (SCEGM), the GRECC and the NIA-funded P30 Deep South Resource Center for Minority Aging Research (RCMAR). I am PI for the UAB Study of Aging, "Mobility Among Older African Americans and Whites" (R01 AG15062). This R01 was first funded by NIA in1998 and was renewed for a third five-year funding period in February 2010. We are currently focusing on symptoms, social support, and resource utilization that may moderate mobility loss among adults aged 75 years and older. Obesity and nutritional impairment are both important factors in understanding trajectories of mobility loss among older adults. I also serve as the director of the UAB Center for Clinical and Translational Science (CCTS) Nascent Project and Pilot programs. Funding of this proposal will provide Dr. Julie Locher with the resource needed to bring together researchers from the Nutrition and Obesity Research Center, the Center for Outcomes and Effectiveness Research and Education, and the Center for Aging to develop a program in Nutrition and Aging Translational Research. I look forward to serving on the Internal Advisory Committee for the program and working with Dr. Locher to implement the program as proposed. She will make an outstanding leader for this program and strong, institutional support for this proposed program will ensure her success.

# B. Positions and Honors Positions and Employment

1985-1986	Assistant in Medicine, Division of Internal Medicine, Johns Hopkins University
1986-1990	Assistant Professor of Medicine, Division of General and Preventive Medicine, UAB
1987-1990	Assistant Professor of Medicine, Division of Gerontology, Geriatrics, and Palliative Care, UAB
1990-	Director, Division of Gerontology, Geriatrics, and Palliative Care, UAB
1990-1996	Associate Professor of Medicine, Division of Gerontology, Geriatrics, and Palliative Care, UAB
1990- 2001	Chief, Geriatrics Section, Birmingham Veterans Affairs Medical Center
1992-	Director, Center for Aging, UAB
1995-2005	Principal Clinical Coordinator, Alabama Quality Assurance Foundation (AQAF)
1996-	Professor of Medicine, Division of Gerontology, Geriatrics, and Palliative Care, UAB

1998-	Co-Director, Southeast Center of Excellence in Geriatric Medicine
2000-2005	Associate Director, UAB Clinical and Behavioral Gerontology Research Training Program
2000-	Director, Birmingham/Atlanta VA Geriatric Research, Education and Clinical Center
2004-	Emmett G. and Beverly S. Parrish Endowed Professor of Medicine, UAB
2007-	Director, Deep South Resource Center for Minority Aging Research
2007-	Steering Committee, UAB Geriatric Education Center
2008-	Steering Committee, UAB Reynolds Comprehensive Geriatric Education Program
2010-	Director, Pilot Grant and Nascent Project Panel Programs, UAB CTSA

# Other Experience and Professional Memberships

1990-1995	National Pressure Ulcer Advisory Panel (Vice President, 1992-1995)
1992-1995	National Councilor, American Federation for Medical Research
1993-2003	Board of Dir., Assoc. of Directors of Geriatric Academic Programs (Sec-Treas, 2000-2003)
1994-1996	Department of Veterans Affairs Merit Review Committee on Aging and Clinical Geriatrics
1994-1997	Editorial Board, Journal of the American Geriatrics Society
1995-2000	American Geriatrics Society Research Committee, (Chair, 1998-2000)
1996-1999	Editorial Board, Journal of Gerontology: Medical Sciences
2005-	GRECC Directors' Association (Vice Chair 2005-2007; Chair 2007 - 2009)
2009	Rehabilitation and Development Aging and Neurodegenerative VA Merit Review Panel
2009, 2011	Neurological, Aging, Musculoskeletal Epidemiology (NAME) NIH Study Section
2011	Chair, UAB University-Wide Council of Center Directors

#### **Honors**

1977, Phi Beta Kappa; 1977, Lange Book Award; 1978, Mosby Book Award; 1979, Alpha Omega Alpha; 1980, Best Intern in Medical Group Practice; Since 1991, Listed in *The Best Doctors in America*, Aiken: Woodward/White, Inc.; 1993 and 1999 Alabama Senior Citizen's Hall of Fame Golden Eagle Physician Award; 2000 Listed in *Who's Who in Medicine and Healthcare*, Millennium Edition; 2003 Kosiak Award for Significant Contributions to Pressure Ulcer Prevention and Management by the National Pressure Ulcer Advisory Panel; 2004 WVU School of Medicine Distinguished Alumnus; 2009 Sherrill Quality Care Champion in Alabama Award; 2009 Alabama Senior Citizens' Hall of Fame Permanent Member, 2010 Alabama AARP Champion for Change Award.

# C. Selected Peer-Reviewed Publications (from more than 130 published or in press papers) Most relevant to the current application

- Wassertheil-Smoller S, Fann C, **Allman RM**, Black HR, Camel GH, Davis B, Masaki K, Pressel S, Prineas RJ, Stamler J, Vogt TM. Relation of low body mass to death and stroke in the Systolic Hypertension in the Elderly Program (SHEP). *Arch of Intern Med* 160(4)494-500, Feb 2000. PMID: 10695689
- Locher JL, Ritchie CS, Roth DL, Sawyer Baker P, Bodner EV, **Allman RM.** Social isolation, support, and capital and nutritional risk in an older sample: Ethnic and gender differences. *Soc Sci and Med* 60(4)747-761, Feb 2005. PMID: 15571893, PMCID: PMC2763304
- Roff LL, Klemmack, DL, Koenig HG, Parker M, Sawyer Baker P, **Allman RM**. Religiosity, smoking, exercise, and obesity among southern, community-dwelling older adults. *J Appl Gerontol*, 24(4):337-354, 2005.
- Rahman S, Sawyer Baker P, **Allman RM**, Zamrini E. Dietary factors and cognitive impairment in community-dwelling elderly. *J Nutr Health Aging*, 11(1):49-54, Jan-Feb 2007. PMID: 17315080. PMCID: NA.
- Makhija SK, Gilbert GH, Litaker MS, **Allman RM**, Sawyer P, Locher JL. Ritchie CS. Association between aspects of oral health-related quality of life and body mass index in community-dwelling older adults. *J Am Geriatric Soc*, 55(11):1808-1816, Nov 2007, Epub 2007. PMID: 17727644. PMCID: NA
- Locher JL, Roth DL, Ritchie CS, Cox K, Sawyer P, Bodner EV, **Allman RM**. Body mass index, weight loss, and mortality in community-dwelling older adults. *J Gerontol A Biol Sci Med Sci*, 62(12)1389-92, Dec 2007. PMCID: PMC2750037.

Ritchie CS, Locher JL, Roth DL, McVie T, Sawyer P, **Allman R**. Unintentional weight loss predicts decline in ADL function and life space mobility over four years among community dwelling older adults. *J Gerontol A Biol Sci Med Sci*, 63(1):67-75, Jan 2008. PMID: 18235763. PMCID: NA

## **Other Selected Publications**

- Makhija SK, Gilbert GH, Boykin MJ, Litaker MS, **Allman RM**, Baker PS, Locher JL, Ritchie CS. The relationship between socio-demographic factors and oral health-related quality of life in dentate and edentulous community-dwelling older adults. *J Am Geriatr Society*, 54(11)1701-1712, Nov 2006. PMID: 17087697. PMCID: NA.
- Bowling CB, Pitt B, Ahmed M, Aban I, Sanders P, Mujib M, Campbell R, Love T, Aronow W, **Allman R**, Bakris G, Ahmed A. Hypokalemia and outcomes in patients with chronic heart failure and chronic kidney disease: Findings from propensity-matched studies. *Circ Heart Fail*, J, Mar;3(2):253-60, Epub 2010 Jan 26, PMID: 20103777, PMCID: PMC2909749.
- Crowe M, Sartori A, Clay OJ, Wadley VG, Andel R, Wang HX, Sawyer P, **Allman R**. Diabetes and cognitive decline: Investigating the potential influence of factors related to health disparities. *J Aging Health* 22(3)292-306. April 2010. PMCID: PMC2837792.
- Allman RM, Sawyer P, Crowther M, Strothers II HS, Turner T, Fouad M. Predictor of 4-Year retention among African American and white community dwelling participants in the UAB Study of Aging. *The Gerontologist.* June 2011, 51(S1):S46-S58, PMCID: PMC3092976.
- Bowling CB, Sawyer P, Campbell RC, Ahmed A, **Allman RM**. Impact of chronic kidney disease on activities of daily living in community-dwelling older adults. *J Geron A: Biol Sci Med Sci.* 2011 June:66A(6):689-694. PMCID in process by journal.
- Makhija SK, Gilbert GH, Clay OJ, Matthews JC, Sawyer P, **Allman R**. Oral health-related quality of life and life-space mobility in community-dwelling older adults. *J Am Geriatr Soc.* 59:512–518, March 2011, PMCID in process by journal.
- Snih SA, Peek KM, Sawyer P, Markides KS, **Allman RM**, Ottenbacher KJ. Life-Space Mobility Among Mexican Americans Aged 75 Years and Older. *J Am Geriatr Soc*, in press, PMCID in process by journal.
- Bowling CB, Stevens LA, Gutierrez OM, **Allman RM**, Warnock D, McClellan W, Muntner, P. Age-specific sociations of reduced estimated glomerular filtration rate with concurrent chronic kidney disease complications. *CJASN*, In press, PMCID in process by journal.

# D. Research Support

# **Ongoing Research Support**

P30AG031054 (Allman)

NIH/NIA

NIA

Deep South Resource Center for Minority Aging Research

The Deep South RCMAR will serve as research-based and mentoring investment in the process of closing the health disparities gap between African Americans and non-minority older adults, and will increase the number of researchers with the capacity to conduct independent, peer-reviewed research related to minority aging and health disparities.

Role: PI

# R01 AG15062 (Allman)

02/15/2010-2/14/2015

09/30/2007-06/30/2012

NIH/NIA

Mobility Among Older African Americans and Whites

The UAB Study of Aging (Phase II) will test the hypothesis that many declines in mobility and social participation after age 75 are due to residual effects of more immediate (within one month) responses to specific acute events, rather than a gradual equivalent decline over longer periods of time.

Role: PI

**2000-0439 (Allman)** 01/01/1998–06/30/2012

The John A. Hartford Foundation

University of Alabama at Birmingham (UAB) Center of Excellence in Geriatric Medicine. The primary objective is to provide training and support for senior Geriatric Medicine fellows and junior faculty in order to facilitate their success in academic Geriatric Medicine.

Role: Program Director

#### 1UL 1RR025777 (Guay-Woodford)

5/1/2010 - 4/30/2013

NIH/NCRR

UAB Center for Clinical and Translational Science (CCTS)

To establish a communication structure to enhance collaboration between our research programs across all fields of clinical and translational research; to train and develop investigators; to emphasize novel interdisciplinary research that is important given our geographic location and history.

Role: Pilot Grant and Nascent Project Panel Program Director

#### 1R01HL085561-01 (Ahmed)

08/15/2006 – 05/31/2011 (No cost extension)

**NHLBI** 

Heart failure, chronic kidney disease, and renin-angiotensin system inhibition

Determine if therapy with angiotensin-converting enzyme inhibitors (ACEI) or angiotensin receptor blockers (ARB) is associated with reduction in mortality and hospitalizations in heart failure patients with chronic kidney disease.

Role: Investigator

### VA Grant: E6660R (Brown)

7/1/09 - 6/30/2012

**VA Merit Award** 

"Trajectory of Recovery of Life-Space Mobility after Hospitalization"

Using the Life-Space Assessment to measure community mobility, the major goals of this project are to describe changes in life-space mobility after hospitalization; to compare the observed life-space changes with changes in basic and instrumental activities of daily living; and to determine predictors of life-space recovery after hospitalization that might be targets of an intervention to improve community mobility.

Role: Investigator

# P30AG031054-02S1-Diversity Supplement (Allman)

05/01/2010-04/31/2012

NIH/NIA

Deep South Resource Center for Minority Aging Research

The proposed research will examine associations among the built environment and the residential and sociodemographic factors that influence physical activity among older African Americans, and will enable Dr. Lonnie Hannon to become a national expert on the relationship between place and health disparity outcomes Role: PI/Mentor for Lonnie Hannon, PhD, Sociology, Tuskegee University

# P30AG031054-02S1-Diversity Supplement (Allman)

09/01/2010-06/30/2012

NIH/NIA

Deep South Resource Center for Minority Aging Research

The proposed research will use qualitative and quantitative methods to examine social-behavioral factors associated with cardiovascular disease risk factor management among older, rural, African American women. Role: Collaborator with Cassandra Ford, PhD, Capstone Nursing School, University of Alabama (Tuscaloosa)

# **R01 AG15062 – Diversity Supplement (Allman)**

07/01/2011-6/30/2013

NIH/NIA

Mobility Among Older African Americans and Whites

The proposed research will examine the association of symptoms on health care utilization among community-dwelling older adults in the UAB Study of Aging (Phase II).

Role: PI & co-mentor for Kendra Sheppard, MD, UAB Division of Gerontology, Geriatrics, and Palliative Care

Provide the following information for the Senior/key personnel and other significant contributors in the order listed on Form Page 2. Follow this format for each person. **DO NOT EXCEED FOUR PAGES.** 

NAME Barbara A. Gower	POSITION TITE Professor	POSITION TITLE Professor	
eRA COMMONS USER NAME (credential, e.g., agency login) BGOWER			
EDUCATION/TRAINING (Begin with baccalaureate or other initial professional education, such as nursing, include postdoctoral training and residency training if applicable.)			
INSTITUTION AND LOCATION	DEGREE (if applicable)	MM/YY	FIELD OF STUDY
Pennsylvania State Univ., University Park, PA	BS	06/80	Microbiology

PhD

Postdoc

Postdoc

08/90

09/94

10/97

Biology

Endocrinology

Metabolism

NOTE: The Biographical Sketch may not exceed four pages. Follow the formats and instructions below.

#### A. Personal Statement

University of Utah, Salt Lake City, UT

University of Delaware, Newark, DE

University of Alabama at Birmingham

I serve as the Director of the Metabolism Core for UAB's Nutrition and Obesity Research Center and the Center for Clinical and Translational Science and of the Human Physiology Core for UAB's Diabetes Research Training Center. My research focus is on the interplay between endocrinology and metabolism and their relation to chronic metabolic disease. My major research areas are: 1) determining how physiologic, genetic, and lifestyle factors contribute to greater risk for type 2 diabetes in African Americans and 2) exploring the role of diet quality in determining insulin sensitivity and beta-cell function. During my time at UAB I have successfully mentored 10 doctoral students, 16 master's students, 7 postdoctoral fellows, and three junior faculty, all of whom have been interested in nutrition, and many of whom have also had interests in aging. One of my current trainees is conducting a randomized controlled intervention to translate basic science observations regarding the role of individual amino acids in preventing sarcopenia into clinically meaningful outcomes in adults aged 65 and older. I invited Dr. Locher to serve on that dissertation committee. In my roles as Director for several Metabolism Cores, I am aware of multiple research studies that are ongoing that may have relevance to translational nutrition and aging research. I will facilitate increased collaboration in this area. Thus, I have both the background and interest in seeing the K07's training component excel.

## **B. Positions and Honors**

1990-1994	Postdoctoral research associate, School of Life and Health Sciences, University of Delaware
1995-1997	Postdoctoral fellow, Department of Nutrition Sciences, UAB
1997-2001	Assistant Professor, Dept. of Nutrition Sciences, Div. Physiology and Metabolism, UAB
1998	Associate Scientist, Center for Aging, UAB
1999	Director, Metabolism Core Laboratory, GCRC/CTSA, UAB
2000	Assistant Professor, Secondary Appointment, Dept. Physiology and Biophysics, UAB
2000	Director, Metabolism Core, Nutrition Obesity Research Center, UAB
2001	Scientist, Clinical Nutrition Research Center, UAB
2001	Associate Professor, Dept. Nutrition Sciences, Div. Physiology and Metabolism, UAB
2007	Excellence in Scholarship Award, School of Health Professions, UAB
2007	Professor, Dept. Nutrition Sciences, UAB
2008	Director, Human Physiology Core, Diabetes Research and Training Center, UAB

#### C. Selected Peer-reviewed Publications

- **Gower BA**, Muñoz J, Desmond R, Hilario-Hailey T, Jiao X. 2006. Temporal changes in intra-abdominal fat and associated risk factors in early postmenopausal women: effects of hormone use. *Obesity* 14:1046-55.
- **Gower BA**, Ard J, Hunter GR, Fernandez JR, Ovalle F. 2007. Elements of the Metabolic Syndrome: Association with Insulin Sensitivity, and Effects of Ethnicity. *Metabolic Syndrome and Related Disorders* 5:89-98. PMID 18370816.
- St-Onge M, Newcomer BR, Buchthal S, Aban I, Allison DB, Bosarge A, **Gower BA**. 2007. Intramyocellular lipid is lower with a low-fat diet but this may not be relevant for health. *Amer. J. Clin. Nutr.* 86:1316-22. PMID 17991641
- Casazza KR, Goran MI, **Gower BA**. 2008. Associations among insulin, estrogen, and fat mass gain over the pubertal transition in African American and European American girls. *J. Clin. Endo. Metab.* 93:2610-2615. PMCID 2453051
- Casazza K, Higgins PB, Fernández JR, Goran MI, **Gower BA**. 2008. Longitudinal analysis of the insulin-like growth factor system in African American and European American children and adolescents. *J Clin Endo Metab*. 93:4917-4923. PMCID 2626444.
- GR Hunter, NM Byrne, B Sirikul, JR Fernandez, PA Zuckerman, BE Darnell, **BA Gower**. 2008. Resistance training conserves fat-free mass and resting energy expenditure following weight loss *Obesity*. 16:1045-1051. PMID 18356845.
- Thomas AS, Greene LF, Ard JD, Oster RA, Darnell BE, Goran MI, **Gower BA**. 2009. Physical activity may facilitate diabetes prevention in adolescents. *Diabetes Care*. 32:9-13. PMCID 2606821.
- Goree LL, Darnell BE, Oster RA, Brown MA, **Gower, BA**. Association of free fatty acids with insulin secretion and action among African American and European American girls and women. *Obesity*. In press. PMID 19680231.
- Lawrence JC, **Gower BA**, Garvey WT, Munoz AJ, Darnell BE, Oster RA, Buchthal SD, Goran MI, Newcomer BR. Relationship between insulin sensitivity and muscle lipids may differ with muscle group and ethnicity. *The Open Obesity Journal*. In press.
- Lawrence JC, Newcomer BR, Buchthal SD, Sirikul B, Oster RA, Hunter GR, **Gower BA**. 2011. Relationship of intramyocellular lipid to insulin sensitivity may differ with ethnicity in healthy girls and women. *Obesity*. 19:43-8. PMID:20559297
- Alvarez JA, Bush NC, Choquette SS, Hunter GR, Darnell BE, Oster RA, and **Gower BA**. 2010. Vitamin D intake is associated with insulin sensitivity in African American, but not European American, women. *Nutrition & Metabolism* 7:28. PMC2868016.
- **Gower BA**, Hunter GR, Chandler-Laney P, Alvarez J, Bush N. Glucose metabolism and diet predict changes in adiposity and fat distribution in weight-reduced women. *Obesity*, 18:1532-7. PMID 20035282. PMCID in progress.
- Hunter GR, Chandler-Laney P, Brock DW Lara-Castro C, Fernandez JR, **Gower BA**. Fat distribution, aerobic fitness, blood lipids and insulin sensitivity in African American and European American women. *Obesity*. In press. PMID 19661963.
- Chandler-Laney P, Phadke R, Granger W, Muñoz AJ, Dalla Man C, Cobelli C, Ovalle F, Fernández J, **Gower BA**. Adiposity and β-cell function: relationships differ with ethnicity and age. *Obesity*, in press.
- Chandler-Laney P, Phadke R, Granger W, Fernández J, Muñoz AJ, Dalla Man C, Cobelli C, Ovalle F, **Gower BA.** 2011. Age-related changes in insulin sensitivity and β-cell function among European American and African American women. *Obesity*. 19:528-35. PMID 20885386; PMCID pending.
- Bush NC, Alvarez JA, Choquette SS, Hunter GR, Oster RA, Darnell BE, **Gower BA**. Dietary calcium intake is associated with less gain in intra-abdominal adipose tissue over 1 yr. *Obesity*, in press.
- Ellis AC, Hyatt TC, Hunter GR, **Gower BA**. Respiratory quotient predicts fat mass gain in premenopausal women. *Obesity*. In press.
- Alvarez JA, Ashraf AP, Hunter GR, **Gower BA**. 2010. Serum 25-hydroxyvitamin D and parathyroid hormone are independent determinants of whole-body insulin sensitivity in women and may contribute to lower insulin sensitivity among African Americans. *Am. J. Clin. Nutr.* 92:1344-9. PMC2980959.
- Fisher G, Hyatt T, Hunter GR, Oster RA, Desmond RA, **Gower BA**. Markers of inflammation and fat distribution following weight Loss in African American and Caucasian women. *Obesity*. In press.

- Fisher G, Hyatt T, Hunter GR, Oster RA, Desmond RA, **Gower BA**. 2011. Effect of diet with and without exercise training on markers of inflammation and fat distribution in overweight women. *Obesity*. ePub ahead of print. PMCID in progress. PMID:21183937
- Chandler-Laney PC, Bush NC, Rouse DJ, Mancuso MS, **Gower BA**. 2011. Maternal glucose concentration during pregnancy predicts fat and lean mass of prepubertal offspring. *Diabetes Care*, 34:741-5. PMC3041219
- Casazza K, Granger WM, Wallace S, **Gower, BA**. Can reduction in dietary carbohydrate play a role in normalizing the endocrine-metabolic state perturbed during the pubertal transition? The PRIMO Pilot Study. *Infant, Child, & Adolescent Nutrition*. In press. PMCID pending.
- Bush NC, Chandler-Laney PC, Rouse DJ, Granger WM, Oster RA, **Gower BA**. Higher maternal gestational glucose concentration is associated with lower offspring insulin sensitivity and altered β-cell function. *J. Clin.Endocrinol.Metab.* epub ahead of print. PMID:21346075
- Goree LLT, Chandler-Laney PC, Ellis AC, Casazza K, Granger WM, **Gower BA**. Dietary macronutrient composition affects β-cell responsiveness but not insulin sensitivity. *Am. J. Clin. Nutr.* In press.

#### D. Research Support

Selected ongoing and completed research projects for the past three years. Begin with the projects that are most relevant to the research proposed in the application.

### **Ongoing Research Support**

R01 HD054960 (Gower) 09/28/09 - 08/31/12

Reduced Carbohydrate Diet Intervention for PCOS

The objective is to develop a diet that optimizes reproductive and metabolic health among women with PCOS in the absence of weight loss.

R01DK049779 (Hunter/Gower) 09/01/10-07/31/14

Exercise intensity, metabolic rate & insulin sensitivity.

Goal is to determine if exercise intensity has unique effects on insulin sensitivity after accounting for exercise volume and energy balance.

Role: PI; oversight of insulin sensitivity

R01 AG033094 (Ard & Locher) 09/15/09 - 06/30/14

Calorie Restriction and Changes in Body Composition, Disease Risk, Function, & Quality of Life in Older Adults The purpose of this randomized clinical trial is to compare the effects of changes in diet composition alone or combined with weight loss with an exercise only control intervention on body composition, disease risk function, and quality of life in obese older adults with co-morbid conditions.

Role: Investigator (insulin sensitivity; body composition; hormone and cytokine analyses).

UAB Center for Metabolic Bone Disease Pilot Study (Gower) 11/1/09-10/31/11

The bone fat pancreas axis in children: a role for undercarboxylated osterocalcin

Objective: To test the hypothesis that a "bone-fat-pancreas" axis exits in young children; specifically, that obesity in children decreases bone mass via elevated leptin, which in turn lowers the production by bone of undercarboxylated osteocalcin and decreases insulin secretion.

### UL 1RR025777 Guay-Woodford (PI) 05/19/08-04/30/13 NCRR

Metabolism Core Laboratory for the Center for Clinical and Translational Sciences. Objective: provide a hormone and substrate analysis service, insulin sensitivity analyses, and expertise on experimental design regarding insulin sensitivity testing and hormone/substrate analyses for CTSA-funded research projects. Role: Core Director

# P30 DK56336 Allison (PI) 06/01/07-05/31/12

NIDDK

Metabolism Core Laboratory for the Nutrition Obesity Research Center. Objective: provide analyses for hormones and substrates, insulin sensitivity, body composition, and energy expenditure for clinical and animal model research studies related to nutrition and metabolism.

Role: Core Director

P60 DK079626 Garvey (PI) 04/01/08-03/31/13

**NIDDK** 

Human Physiology Core Laboratory for the Diabetes Research and Training Center. Objective: provide analyses for hormones and substrates, insulin sensitivity and secretion, body composition, energy expenditure, substrate metabolism, and cardiovascular outcomes for research studies related to diabetes.

Role: Core Director

# **Completed Research Support**

R01 DK51684 Gower (PI)

03/15/06-02/28/10

NIDDK

Long-term follow-up of postobese black and white women. Objective is to determine if an aerobic or resistance training intervention is more effective at maintaining weight loss over time. Dr. Gower is responsible for oversight on insulin sensitivity testing, as well as for analysis of hormones, glucose, and lipids. Role: PI

R01 DK67538 Gower (PI)

09/15/05-08/31/09

NIDDK

Intramuscular lipid and insulin action: ethnic aspects. Objective is to determine if intra- or extra-myocellular lipid differs with ethnicity; if ethnic differences in skeletal muscle lipid content contribute to lower insulin sensitivity among African-Americans vs Caucasians; and if manipulation of dietary fat or carbohydrate affects muscle lipid content and associated insulin sensitivity.

Intramural Grant Award, Gower (PI) 02/01/08-01/31/11

**UAB** Center for Aging

A nutrition intervention for the prevention of sarcopenia. This randomized, blinded, placebo-controlled intervention will determine whether an amino acid mixture alters skeletal muscle volume or function in older adults.

Mead Johnson Nutritionals Gower (PI)

03/01/08-02/28/09

Insulin sensitivity in children. Accurate, non-invasive, easy to perform means of assessing insulin sensitivity and beta cell function within the pediatric population are needed. The objective of this study is to develop, refine, validate, and field test a meal-based model for insulin sensitivity testing in children. Role:PI

Provide the following information for the Senior/key personnel and other significant contributors. Follow this format for each person. **DO NOT EXCEED FOUR PAGES.** 

NAME	POSITION TITI	POSITION TITLE Professor		
Morrisey, Michael A.	Professor			
eRA COMMONS USER NAME (credential, e.g., agency login)	•	Department of Health Care Organization & Policy University of Alabama at Birmingham		
EDUCATION/TRAINING (Begin with baccalaureate or other initial residency training if applicable.)	I professional education, s	such as nursing, inc	lude postdoctoral training and	
INSTITUTION AND LOCATION	DEGREE (if applicable)	MM/YY	FIELD OF STUDY	
Northern State University, Aberdeen, SD	B.A.	05/74	Economics	
Northern State University, Aberdeen, SD University of Washington, Seattle, WA	B.A. M.A.	05/74 05/75	Economics Economics	

#### A. Personal Statement

I am a professor of health economics and health insurance in the UAB School of Public Health, Director of the UAB Lister Hill Center for Health Policy, and Co-Director of the UAB Center for Outcomes and Effectiveness Research & Education. I also lead the predoctoral program for the UAB Health Services Research and Comparative Effectiveness Research Training Program. I also currently mentor 2 of our CER K12 Scholars. My research interests are diverse reflecting my interests in the economics of hospitals, employer sponsored health insurance, the effects of legislation and regulation on health and health care, and the economic and disease burden of osteoporosis. My early career research focused on hospital payment issues and hospital-physician relationships. My research on insurance has focused on employer-sponsored coverage including the graduate textbook: *Health Insurance*. This research also includes the analysis of claims data from Medicare, Medicaid and private insurers. My didactic teaching includes graduate courses in health economics and in health insurance.

### **B. Positions and Honors**

#### **Positions and Employment**

1977-1979	Research Assistant, Visiting Research Scientist, Battelle HARC, Seattle, WA	
1979-1985	85 Senior Economist and Assistant Director, American Hospital Association, Chicago, IL	
1985-1988 Associate Professor, Department of Health Care Organization & Policy, School of Pu		
	University of Alabama at Birmingham (UAB).	
1988-present	Professor, Department of Health Care Organization and Policy, School of Public Health, UAB.	
1990-present	Director, UAB Lister Hill Center for Health Policy.	
2009-present	Co-Director, UAB Center for Outcomes and Effectiveness Research and Education.	
1986-present	Secondary faculty appointments: UAB Departments of Marketing, Industrial Distribution and	
·	Economics; Sociology & Social Work; and Health Services Administration.	
1988-present	Senior Scientist/Scholar appointments: Center for Aging; Center for Outcomes & Effectiveness	
·	Research and Education; Injury Control Research Center; Arthritis and Musculoskeletal	
	Diseases Center: Center for the Study of Community Health: Lister Hill Center for Health Policy.	

#### Other Experience and Professional Memberships

1085-procent	Member, editorial boards: Health Services Research (1985-94), Health Services Outcomes and
1900-bieseiit	
	Research Methodology (1998-), Journal of Gerontology – Social Sciences (1998-2001), Health
	Affairs (1998-2007), Medical Care Research and Review (2000-2008), Health Administration
	Press (1999-2002, 2005-2009), Encyclopedia of Health Services Research (2009)
1987-1996	Deputy Editor, Medical Care.
2009-present	Treasurer, American Society of Health Economists (ASHEcon)
1994-2004	Treasurer & Secretary/Treasurer, International Health Economics Association (iHEA).

1992-1996 Member, AHCPR Health Services Developmental Grants Study Section.

1986-present Ad hoc grant reviewer, Robert Wood Johnson Foundation.

#### **Honors**

2011-present Faculty Inductee, Delta Omega, National Public Health Honor Society

2009-present Adjunct Scholar, American Enterprise Institute, Washington, DC.

2001-2002 President's Excellence in Teaching Award, UAB School of Public Health.

2000-2001 Distinguished Faculty Investigator Award, UAB School of Public Health.

1992-present Fellow, Employee Benefits Research Institute.

1991 Recipient, John Thompson Young Investigator Award, AUPHA

#### C. Selected Peer-reviewed Publications (from 5 books & 144 peer-reviewed publications)

- 1. **Morrisey, M.A.**, Sloan, F.A. and Valvona, J., "Medicare Prospective Payment and Posthospital Transfers to Subacute Care," Medical Care 26(7):685-697 (July 1988).
- 2. Sloan, F.A., **Morrisey, M.A.** and Valvona, J., "Medicare Prospective Payment and the Use of Medical Technologies in Hospitals," Medical Care 26(9):837-853 (September 1988).
- 3. Morrisey, M.A., "Retiree Health Benefits" Annual Review of Public Health 14:271-292 (1993).
- 4. Mennemeyer, S.M., **Morrisey, M.A**. and Howard, L., "Death and Reputation: How Consumers Acted Upon HCFA Mortality Data", Inquiry 34:117-128 (Summer 1997).
- 5. White, W.D. and **Morrisey, M.A.**, "Are Patients Traveling Further?" International Journal of the Economics of Business, 5(2):203-221 (1998).
- 6. Grabowski, D.C., Ohsfeldt, R.L. and **Morrisey, M.A.**, "The Effects of CON Repeal on Medicaid Nursing Home and Long Term Care Expenditures," Inquiry 40(2): 146-157 (Summer 2003).
- 7. Jensen, G.A. and **Morrisey, M.A**., "Are Healthier Older Adults Choosing Managed Care," The Gerontologist 44(1):85-94 (January 2004).
- 8. Grabowski, D.C., Campbell, C.M. and **Morrisey, M.A.**, "Elderly Licensure Laws and Motor Vehicle Fatalities." Journal of the American Medical Association 291(23):2840-2846 (June 16, 2004).
- 9. Morrisey, M.A. and Grabowski, D.C., "State Motor Vehicle Laws and Older Drivers," Health Economics 14(4):407-419 (April 2005).
- 10. Morrisey, M.A., Health Insurance (Chicago: Health Administration Press, 2008).
- 11. **Morrisey, M.A.**, Kilgore, M.L., and Nelson, L.J., "Medical Malpractice Reform and Employer Sponsored Health Insurance Premiums," Health Services Research 43(6):2124-2142 (December 2008). PMCID: PMC2614003.
- 12. Kilgore, M.L., **Morrisey, M.A.**, Becker, D.J., Gary, L.C., Curtis, J.R., Saag, K.G., Yun, M.S., Matthews, R., Smith, W., Taylor, A, Arora, M.S., and Delzell, E., "Health Care Expenditures Associated with Skeletal Fractures Among Medicare Beneficiaries, 1999-2005," Journal of Bone & Mineral Research 24(12):2050-2055 (December 2009). No NIH Direct Funding Acknowledged.
- 13. Kilgore, M.L., Grabowski, D.C., **Morrisey, M.A**., Ritchie, C.S., Yun, H. and Locher, J.L., "The Effects of the Balanced Budget Act of 1997 on Home Health and Hospice in Older Adult Cancer Patients," Medical Care 47(3): pp 279-285 (March 2009). PMCID: PMC2759602.
- 14. **Morrisey, M.A.** and Grabowski, D.C. "Gas Prices, Beer Taxes and GDL Programs: Effects on Auto Fatalities Among Young Adults," Applied Economics 43(25):3645-3654 (October 2011). No NIH Direct Funding Acknowledged.
- 15. Nelson, L.J., **Morrisey, M.A**., and Becker, D.J., "Medical Liability and Health Care Reform," Health Matrix: Journal of Law-Medicine 21(2):443-520 (October 2011). No NIH Direct Funding Acknowledged.

# D. Research Support

# **Ongoing Research Support**

1U19HS021110-01 Saag (PI) 09/01/11- 08/31/16

UAB Deep South Arthritis and Musculoskeletal CERTs

The long-term goal of this grant is to sustain a center for education and research on therapeutic of musculoskeletal disorders.

Role: Investigator

200622492 Delzell (PI) 10/15/06-03/30/12

Osteoporosis and Related Fracture among Older Americans

Study of the health and economic burdens of osteoporosis and related fractures among Medicare and Medicaid recipients.

Role: Investigator

09-058 Morrisey (PI) 07/01/09-06/30/12

Research and Analysis for Alabama Medicaid (RAAM)

Project has two objectives: Develop staff expertise in accessing and using AL Medicaid claims data and providing analysis of AL Medicaid data to address programmatic and policy questions raised by the Agency Role: PI.

20090522 Delzell/Curtis (PI) 02/21/11-12/31/19

Denosumab Global Safety Assessment among Women With Postmenopausal Osteoporosis (PMO) Using Multiple Observational Databases

Determine incidence rates of adverse events of special interest (AESI) in women with PMO exposed to denosumab, women with PMO exposed to other osteoporosis medications, and women with PMO not exposed to any osteoporosis medications.

Role: Investigator

1 K12 HS019465-01 Saag (PI) 07/01/10 – 06/30/13

UAB K12 in Comparative Effectiveness Research

The goal of this project is to build upon the momentum of our ongoing Comparative Effectiveness Research (CER) and training and to expand our training capacity and vibrant intellectual milieu for CER at UAB.

Role: Mentor

C10114260 Menachemi (PI) 06/01/11-05/31/12

All Kids Proposal for Special Projects - Alabama Department of Public Health/Bureau of Children's Health Insurance

This study will provide information regarding Alabama CHIP enrollees' use of emergency department (ED) services for potentially inappropriate utilization. We will characterize the misuse of the ED and identify patients most at risk for this misuse. In addition, we will examine the effect of utilizing preventive dental services on overall oral health and costs.

Role: Investigator

Provide the following information for the key personnel and other significant contributors in the order listed on Form Page 2. Follow this format for each person. **DO NOT EXCEED FOUR PAGES.** 

NAME Spage Kannoth C	POSITION TITLE
Saag, Kenneth G.	Professor
eRA COMMONS USER NAME kensaag	

EDUCATION/TRAINING (Begin with baccalaureate or other initial professional education, such as nursing, and include postdoctoral training.) **DEGREE** INSTITUTION AND LOCATION FIELD OF STUDY MM/YY (if applicable) Bioengineering University of Michigan, Ann Arbor 05/82 BSE Northwestern University, Chicago, IL MD 06/86 Medicine University of Iowa, Iowa City, IA MSc 04/93 **Epidemiology** 

#### A. Personal Statement

I am a practicing rheumatologist, epidemiologist, and outcomes researcher with 20 years of experience in conducting patient-oriented, clinical trial, pharmacoepidemiologic, and comparative effectiveness research in musculoskeletal disorders. I am the founding Director of the AHRQ funded UAB Center for Education and Research on Therapeutics (CERTs) and Director of the UAB Center for Outcomes and Effectiveness Research (COERE), a University-Wide supported Interdisciplinary Research Center. I am PI of two AHRQ funded T32s, one in Health Services research and one in Comparative Effectiveness Research, and an ARRA-funded K12 in Comparative Effectiveness Research. I am in my second 5 year funding cycle of a K24 Mid-Career Award in Patient Oriented Research. I have been primary or secondary mentor for 35 trainees. I am Project Principal Director for a NCRR NRAA Supplement: CCTS Collaborative CTSA Community-based Network for Pragmatic Clinical Trials with Medicare Linkage, a NIAMS RO1, and a NIAMS R21. These grants position me well to serve as an Internal Advisory Committee on Dr. Locher's proposed Career Academic Leadership Award and to support her in recruiting trainees interested in conducting Translational Nutrition and Aging Research.

# B. Positions and Honors Positions and Appointment

Positions and	d Appointments
1986-1989	Resident, Internal Medicine, Northwestern University, Evanston Hospital, Evanston, IL
1989-1990	Chief Resident, Internal Medicine and Instructor in Medicine, Northwestern University, Evanston
	Hospital, Evanston, IL
1990-1993	Fellow in Rheumatology, University of Iowa Hospitals and Clinics, Iowa City, IA
1993-1994	Associate, Division of Rheumatology, Department of Internal Medicine, University of Iowa
	College of Medicine, Iowa City, IA
1994-1998	Assistant Professor, Division of Rheumatology, Department of Internal Medicine, University of
	Iowa College of Medicine, Iowa City, IA
1997-1998	Assistant Professor, Division of Epidemiology, Department of Preventive Medicine and
	Environmental Health, University of Iowa College of Medicine, Iowa City, IA
1998-2006	Associate Professor, Department of Medicine, University of Alabama at Birmingham School of
	Medicine, Birmingham, AL
2001-present	Director, Center for Education and Research on Therapeutics (CERTs) of Musculoskeletal.
	Disorders, UAB
	Associate Director, Multidisciplinary Clinical Research Center, UAB
	Professor, Department of Medicine and Epidemiology (Secondary appointment), UAB
•	Director, Center for Outcomes Effectiveness Research and Education, UAB
2009-present	Jane Knight Lowe Endowed Chair in Medicine

#### Other Professional Experience and Memberships

1997-2009	Editorial Board, Arthritis Care and Research
2004, 2005	Chair, Clinical Outcomes and Therapeutics Study Section, Arthritis Foundation
2005-	Board of Directors, American Gout Society
2006	Chair, AMA Consortium on Osteoporosis Clinical Guidelines
2006-2010	Member, FDA Arthritis Advisory Committee
2007-2010	Editorial Board, Archives Internal Medicine

2007-present Associate Editor, Outcomes Section, Arthritis, Research & Therapy

2008-present Member, Board of Trustees, National Osteoporosis Foundation

2008-present Chair, Quality of Care Committee, American College of Rheumatology

2010-present Editorial Board, Annals of Internal Medicine

2010-present Member, Advocacy Task Committee, American Society of Bone and Mineral Research

#### **Honors and Awards**

1981 Tau Beta Pi Engineering Honor Society

1987 Outstanding Intern of the Year

2001-2002 Department of Medicine Division Teacher Award, University of Alabama at Birmingham

2005 Max Cooper Research Award

2011 Research Excellence Award (second highest score for Professors in Department of Medicine)

# **C. Selected Peer-reviewed Publications** (Selected from over 150 publications) \*No NIH direct funding acknowledged.

- 1. **Saag KG**, Emkey R, Schnitzer T, et al: Alendronate for the treatment and prevention of glucocorticoid-induced osteoporosis. New Engl J Med, 1998; 339:292-299.
- 2. Merlino L, Bagchi I, Taylor T, Utrie P, Chrischilles E, Sumner III W, Mudano A, **Saag K**: Preferences for fractures and other glucocorticoid-associated adverse effects among rheumatoid arthritis patients. Med Decis Making, 2001;21:122-132.
- 3. Mudano A, Allison J, Hill J, Rothermel T, **Saag K**: Variations in Glucocorticoid induced Osteoporosis Prevention in a Managed Care Cohort. J Rheum, 2001; 28:1298-1305.
- 4. **Saag KG**, Olivieri JJ, Patino F, Mikuls TR, Allison JJ, MacLean C: Measuring quality in arthritis care: the Arthritis Foundation's quality indicator set for analgesics. Arthritis Rheum (Arth Care Res) 2004; 51:337-49.
- 5. Pisu M, James N, **Saag KG**: The cost of glucocorticoid-associated adverse events in rheumatoid arthritis. Rheumatology 2005; 44:781-788.
- 6. Curtis J, Olivieri J, Allison J, Person S, Juarez L, Kovac S, Gaffo A, **Saag KG**: A group randomized trial to improve safe use of nonsteroidal anti-inflammatory drugs. Am J Managed Care, 2005; 11:537-43.
- 7. Shatin D, Rawson N, Braun MM, Curtis J, Moreland LW, **Saag K**: Documented Tuberculin Skin Testing Among Infliximab Users Following a Multi-modal Risk Communication Interventions. Pharmacoepidemiol Drug Saf, 2006; 15(1):11-8.
- 8. **Saag KG**, Shane E, Boonen S, Marín F, Donley DW, Taylor KA, Dalsky GP, Marcus R: Teriparatide or Alendronate in Glucocorticoid-Induced Osteoporosis. N Engl J Med, 2007; 357(20):2028-2039.
- 9. Curtis JR, Westfall AO, Allison JJ, Becker A, MacArthur M, Ockershausen T, Stewart E, Weissman N, **Saag KG**. Challenges in Improving the Quality of Osteoporosis Care for Long Term Glucocorticoid Users: A Prospective, Randomized Trial. Arch Intern Med. 2007; 167(6): 591-6.
- Colon-Emeric CS, Lyles KW, House P, Levine DA, Schenck AP, Allison J, Gorospe J, Fermazin M, Oliver K, Curtis JR, Weissman N, Xie A, Saag KG: Randomized Trial to Improve Fracture Prevention in Nursing Home Residents. Am J Med 2007; 120:886-892.
- 11. Curtis JR, Westfall AO, Cheng H, Lyles K, **Saag KG**, Delzell E. The Benefit of Adherence with Bisphosphonates Depends on Age and Fracture Type: Results From an Analysis of 101,038 New Bisphosphonate Users. J Bone Miner Res. 2008, 23(9):1435-41. PMID:18442318. PMCID: PMC2574615
- 12. **Saag KG**, Teng GG, Patkar NM, et al. American College of Rheumatology 2008 recommendations for the use of nonbiologic and biologic disease-modifying antirheumatic drugs in rheumatoid arthritis. Arthritis Rheum, (Arth Care Res), 2008; 59(6):762-84. PMID:18512708 \*
- 13. Hooven FH, Adachi JD, Adami S, Boonen S, Compston J, Cooper C, Delmas P, Diez-Perez A, Gehlbach S, Greenspan SL, LaCroix A, Lindsay R, Netelenbos JC, Pfeilschifter J, Roux C, **Saag KG**, Sambrook P, Silverman S, Siris E, Watts NB, Anderson FA Jr. The Global Longitudinal Study of Osteoporosis in Women (GLOW): rationale and study design. Osteoporos Int. 2009 Jul;20(7):1107-16. PMCID: PMC2690851.
- 14. Grijalva CG, Chen L, Delzell E, Baddley JW, Beukelman T, Winthrop KL, Griffin MR, Herrinton LJ, Liu L, Ouellet-Hellstrom R, Patkar NM, Solomon DH, Lewis JD, Xie F, Saag KG, Curtis JR. Initiation of tumor necrosis factor-α antagonists and the risk of hospitalization for infection in patients with autoimmune diseases. JAMA. 2011;306(21):2331-9. Epub 2011 Nov 6. PMID: 22056398\*
- 15. Wright NC, **Saag KG**. Is Two Better Than One? Combining Antiresorptive and Anabolic Osteoporosis Medications. Curr Osteoporos Rep. 2011;9(3):109-11. PMID:21611725.\*

## D. Research Support

# **Ongoing Research Support**

# 2 K24 AR052361 Saag (PI)

06/01/10 - 05/31/15

National Institutes of Health/ NIAMS

## Midcareer Investigator Award in Patient-Oriented Research K24

The goal of this project is to allow Dr. Saag to continue mentoring trainees and conducting research in the pharmacoepidemiology of the rheumatic diseases.

# 1U19HS021110-01 Saag (PI)

09/30/11-08/31/16

Agency for Healthcare Research and Quality (AHRQ)

#### **UAB Deep South Arthritis and Musculoskeletal CERTs**

The long-term goal of this grant is to sustain a center for education and research on therapeutic of musculoskeletal disorders.

#### U18 HS016956 Saag (PI)

09/01/07-08/31/12 NCE

Agency for Healthcare Research and Quality (AHRQ)

# Deep South Musculoskeletal CERTs (DSM)

The long-term goal of this grant is to sustain a center for education and research on therapeutic of musculoskeletal disorders.

# 1R01AR060240-01A1 Saag (PI)

07/01/11- 08/31/16

National Institutes of Health/NIAMS

# **Activating Patients to Reduce Osteoporosis (APROPOS)**

Examine changes in osteoporosis-related health beliefs, greater levels of doctor-patient communication, and changes in possible concerns about osteoporosis medication safety and efficacy.

#### 1R21AR062300-01 Saag (PI)

03/01/12 - 02/28/14

National Institutes of Health/NIAMS

#### Pilot Studies for the Active Comparator Osteoporosis Large Simple Trial (ATLAST)

To develop materials and pilot test methods necessary to determine feasibility and future completion of The Active comparaTor osteoporosis LArge Simple Trial (ATLAST)

## 1 T32 HS019463-01 Saag (PI)

07/30/10 - 07/29/13

Agency for Healthcare Research and Quality (AHRQ)

#### **UAB T32 in Comparative Effectiveness Research**

The goal of this grant is to build upon the momentum of our ongoing CER research and training and to expand our training capacity and the vibrant intellectual milieu for CER at UAB

## 1 K12 HS019465-01 Saag (PI)

07/01/10 - 06/30/13

Agency for Healthcare Research and Quality (AHRQ)

#### **UAB K12 in Comparative Effectiveness Research**

The goal of this grant is to build upon the momentum of our ongoing CER research and training and to expand our training capacity and vibrant intellectual milieu for CER at UAB.

# P60 AR48095 Kimberly (PI), Saag (Project PI)

06/01/08 - 03/31/13

National Institutes of Health/NIAMS

#### **Multidisciplinary Clinical Research Center**

# Project 4: Improving Care of Osteoporosis: Multi-Modal Intervention to Increase Testing and Treatment (ICOMMITT)

The major goal of this project is to rigorously test the incremental impact of simple, generalizable interventions to improve healthcare among older women at high risk for osteoporosis.

## **R01 HS18517-01 Curtis (PI)**

11/01/09 - 10/31/14

Agency for Healthcare Research and Quality (AHRQ)

#### Longitudinal Comparative Effectiveness & Safety of Biologics in Autoimmunity

The purpose of this project is to gain improved understanding of comparative effectiveness by evaluating clinical data from a prospective cohort study and through an analysis of national Medicare data from 2006-2011.

# 1RO1AG033035-01A2 Cram (PI), Saag (Subcontract PI)

04/01/11- 03/31/15

# NIH / University of Iowa

# A Patient Activation Intervention to Improve Bone Health in Older Adults

The aim of this study is to improve healthcare and enhance bone-related health by mailing patients their DXA scan results.

#### 3P30MD000502-08S1 Fouad (PI)

07/01/10 - 04/30/12

National Center on Minority Health and Health Disparities

#### **Comprehensive Minority and Health Disparities Research Center CERED Supplement**

This revision proposes to establish a Center of Excellence in Comparative Effectiveness Research (CERED) for Eliminating Disparities.

#### 1 R18 HS019239-01 Safford (PI

08/16/10 - 08/15/13

Agency for Healthcare Research and Quality (AHRQ)

# Using CERs to Optimize Quality of Life for Persons with Diabetes and Chronic Pain

Randomized trial to test a community health worker (CHW) intervention to improve chronic pain and diabetes for patients with pain, diabetes, and osteoarthritis in vulnerable, hard-to-reach patients living in Alabama's rural and impoverished Black Belt.

### 3UL 1RR025777-02S1 Guay-Woodford (PI), Saag (Project PI)

09/17/09-09/16/12 NCE

National Institutes of Health / National Center for Research Resources

**UAB Center for Clinical and Translational Science (CCTS)** 

# NCRR NRAA Supplement:CCTS Collaborative CTSA Community-based Network for Pragmatic Clinical Trials with Medicare Linkage

The major goal of this Medicare United with Simple Clinical triaLs Expanded network (MUSCLE) is to conduct comparative effectiveness research by developing a "network of networks" for conducting pragmatic trials of therapeutics for chronic musculoskeletal diseases.

#### **Completed Research Support**

U18 HS17919 Saag (PI)

09/30/08 - 12/31/11

Agency for Healthcare Research and Quality (AHRQ)

## Safety Assessment of Anti-TNF Agents Used in Autoimmune Disease

The goal of this project is intended to help the AHRQ, the FDA, drug manufacturers, physicians, and patients identify those patient groups who are at increased risk for serious adverse events associated with biologic therapy.

# No number assigned Saag (PI)

04/01/06 -11/30/07

American College of Rheumatology

#### Recommendations for the Use of Biological Agents in the Treatment of Rheumatoid Arthritis

This project is designed to construct evidence-based guidelines describing appropriate use of biologic therapies for rheumatoid arthritis in the clinical setting.

Provide the following information for the Senior/key personnel and other significant contributors in the order listed on Form Page 2. Follow this format for each person. DO NOT EXCEED FOUR PAGES.

NAME Connie Watkins Bales, PhD, RD  eRA COMMONS USER NAME (credential, e.g., agency login)  CWBALES	POSITION TITLE Professor of Medicine, Duke School of Medicine; Associate Director, GRECC, Durham VA Medical Center	
EDUCATION/TRAINING (Begin with baccalaureate or other initial professional education, such as nursing, include postdoctoral training and residency training if applicable.)		

INSTITUTION AND LOCATION	DEGREE (if applicable)	MM/YY	FIELD OF STUDY
[1] : : : : : : : : : : : : : : : : : : :	T		T
University of Tennessee, Knoxville, TN	B.S.	1972-1976	Dietetics
University of Tennessee, Knoxville, TN	Ph.D.	1976-1981	Nutrition Sciences
Registered Dietitian, American Dietetic Assoc.	R.D.	1976	Dietetics
Duke University		1986-88	NIA Fellowship

#### A. Personal Statement

As a Ph.D. research scientist and a Professor in the Department of Medicine at Duke University School of Medicine, I am well prepared to help support the Translational Nutrition and Aging Research Academic Career Leadership Award application of Dr. Locher. My research experience over the past almost 30 years has ranged from basic bench work to large randomized clinical trials and innovative community health interventions. This work has been unified by an overall goal of enhancing scientific understanding of the interaction of nutrition with human health, disease and functional status in middle-aged and older adults. I continue to maintain an active clinical nutrition laboratory in Duke's Center for the Study of Aging and have authored more than 75 papers and chapters on nutrition and aging related topics. Over the years I have taught and mentored scores of undergraduate, medical and graduate students and postdoctoral fellows. I have also mentored a number of junior faculty members in our department and at other institutions in the US and abroad. Other academic activities that help qualify me for this role include serving as the Editor in Chief of a scientific journal (the Journal of Nutrition in Gerontology and Geriatrics) since 2009 and as lead editor for multiple editions of a major specialty textbook, the Handbook of Clinical Nutrition and Aging, Springer Press (Dr. Locher will join as a coeditor on the upcoming third edition). Other leadership roles have included service on various editorial boards, on study sections/review panels and a DSMB for NIH and USDA, as an officer or executive board member for a number of national professional societies, and as an invited expert for a workshop on Nutrition and Healthy Aging in the Community presented by the Institute of Medicine of the National Academies in 2011. Additionally, I have extensive experience as an educator and organizer of program evaluations through my 15 years working as the Associate Director for Education and Evaluation for the Geriatric Research, Education, and Clinical Center at the Durham VA Medical Center. I look forward to contributing my expertise to the program Dr. Locher is planning. I will provide guidance on goal setting and advance planning for on-going self-evaluation. I also look forward to being a Visiting Scholar because of the research interactions it will foster and the opportunity it offers to sustain a productive dialog with the rest of the team on the future directions of this exciting initiative.

# **B.** Positions and Honors: Positions and Employment.

1976-77	Therapeutic Dietitian, St. Mary's Medical Center, Knoxville, Tennessee
1977-81	Research Assistant, College Human Ecology, University of Tennessee, Knoxville, Tennessee
1981-1986	Assistant Professor, Div. Graduate Nutrition, College Natural Sciences, Univ. of Texas, Austin
1986-1988	Research Fellow (NIH), Center for Aging, Duke Univ Med Ctr, Durham, NC
1987-1991	Administrative Director, Duke Osteoporosis Program, Duke Univ. Med. Ctr., Durham, NC
1988-1993	Assistant Professor of Medicine, Duke Univ Med Ctr, Durham, NC
1991-2002	Associate Director, Stedman Center for Nutritional Studies, Duke Univ. Med Ctr., Durham, NC

1993-2009	Associate Professor of Medicine, Duke Univ. Med. Ctr., Durnam, NC
2010-present	Professor of Medicine, Duke Univ. Med. Ctr., Durham, NC
1989-present	Senior Fellow, Center for the Study of Aging, Duke Univ. Med. Ctr., Durham, NC
1996-present	Associate Director for Education and Evaluation, Geriatric Research, Education,
	and Clinical Center, Durham Veterans Administration Medical Center, Durham, NC
2007- present	Editor-in-Chief, Journal of Nutrition in Gerontology and Geriatrics

Honors.

1976	College Valedictorian, College of Human Ecology, University of Tennessee, Knoxville
1986	Katherine Ross Richards Centennial Teaching Fellowship, University of Texas at Austin
1986	College of Natural Sciences Foundation Teaching Excellence Award, Univ. Texas, Austin
1997	Centennial Leader Award, College of Human Ecology, Univ. of Tennessee, Knoxville
2002	Grace Goldsmith Award, American College of Nutrition
2006	Max E. Horwitt Memorial Distinguished Lectureship, St. Louis University
2007	Mastership, American College of Nutrition

#### Other Experience and Professional Memberships.

2011	Workshop planning Committee for "Nutrition and Healthy Aging in the Community": Institute of
	Medicine of the National Academies.
2009 – present	Executive Board, Medical Nutrition Council, American Society of Nutrition
2005 – 2010	NIH Study Sections: Kidney, Nutrition, Obesity and Diabetes Epidemiology and Neurological,
	Aging and Musculoskeletal Epidemiology
2005 – 2011	Scientific Program Committee, American Society of Nutrition
1976 - present	Academy of Nutrition and Dietetics (formerly American Dietetic Association): Member and
·	Registered Dietitian

# C. Selected peer-reviewed publications.

#### Most relevant to the current application

- 1. **Bales, C.W.** and Ritchie, C. (2002) Sarcopenia, weight loss, and nutritional frailty in the elderly. <u>Annual Review of Nutrition</u> 22:309-23.
- 2. White, H., McConnell, E., **Bales, C**., Kuchibhatia, M. (2004) A 6-month observational study of the relationship between weight loss and behavioral symptoms in institutionalized Alzheimer's disease subjects. <u>Journal American Medical Directors Association</u> 5:89-97.
- 3. **Bales CW**, Buhr G. Body mass trajectory, energy balance, and weight loss as determinants of health and mortality in older adults. <u>Obesity Facts: European Journal of Obesity</u> 3; 171-178, 2009.
- 4. Buhr G and **Bales, CW.** (2010) Nutritional supplements for older adults: Review and recommendations, Part II. <u>J Nutrition Elderly</u> 29:42–71.
- Locher JL, Bales CW, Buys DL, Ellis AC, Lawrence JC, Newton L, Roth D, Ritchie CS, and Vickers KS. (2011) A theoretically based nutrition intervention for high-risk older adults living in the community. <u>J Nutr Gerontology Geriatrics</u>: 30 (4):384–402.

## Additional selected recent publications important to the field (in chronological order)

1. **Bales CW**, Fischer JG, and Orenduff MC. Nutritional interventions for age-related chronic disease. (2005) <u>Generations:</u> 28:54-60.

- 2. Payne ME, Hybels CF, **Bales CW**, and Steffens DC. (2006) Vascular nutritional correlates of late-life depression. <u>American Journal Geriatric Psychiatry</u> 14(9):787-795.
- 3. Huffman KM, Orenduff MC, Samsa G, Houmard J, Kraus WE, and **Bales CW**. Dietary carbohydrate intake and high sensitivity C reactive protein in at-risk women and men. (2007) <u>American Heart Journal</u> 154(5):962-68. PMCID: PMC2080826.
- 4. **Bales CW** and Buhr G. (2008) Is obesity bad for older persons? A systematic review of the pros and cons of weight reduction in later life. <u>Journal American Medical Directors Association</u> 9:302-312.
- Evans WJ, Morley JE, Argiles J, Bales C, Baracos V, Guttridge D, Jatoi A, Kalantar-Zadeh K, Lochs H, Mantovani G, Marks D, Mitch WE, Muscaritoli M, Najand A, Ponikowski P, Fanelli FR, Schambelan M, Schols A, Schuster M, Thomas D, Wolfe R, and Anker SD. (2008) Cachexia: A new definition. <u>Clinical</u> Nutrition 27:793-99.
- 6. Buhr G and **Bales, CW.** (2009) Nutritional supplements for older adults: Review and recommendations, Part I. J Nutrition Elderly 28:5-29.
- 7. Galanos AN, Nett E, Hueberger R, and **Bales CW**. (2010) What is "optimal nourishment at the end of life? A conversation. <u>J Nutrition Elderly</u> 29: 386-392.
- 8. Rochon J, **Bales CW**, Ravussin E, Holloszy J, Roberts S, Romashkan S, Galan K, Hadley E, Kraus WE. (2011) Design and conduct of the CALERIE Study: Comprehensive assessment of the long-term effects of reducing intake of energy. J.Gerontol: Med Sci. 66:97-108. PMCID: PMC3032519
- Rickman AD, Williamson DA, Martin CK, Gilhooly CH, Stein RI, Bales CW, Roberts S, Das SK and The CALERIE Research Group. (2011) CALERIE Study: The CALERIE Study: Design and methods of an innovative 25% caloric restriction intervention. <u>Contemp Clin Trials.</u> 2011 Nov;32(6):874-81. NIHMSID: NIHMS310952
- 10. Slentz CA, Bateman LA, Willis LH, Shields T, Tanner CJ, Piner LW, Hawk VH, Muehlbauer MJ, Samsa GP, Nelson RC, Bales CW, Houmard JA, Kraus WE. (2011) The effects of aerobic versus resistance training on visceral and liver fat stores, liver enzymes and insulin resistance by HOMA in overweight adults from STRRIDE AT/RT: A randomized trial. <a href="mailto:Am J Physiol-Endocrinology and Metabolism">Am J Physiol-Endocrinology and Metabolism</a>. In press.

# C. Research Support

#### **Ongoing Research Support**

NIA 1U01-AG022132 W. Kraus (PI) 10/1/02-9/30/12 Coordinating Center for "CALERIE" Studies (Comprehensive Assessment of Long-Term Effects of Reducing Intake of Energy)

The goal of this project is to coordinate the efforts of three clinical research sites as they conduct controlled human intervention studies on the effects of calorie restriction on physiology, body composition, and risk factors for age-related pathologies.

Role: Co-Investigator

1R01-DK081559 DK081559 W. Kraus (PI) 4/1/09-3/31/14

NIDDK

Exercise Dose-Response Effects in Pre-diabetes: Response and Mechanisms

The major goal of this project is to investigate the effects and mechanisms of influence of exercise and weight loss on measures and mechanisms of glucose control. Using a controlled, randomized design, the effects of three six-month exercise-training programs involving different amounts and intensities of exercise on measures and mechanisms of glucose control in pre-diabetics will be assessed. We will evaluate the overall effectiveness of these three exercise-only interventions by comparing them to a six-month clinical lifestyle intervention that contains the components of the Diabetes Prevention Program but of shorter duration.

Role: Co-Investigator

# Completed Research Support

2R01-HL57354 W. Kraus (PI) 5/01/04-4/30/09

**NHLBI** 

Peripheral Effects of Exercise on Cardiovascular Health-II

The major goal of this project is to investigate the effects and mechanisms of resistance training alone and in combination with aerobic training on metabolic markers of cardiovascular risk and to assess the gender-specific component of these effects.

Role: Co-Investigator

Provide the following information for the key personnel and other significant contributors. Follow this format for each person. DO NOT EXCEED FOUR PAGES.

POSITION TITLE
1 3 3 11 3 11 1 2 2
Professor/Head

EDUCATION/TRAINING (Begin with baccalaureate or other initial professional education, such as nursing,

INSTITUTION AND LOCATION	DEGREE (if applicable)	YEAR(s)	FIELD OF STUDY
Pennsylvania State University, University Park, PA	B.S	1975	Biology
University of New Hampshire, Durham, NH	M.S	1977	Zoology
Cornell University Medical College, NY, NY	Ph.D.	1981	Nutrition Biochem
Cornell University, Ithaca, NY	M.D.	1984	Medicine

#### A. Personal Statement

I am an academic physician nutrition specialist with formal doctoral and fellowship training in nutrition. I currently serve as Head of the Department of Nutritional Sciences at Penn State. I have demonstrated a strong record of national and international leadership in nutrition. I have served on mentorship committees for Kawardees as well as the thesis committees for doctoral students. In addition, I have supervised numerous nutrition and gastroenterology fellows as well as medical student, house officer, dietitian, and pharmacy trainees in clinical nutrition and research. I have also served as a mentor on training grants for Pulmonary / Critical Care Medicine at Vanderbilt and for the MD, PhD program at Penn State Hershey Medical School. My research interests have focused upon nutrition, inflammation, and obesity through the life cycle.

#### B. Positions and Honors

### **Positions and Employment**

1977-1981 NIH Traineeship, Cornell University

1981 Postdoctoral Fellow, Cornell University

1981-1984 Medical Student and research fellow. Cornell Medical College

1984-1987 Resident Internal Medicine, New England Deaconess, Harvard Medical School

1987-1988 Clinical Nutrition Fellow, New England Deaconess, Harvard Medical School

1988-1997 Director, Nutrition Support, Gastroenterology, Geisinger Medical Center

1989-1997 Clinical Assistant Professor of Medicine, Jefferson Medical College

1990-1997 Research Associate, Critical Care Medicine, Geisinger Medical Center

1998-2003 Associate Professor of Medicine, Medical Director of Nutrition Support, Vanderbilt

1999-2007 Director of the Vanderbilt Center for Human Nutrition

1999-2007 Core Investigator, VA Geriatric Research and Education Center, Nashville

2003-2007 Professor of Medicine. Vanderbilt

2007-Present - Professor and Head, Department of Nutritional Sciences, Penn State

2007-Present - Professor of Medicine, Penn State Hershey Medical Center

2011-Present - Co-Director KL2 Training Program Penn State CTSI

2011-Present - Co-Director Penn State Childhood Obesity Transdisciplinary Training Program

## Supervised Trainees

K-award mentorship – three mentorees at Vanderbilt

Physician nutrition fellows certified by American Board of Nutrition - three completed (Geisinger)

Gastroenterology fellows completing nutrition support rotation - four annually (Vanderbilt)

Master's students - five awarded degrees (Penn State)

Doctoral (PhD) students - four awarded degrees (Penn State)

Undergraduate, medical student, or house officer - elective nutrition support or research rotations - estimate 75 completed

Dietitian, nurse, and pharmacy trainees in nutrition support - estimate 300 completed Member, Training grant faculty for Pulmonary / Critical Care Medicine, Vanderbilt Member, Training grant faculty for MD, PhD program, Penn State Hershey

## Other Experience and Professional Activities (Selected)

1997-2005 Member, Editorial Board - Journal Parenteral and Enteral Nutrition

1997 Member, Food and Nutrition Board Panel on Nutrition Services and Quality of Care

1999 Member, Food and Nutrition Board Panel on Nutrition Services for Medicare Beneficiaries

2001-2004 Reviewer, Special Nutritional and Metabolic Sciences Study Section, NIH

2003-2007 Vice-President, President-Elect, President, Past-President, ASPEN

2003-2009 Member, Editorial Board, American Journal of Clinical Nutrition

2006-2009 Chair-Elect, Chair, and Past-Chair, Medical Nutrition Council, ASN

2007-2013 Member, Food and Nutrition Board of the Institute of Medicine

2008-2009 Reviewer Canada Foundation for Innovation - Leading Edge Fund

2008-2013 Member DSMB, NIDDK Study of Nutrition in Acute Pancreatitis (SNAP)

2009-2012 Member, Food Forum of the Institute of Medicine

2009-2010 Member, NASA Standing Review Committee on Human Nutrition

2010-2011 Chair, ANDP Board of Directors

2011-2012 Vice-President Elect American Society for Nutrition

## Honors (Selected)

1971-1975 Graduated from Penn State with High Distinction,

Election to Phi Kappa Phi, Phi Sigma, and Phi Eta Sigma honorary societies

1977-1981 Teaching assistant recognition award, Cornell University

1981-1984 Dean Mecklenburg Memorial Research Prize, Cornell Medical College

1999 Elected to Honorary Membership in the American Dietetic Association

2005-2007 Recognized by America's Top Doctors, Castle Connolly Medical Ltd.

2010 Recognition as "Honorary Faculty" European Society for Parenteral and Enteral Nutrition

2012 Elected Fellow of American Society of Parenteral and Enteral Nutrition

#### C. Selected peer-reviewed publications

#### **Most Recent**

- 1. Sciamanna CN, Kiernan M, Rolls BJ, Boan J, Stuckey H, Kephart D, Miller CK, **Jensen GL**, Hartman TJ, et al. Practices associated with weight loss versus weight loss maintenance. Results of a national survey. Am J Prev Med, 2011; 41:159-66. [PMID: 21846239]
- 2. Hsiao PY, **Jensen GL**, Hartman TJ, Mitchell DC, Nickols-Richardson SM, Coffman DL. Food intake patterns and body mass index in older adults: a review of the epidemiological evidence. J Nutr Gerontol Geriatr 2011; 30: 204-24. [PMID: 212703372]

#### Additional Recent Publications (in chronological order)

- 3. **Jensen GL**, Silver HJ, Roy MA, Callahan E, Still C, Dupont W. Obesity is a risk factor for reporting homebound status among community dwelling older persons. Obesity 2006;14: 509-17.
- 4. **Jensen GL**. Obesity among older persons: screening for risk of adverse outcomes. Journal of Nutrition, Health and Aging 2006;10: 510-22. [PMID: 16648623]
- 5. **Jensen GL**, Silver HJ, Roy MA, Callahan E, Still C, Dupont W. Obesity is a risk factor for reporting homebound status among community dwelling older persons. Obesity 2006; 14: 509-17 (2006). [PMID: 16648623]
- 6. **Jensen GL**. Obesity among older persons: screening for risk of adverse outcomes. Journal of Nutrition, Health and Aging 2006; 10: 510-22. [PMID: 17183423]
- 7. **Jensen GL**. Inflammation as the key interface of the medical and nutrition universes: a provocative examination of the future of clinical nutrition and medicine. JPEN 2006; 30: 453-63. [PMID: 16931617]
- 8. Silver HJ, Torquati A, **Jensen GL**, Richards WO. Weight, dietary and physical activity behaviors two years after gastric bypass. Obesity Surgery 2006; 16: 859-64. [PMID: 16839483]

- 9. Bailey RL, Mitchell DC, Miller CK, Still CD, **Jensen GL**, Tucker K, Smiciklas-Wright H. Dietary patterns derived from a diet screening instrument in older rural adults. J Nutr, 2007; 137: 421-6. [PMID: 17237321]
- 10. Bailey RL, Mitchell DC, Miller CK, Still CD, **Jensen GL**, Tucker K, Smiciklas-Wright H. A dietary screening questionnaire identifies dietary patterns in older adults. J Nutr, 2007;137: 421-6. [PMID: 17237321]
- 11. Kumpf V, Slocum K, Binkley J, **Jensen GL**. Complications following bariatric surgery: survey evaluating impact on the practice of specialized nutrition support. Nutr Clin Prac, 2007; 22: 673-8. [PMID: 18042956]
- 12. Branner CM, Koyama T, **Jensen GL**. Racial and ethnic differences in pediatric obesity-prevention counseling: a National prevalence analysis of healthcare provider practices. Obesity, 2008;16: 690-4. [PMID: 18239563]
- 13. Kropski JA, Keckley PH, **Jensen GL**. School-based obesity prevention programs: an evidence-based review. Obesity, 2008;16: 1009-18. [PMID: 18356849]
- 14. Pousman R, Pepper C, Pandharipande P, Mills B, Diaz C, Collier B, Miller R, Ayers G, **Jensen, GL**. Feasibility of implementing a reduced fasting protocol for critically ill trauma patients undergoing operative and non-operative procedures. JPEN, 2009; 33:176-80. [PMID: 19251911]
- 15. **Jensen GL**, Bistrian B, Roubenoff R, Heimburger DC. Malnutrition syndromes: a conundrum versus continuum. JPEN 2009; 33: 710-16. [PMID: 19892905]
- 16. **Jensen GL**, Hsiao PY. Obesity in older adults: relationship to functional limitation. Curr Opin Nutr Metab Care 2010; 13:46-51. [PMID: 198415579]
- 17. **Jensen GL**, Mirtallo J, Compher C, at al. Adult starvation and disease-related malnutrition: A proposal for etiology-based diagnosis in the clinical practice setting from the International Consensus Guideline Committee. Clinical Nutrition 2010; 29: 151-3 and JPEN 2010; 34: 156-9. [PMID: 20071059 / PMID: 20375423]

# D. Research Grants Received (Selected)

## **Ongoing Research Support**

Cooperative Agreement 58-1950-6-109

USDA, Agricultural Research Service

Subcontract Penn State (Jensen / Hartman)

Geisinger Rural Aging Study

In this study we seek to develop and validate a population-specific food frequency questionnaire for a cohort study of 21,000 rural older persons. Poor diet quality will be related to adverse medical, nutritional status, functional, life quality, and healthcare resource use outcomes.

2011-67001-30117

02/15/11 - 02/14/16

09/01/10 - 08/31/14

USDA, National Institute of Food and Agriculture

(Birch / Jensen)

Penn State University Childhood Obesity Transdisciplinary Training Program.

(2011-2016)

In this training grant we seek to prepare PhD students for careers in childhood obesity prevention.

#### **Relevant Completed Research**

R01 DK069322 (Ziegler - PI)

09/01/05 - 8/31/10

**NIDDK** 

Subcontract (Jensen) – completed my role with my 2007 move to Penn State.

Efficacy and Mechanisms of GLN Dipeptide in the SICU

In this study we sought to understand the efficacy and mechanisms of glutamine dipeptide as a nutrition supplement in total parenteral nutrition for critically ill surgical patients.

Penn State Social Science Research Institute

07/1/08 - 06/30/10

(Jensen - PI)

Development of a Community-Based Low Energy Density Diet Trial

In this pilot study we aim to characterize an overweight / obese community-based clinic population and develop a low energy density intervention.

Provide the following information for the Senior/key personnel and other significant contributors. Follow this format for each person. **DO NOT EXCEED FOUR PAGES.** 

NAME Heather H Keller		POSITION TITLE Professor & Schlegel Research Chair, Nutrition &		
eRA COMMONS USER NAME (credential, e.g., agency login)	Aging University of	Aging University of Waterloo		
EDUCATION/TRAINING (Begin with baccalaureate or other init residency training if applicable.)	tial professional education,	such as nursing, in	clude postdoctoral training and	
INSTITUTION AND LOCATION	DEGREE (if applicable)	MM/YY	FIELD OF STUDY	
University of Guelph	BASc	05/1989	Applied Nutrition/Dietetics	
McGill University	MSc	05/1991	Nutrition	
University of Western Ontario	PhD	05/1997	Epidemiology & Biostatistics	

Please refer to the application instructions in order to complete sections A, B, C, and D of the Biographical Sketch.

A. Personal Statement My expertise in applied/clinical nutrition, epidemiology, aging, and knowledge translation provides a unique perspective that I bring to three areas of research. Geriatrics is my primary focus and I have been conducting research in older adults for my entire career spanning 25 years. The first research theme is focused on **nutrition care for vulnerable** adults; this has involved the development and/or validation of nutrition screening tools for community living older adults (SCREENII©), hospital (Canadian Malnutrition Task Force (CMTF)), and homecare (MDS® derived algorithm). As an expert in nutrition screening and implementation of screening programs, I have developed: 1) implementation guides, as part of a national project on community nutrition screening models for older adults (Bringing Nutrition Screening to Seniors); e-learning on nutrition screening with Dietitians of Canada (to be launched April 2012); internet self-management tools (www.eatrightontario/escreen) and I am co-chair of the CMTF which is currently conducting a multi-site study on the prevalence, predictors and outcomes of malnutrition in 1000 adult patients in Canada. As part of this study, we are conducting an in-depth collection on nutrition care process to identify gaps and facilitators of quality nutrition care, including post-discharge. This work also involves an extensive knowledge translation process with broad stakeholder engagement (see www.nutritioncareincanada.ca). The second research theme is focused on enhancing food quality to promote improved nutritional status and health. Working as part of the Agri-Food for Health Aging Research group (aha.theria.ca), projects within this theme include examining nutritional and sensory issues of pureed food, an intervention study on pureed food, and new projects will focus on nutrient enhancement. My final research theme is focused on **improving the dining experience.** I have conducted a

longitudinal qualitative study that has resulted in the Life Nourishment Theory, which can be used as a basis for knowledge translation and education initiatives with staff as well as intervention work. Other work in this area includes social interaction at mealtimes and mealtime satisfaction. As a research chair within the UW-Schlegel Research Institute of Aging I have the rare opportunity to work collaboratively with diverse researchers focused on geriatric medicine, brain health, mobility, pharmacology, physical activity, health services (specifically across the continuum of care) and enhancing seniors care through knowledge translation. This research institute provides unique opportunities for collaborative research nationally and internationally on health and care issues specific to older adults.

### **B. Positions and Honours**

**Employment** 

Dates	Rank/Position	Department/Institution/Firm
01/12	Full Professor	Kinesiology, University of Waterloo
	Schlegel Research Chair	
	Nutrition & Aging	
07/08—12/11	Full Professor	Family Relations and Applied Nutrition,
		University of Guelph
07/00 -06/08	Associate Professor	Family Relations and Applied Nutrition,
		University of Guelph
09/01- 12/06	Public Health Associate	Hamilton Wentworth Public Health
		Department
01/97 - 06/00	Assistant Professor	Family Relations and Applied Nutrition,
		University of Guelph
07/96 - 01/97	Lecturer	Family Studies, University of Guelph
01/91 - 04/96	Clinical Research Dietitian	Nutrition and Food Services, Parkwood
		Hospital, London, ON

#### Honours

Betty Havens Knowledge Translation Award CIHR-IA,2007; Fellow, Dietitians of Canada, 2006; Distinguished Lectureship, The Max K. Horwitt Memoria Lecture. St. Louis University, School of Medicine, 2004; Canadian Institutes of Health Research, New Investigator Award, 2000-2006; University of Guelph President's Distinguished Professor Award , 2000/2001; College of Family and Consumer Studies Learning and Teaching Award for Undergraduate Teaching Excellence, 1998; Ontario Dietetic Association Peer Recognition Award, 1993.

#### Other Professional Experience

Research Groups

**Co-chair,** Canadian Malnutrition Task Force, standing committee of Canadian Nutrition Society 09/09—**Research Scientist,** Agri Food For Health Aging, Schlegel-UW Research Institute of Aging, 09/08---*Knowledge Translation* 

Core Working Group Member, Nutrition Community of Practice, SHRTN 10/10—Falls Intervention Faculty, Safer Healthcare Now, CPSI. 01/12—Steering Committee Member, ECHO: Informal caregiver education. 10/10-12/11

Editorial Boards

Journal of Aging Research 10/09--

Journal of the American Medical Directors Association 07/04--

Journal of Nutrition for the Elderly/ Journal of Nutrition, Gerontology & Geriatrics 05/04--

Journals of Gerontology: Medical Sciences 09/03-12/04

Journal of Nutrition Health and Aging 09/03--12/07

Canadian Journal of Dietetic Practice & Research 09/98—

External Expert

RAI-MDS 2.0 Guide for Nutrition Care, Long term care homes common assessment project, MOH-LTC, Ontario 12/08-12/09

Alzheimer Disease and Related Dementias Research Priority Setting Project- Consensus Workshop 04/05

Expert Working Group, Canadian Guidelines for Body Weight Classification 09/01-03/03 Expert Working Group, Health Canada, Division of Aging & Seniors, Healthy Eating 09/00

## C. Selected Publications Specific to this Proposal

Vesnaver, E., *Keller, H.*, Payette, H., Shatenstein, B. (2012). Dietary Resilience as Described by Older Community-Dwelling Adults from the NuAge study "*If there is a will - there is a way!*". Appetite 58:730-738.

Vesnaver, E., *Keller, H.H.* Social influences and eating behavior in later life: A review. *Journal of Nutrition, Gerontology and Geriatrics* 2011;30(1):2-23.

Southgate, K., *Keller*, *H.H.*, & Reimer, H. (2010). Determining knowledge and behaviour change after nutrition screening among older adults . *Can J Diet Pract Res.* 71(3), 128-133.

Curle, L., *Keller, H.H.* (2010). Resident Interaction at Mealtimes: an Exploratory Study. *European Journal of Aging Research* 7:189-200.

Cassaloto, C., *Keller, H.H.*, Dupuis, S., Schindel Martin, L., Edward, H.G., & Genoe, R. (2010). The meaning and experience of eating out for families living with dementia. *Leisure/Loisir*, *34*(10), 107-125.

*Keller, H.H.*, Schindel Martin, L., Dupuis, S., Genoe, R., Edward, H.G., & Cassaloto, C. (2010). Mealtimes and being connected in the dementia context. *Dementia* 9(2), 191-213.

Reimer, H.D., & *Keller, H.H.* (2009). Mealtimes in nursing homes: striving for person-centred care. *J Nutr Elder, 28,* 327-347.

Bocock, M.A., *Keller, H.H.* (2009). Hospital diagnosis of malnutrition: A call for action. *Can J Diet Pract Res*, 70[1], 37-41.

More C, *Keller HH*. (2008). Community Nutrition Policy for Seniors in Canada. *Can J Diet Pract Res*, 69[4], 198-200.

*Keller, H.H.* (2007). Promoting food intake in older adults living in the community: a review. *App Phys Nutr Met*, *32*, 991-1000.

*Keller, H.H.*, Haresign, H., & Brockest, B. (2007). Bringing Nutrition Screening to Seniors (BNSS) Process Evaluation. *Can J Diet Pract Res*, 68(2), 86-91.

*Keller, H.H.*, Dwyer, J.J.M., Censon, S., Edwards, V., & Edward, H.G. (2006). A social ecological perspective of the influential factors for food access described by low-income seniors. *J Hunger Environ Nutr, 1[3],* 27-44.

*Keller, H.H.* (2006). Meal programs improve nutritional risk: A longitudinal analysis of community-living seniors. *J Am Diet Assoc*, 106[7], 1042-1048.

*Keller, H.H.*, Goy, R., & Kane, S-L. (2005). Validity and reliability of SCREEN II (Seniors in the Community: Risk Evaluation for Eating and Nutrition- version II). *Eur J Clin Nutr*, 59,1149-1157.

*Keller*, *H.H*. (2005). Reliance on others for food-related activities of daily living. *J Nutr Elderly*, 25[1], 43-59.

*Keller, H.H.*, & Østbye, T. (2004). Nutritional risk predicts quality of life in elderly community-living Canadians. *J Gerontology: Medical Sciences*, 59A[1], 68-74.

Keller, H.H., & Østbye, T. (2003). Nutritional risk and time to death; predictive validity of

SCREEN© (Seniors in the Community Risk Evaluation for Eating and Nutrition). J Nutr

Health Aging, 7[2], 274-279.

*Keller, H.H.* (2001). Meal-based and non-meal based community services: Comparison of nutritional risk and health of vulnerable seniors. *J Nutr Elderly*, 21[2], 23-38.

*Keller, H.H.*, & Hedley, M.R. (2000). Development of SCREEN - Seniors in the Community: Risk Evaluation for Eating and Nutrition. *Can J Diet Prac Res*, 61[2], 67-72.

*Keller, H.H.*, Østbye, T., & Bright-See, E. (1999). Dietary habits of seniors with some activity limitations. *Can J Diet Prac Res*, 60, 214-221.

*Keller, H.H.*, Østbye, T., & Bright-See, E. (1997). Predictors of dietary intake in Ontario Seniors. *Can J Pub Health*, 88[5], 305-309.

*Keller, H.H.* (1995). Weight gain impacts morbidity and mortality in institutionalized older persons. *J Am Geriatrics Soc, 43*, 165-169.

## D. Current Funding

Year	Role	Co-Recipients	Source	Amount	Topic
2010-	Co-Chair	J. Allard (co-Chair)	Abbott		Support for Phase I
12		D. Duerkson	Laboratories,		Canadian Malnutrition
		K. Jeejeebhoy	Canada; Nestle;		Task Force
		H. Payette	Baxter; Fresnius		
		M. Laporte	Kabi; Calea;		
		L. Gramlich	Pfizer		
2012	Co-	J. Randall Simpson	CIHR-		E-NutriSTEP: internet
	investigator	(PI)	Knowledge		application of NutriSTEP
		J. Beyers	Translation		for self-management.
2011	Investigator	L.M. Giangregorio	University of		Too fit to fracture:
		(PI), J. Hirdes, S.	Waterloo		Research priorities and
		McGill, A.	International		best practices in exercise
		Papaioannou, A.	Research		and osteoporosis.
		Cheung, N. MacIntyre,	Partnership		
		M. Ashe, J. Wark, A.	Grant &		
		Heinonen, K. Shipp, R.	Osteoporosis		
		Jain	Canada		
2010	Investigator	L. Duizer (PI),	OMAFRA		Sensory attributes of
		M. Marcone			pureed food

#### **BIOGRAPHICAL SKETCH**

Provide the following information for the key personnel in the order listed for Form Page 2. Follow the sample format for each person. **DO NOT EXCEED FOUR PAGES.** 

NAME	POSITION TITLE
Sharkey, Joseph R.	
eRA Commons User Name	Professor
Sharkey	

EDUCATION/TRAINING (Begin with baccalaureate or other initial professional education, such as nursing, and include postdoctoral training.)							
INSTITUTION AND LOCATION	DEGREE (if applicable)	YEAR(s)	FIELD OF STUDY				
The University of Texas at Austin	B.A.	1970	History/Government				
Texas A&M University	B.S.	1997	Nutritional Sciences				
The University of North Carolina at Chapel Hill	M.P.H.	1998	Nutrition				
The University of North Carolina at Chapel Hill	Ph.D.	2002	Nutrition				
NIH – Office of Behavioral and Social Science Research	Summer Institute	2003	Design and Conduct of Randomized Clinical Trials Involving Behavioral Interventions				
NIH – National Institute on Aging	Summer Institute	2004	Aging Research				

## A. PERSONAL STATEMENT

The overall aims of this new submission are: 1) to provide leadership, core faculty, and resources that support innovative, integrated, interdisciplinary, clinical, behavioral, and policy-related collaborations focused on translational nutrition and aging; 2) to provide high quality educational experiences related to translational nutrition and aging research for pre-doctoral trainees, post-doctoral fellows, junior and transitional faculty, and community stakeholders, including policy makers and the geriatric workforce; and 3) to identify gaps in the current evidence base, address methodological issues, and set priorities for translational nutrition and aging research. I have expertise in nutrition, aging, health outcomes, and working with diverse populations. I am prepared to serve as a member of the External Advisory Committee and assist Dr. Locher and her team in any way possible.

## **B. POSITIONS AND HONORS**

## **Academic and Professional Appointments**

- 100101011110	
2004-2007	Editor, Journal of Nutrition for the Elderly
2003-present	Graduate Faculty, Intercollegiate Faculty of Nutrition, Texas A&M University
2004-present	Director, Texas Healthy Aging Research Network (TxHAN)
2006-present	Associate Professor (with tenure), School of Rural Public Health, Department of Social and Behavioral
	Health, Texas A&M University System Health Science Center, College Station, TX
2007-present	Director, Program for Research in Nutrition and Health Disparities, SRPH

## **Professional Experience**

2004-2008	Ad Hoc Reviewer, CLHP and NIDDK Special Emphasis Panels, CSR, NIH
2007-2010	Charter Member, Community-Level Health Promotion (CLHP) Study Section, CSR, NIH
1998–present	Registered Dietitian, #850438
2004-present	Chair, Nutrition Interest Group, PRC-Healthy Aging Research Network (HAN)
2005-present	Member, Editorial Board, <u>Journal of Aging and Health</u>
2008-2010	Chair, Aging and Chronic Disease Research Interest Section, American Society for Nutrition

## **Honors & Awards**

1997	Summa Cum Laude in Nutritional Sciences, Texas A&M University
2000	Gordon H. DeFriese Career Development in Aging Research Award (UNC-CH Institute on Aging)
2000	Office of Rural Health Policy Award for Excellence in Research on Aging and Rural Health
2003	Award Winner, Betty J. Cleckley Minority Issues Research Award (Gerontological Health Section, APHA
2003	Elected to Delta Omega Honorary Society in Public Health
2006	Fellow, Mexican American and U.S. Latino Research Center (MALRC), Texas A&M University

#### C. PUBLICATIONS

## Original Research - Selected peer-reviewed (in chronological order out of 89 publications)

- 1. **Sharkey, J.R.** and Haines, P.S. (2001) The Feasibility of Using a Telephone-Administered Survey for Determining Nutritional Service Needs of Non-Institutionalized Older Adults in Rural Areas: Time and Costs. *The Gerontologist*, 41 (4), 546-552.
- 2. **Sharkey, J.R.** and Haines, P.S. (2002) Use of Telephone-Administered Survey for Identifying Nutritional Risk Indicators Among Community-Living Older Adults in Rural Areas. *Journal of Applied Gerontology*, 21 (3), 385-403.
- 3. **Sharkey, J.R.** and Schoenberg, N.E. (2002) Variations in Nutritional Risk Among Black and White Women Who Receive Home-Delivered Meals. *Journal of Women & Aging*, 14 (4), 99-119.
- 4. **Sharkey, J.R.** and Haines, P.S. (2002) Nutrition Risk Screening of Home-Delivered Meal Participants: Relation of Individual Risk Factors to Functional Status. *Journal of Nutrition for the Elderly*, 22 (1), 15-34.
- 5. **Sharkey, J.R.** (2002) The Interrelationship of Nutritional Risk Factors, Indicators of Nutritional Risk, and Severity of Disability Among Home-Delivered Meal Participants. *The Gerontologist*, 42 (3), 373-380.
- 6. **Sharkey, J.R.**(2002) Responding to the Challenges of Recruiting and Retaining Homebound Older Men and Women in a Study of Nutrition and Function: A University-Community Collaborative Strategy. *Journal of Nutrition for the Elderly*, 22 (2), 15-35.
- 7. **Sharkey, J.R.**, Branch, L.G., Zohoori, N., Giuliani, C., Busby-Whitehead, J., and Haines, P.S. (2002) Inadequate nutrient intake among homebound older adults in the community and its correlation with individual characteristics and health-related factors. *The American Journal of Clinical Nutrition*, 76, 1435-45.
- 8. **Sharkey, J.R.**, Giuliani, C, Haines, P.S., Branch, L.G., Busby-Whitehead, J., and Zohoori, N. (2003) A Summary Measure of Dietary Intake of Musculoskeletal Nutrients (Calcium, Vitamin D, Magnesium, and Phosphorus) is Associated with Lower-Extremity Physical Performance in Homebound Older Men and Women. *The American Journal of Clinical Nutrition*, 77, 847-856.
- 9. **Sharkey, J.R.** (2003) Risk and Presence of Food Insufficiency Are Associated with Low Nutrient Intakes and Multi-Morbidity among Homebound Older Women Who Receive Home-Delivered Meals. *Journal of Nutrition*, 133, 3485-3491.
- 10. **Sharkey, J.R.** and Branch, L.G. (2004) Gender Differences in Physical Performance, Body Composition, and Dietary Intake in Homebound Elders. *Journal of Women & Aging*, 16 (3/4), 71-90.
- 11. **Sharkey, J.R.** (2004) Variations in Nutritional Risk among Mexican American and Non-Mexican American Homebound Elders Who Receive Home-Delivered Meals. <u>Journal of Nutrition for the Elderly</u>, 23 (4), 1-19.
- 12. **Sharkey, J.R.**, Branch, L.G., Giuliani, C., Zohoori, N, and Haines, P.S. (2004) *Nutrient Intake and BMI as Predictors of 1-Year Severity of Disability in Homebound Elders*. The Journal of Nutrition, Health & Aging, 8 (3), 131-139.
- 13. **Sharkey, J.R.** (2004) *Nutrition risk screening: the interrelationship of food insecurity, food intake, and unintentional weight change among homebound elders.* Journal of Nutrition for the Elderly, 24 (1), 19-34.
- 14. **Sharkey, J.R.** and Schoenberg, N.E. (2005) *Prospective Study of Black-White Differences in Food Insufficiency Among Homebound Elders.* Journal of Aging and Health, 17 (4),507-527.
- 15. **Sharkey, J.R.** (2004) The Influence of Nutritional Health on Physical Function: A Critical Relationship for Homebound Elderly in the Community. Generations, 28 (3),34-38.

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#### C. RESEARCH SUPPORT

**Active Research Support** 

# The Program for Rural and Minority Health Disparities Research Period: 9/30/2007-5/31/2012

Agency: NIH-NCMHD; 1P20MD002295-01 (McLeroy, Program PI)

Role: Principal Investigator, 5-Year Research Project

"Behavioral and Environmental Influence on Obesity: Rural Context & Race/Ethnicity"

The major objective of this descriptive study (Rural Food Choice) is to examine the interplay of behavioral (individual and family) and environmental (home, social, and neighborhood/community) factors, food choice, and healthful eating in African American, Hispanic, and non-Hispanic White families of rural Central Texas. Increasing Food

## Security among Mexican-Origin Seniors in Texas Border Colonias

**Period: 1/1/2012-12/31/13**Agency: AARP Foundation
Role: Principal Investigator

The PROMOTORAS – Increasing Food Security among Mexican-origin Seniors in Texas Border *Colonias*: *Promotoras* as Agents of Change – Project results from prior work in South Texas *colonias* and input from *promotoras* de salud (promotoras) and other community partners about the critical need for training and education to reduce food insecurity in older adults. This project will fill this need and empower *promotoras* to reduce food insecurity among Mexican-origin adults 50 and older (older adults) through tailored education and skill-building.

#### Texas Healthy Aging Research Network (TxHAN)

Period: 9/30/2009-9/29/2014

Agency: CDC/PRC SIP Role: Principal Investigator

**Center for Community Health Development (CCHD)** 

Period: 9/30/2009-9/29/2014 Agency: CDC/PRC (McLeroy, PI)

Role: Principal Investigator for Core Research Project

Texas Nutrition and Obesity Policy Research Network (TxNOPRN) Collaborating Center

Period: 9/30/2009-9/29/2012

Agency: CDC/PRC SIP Role: Principal Investigator

## **BIOGRAPHICAL SKETCH**

Provide the following information for the Senior/key personnel and other significant contributors. Follow this format for each person. **DO NOT EXCEED FOUR PAGES.** 

NAME Nancy S. Wellman		POSITION TITLE Retired Professor and Director Emerita						
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EDUCATION/TRAINING (Begin with baccalaureate or other initial professional education, such as nursing, include postdoctoral training and residency training if applicable.)								
INSTITUTION AND LOCATION	DEGREE (if applicable)	MM/YY	FIELD OF STUDY					
University of Miami	PhD	1983	Education					
Columbia University Institute of Human Nutrition	MS	1967	Nutrition					
State University of New York Buffalo	BS	1965	Home Economics Ed					

#### **Personal Statement**

Dr. Nancy Wellman is an affiliated faculty at Tufts University's Friedman School of Nutrition Science and Policy. She retired in 2007 as the professor of dietetics and nutrition in the School of Public Health at Florida International University, the public research university in Miami. She is the former director of the National Resource Center on Nutrition, Physical Activity and Aging, which was funded primarily by the US Administration on Aging. Wellman's areas of nutrition expertise include aging, public policy, nutrition screening, communications, and marketing, as well as consumer education and food labeling.

Registered dietitian Wellman is past president of the 70,000-member American Dietetic Association (ADA), the nation's largest group of food and nutrition professionals. As one of its first national spokespersons (1982-90), she was regularly in the national press and on TV and radio. During her high profile ADA presidency, the Nutrition Screening Initiative, a national campaign against malnutrition in older adults backed by a coalition of 35 prominent aging organizations, was launched; the National Center for Nutrition and Dietetics, ADA's public information center, opened; and collaboration with professional and trade associations was strengthened. Dr. Wellman served as national chair of the Nutrition Screening Initiative for its 15-year time-span.

Wellman currently serves on the American Society for Nutrition (ASN) Public Information Committee and is an ASN national spokesperson. The ASN Committee focuses on media outreach to reduce consumer confusion about nutrition, healthy food choices and food safety. Wellman also chairs the International Food Information Council Foundation Board of Directors and serves on the McCormick Science Institute Advisory Council. She has been on food labeling committees at the National Academies of Science, Institute of Medicine, and has written for the National Academy Op-Ed Service. She completed appointments on the USDA National Agricultural Research, Extension, Education, and Economics Advisory Board, Dannon Institute Scientific Council, and US Tennis Association Sport Science Committee. She has testified before US Senate, House of Representatives and FDA Advisory committees.

Recipient of numerous awards, Wellman was recognized as the University-wide *Outstanding Faculty* in 2006 and was the American Dietetic Association *Lenna Francis Cooper Memorial Lecturer* in 2005.

OMB Number: 4040-0001 Expiration Date: 06/30/2011

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		all Senier Key Ber	anno in the etteched									
9. Total Ft	mas requested for	all Senior Key Pers	sons in the attached	me						Total Ser	nior/Key Person	
A -1-1:4:-	mal Camian Kay Ba					D 1 / A#		\ /'	A I			
Additio	nal Senior Key Pe	rsons:			Add Attachment	Delete Attac	nment	View	Attachme	nt		
R Otho	r Personnel											
	umber of						Cal.	Acad.	Sum.	* Requested	* Fringe	
	rsonnel		* F	Project Role	•			Months				* Funds Requested (\$)
	Post	Doctoral Associates										
	Grade	uate Students										
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							<u> </u>	<u> </u>				
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	Total	Number Other Perso	onnel					JL	JL	Total	Other Personn	el

RESEARCH & RELATED BUDG	<u>GET</u> - SECTION C	, D, & E, BUI	OGET PERIOD 4	
* ORGANIZATIONAL DUNS: 0636907050000				
* Budget Type: Project Subaward/Consortium				
Enter name of Organization: $\ensuremath{\mathbb{U}}_{\ensuremath{ ext{Diversity}}}$ of Alabama at	Birmin			
Delete Entry * Start Date: 09/01/2015 * End Date: 08	/31/2016 Budget Po	eriod 4		
C. Equipment Description				
List items and dollar amount for each item exceeding \$5,000	)			
Equipment item		* Funds Req	uested (\$)	
1.				
2.				
3.				
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5.				
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9.				
10.				
11. Total funds requested for all equipment listed in the att	ached file			
	Total Equipme	nt		
Additional Equipment:	Ad	d Attachment	Delete Attachment	View Attachment
D. Travel		Funds Requ	uested (\$)	
1. Domestic Travel Costs (Incl. Canada, Mexico and U.S. Pos	ssessions)			
2. Foreign Travel Costs				
	Total Travel C	ost		
E. Participant/Trainee Support Costs				
1. Tuition/Fees/Health Insurance				
2. Stipends				
3. Travel				
4. Subsistence				
5. Other				
Number of Participants/Trainees Total Participan	nt/Trainee Support Co	sts		

RESEARCH & RELATED Budget {C-E} (Funds Requested)

RESEARCH & RELATED BUDGE	- SECTION F-K, BUD	GET PERIOD 4	Next Period
* ORGANIZATIONAL DUNS: 0636907050000			
* Budget Type: Project Subaward/Consortium			
Enter name of Organization: University of Alabama at Birmin			
Delete Entry Start Date: 09/01/2015 * End Date: 08/31/20	Budget Period 4		
20.000 2.1.11)			
F. Other Direct Costs	Funds Red	quested (\$)	
1. Materials and Supplies			
2. Publication Costs			
3. Consultant Services			
4. ADP/Computer Services			
5. Subawards/Consortium/Contractual Costs			
6. Equipment or Facility Rental/User Fees			
7. Alterations and Renovations			
8. External Advisors			
9. Pilot Projects			
10.			
Total Othe	Direct Costs		
G. Direct Costs		quested (\$)	
Total Direct Co	sts (A thru F)		
	ndirect Cost		
Indirect Cost Type Rate (%)	Base (\$) * Funds Re	equested (\$)	
1. Other Sponsored Activites 8.00			
2.			
3.			
4.			
Total I	ndirect Costs		
Cognizant Federal Agency DHHS, Steven Zuraf 301-492-4855			
(Agency Name, POC Name, and POC Phone Number)			
I. Total Direct and Indirect Costs	Funds Red	quested (\$)	
Total Direct and Indirect Institutional Costs (G	+ H)		
l Ess	Eundo Bo	arrested (¢)	
J. Fee	Funas Rec	quested (\$)	
K.* Budget Justification 1263-JLL K07 Budget Justification.	Add Attachment	Delete Attachment	View Attachment

(Only attach one file.)

OMB Number: 4040-0001 Expiration Date: 06/30/2011

Previo	us Period			RESEARCH	& RELAT	ED BUDGET - SECT	ON A & B, BU	DGET I	PERIO	5		'	alion Balo. 00,00,2011
* ORG	ANIZATIONA	AL DUNS:	0636907050000										
* Budo	jet Type: 🔀	Project	Subaward	d/Consortium									
Enter	name of Org	anization:	University of	Alabama at Bir	min								
Dele	te Entry	* Start D	ate: 09/01/2016	* End Date: 08/33	L/2017 <b>B</b>	udget Period 5							
A. Senio	or/Key Perso	n						Cal	Acad.	Sum	* Requested	* Fringe	
Prefix	* First I	Name	Middle Name	* Last Name	Suffix	* Project Role	Base Salary (\$)		Months		Salary (\$)	Benefits (\$)	* Funds Requested (\$)
1. Dr.	Julie		L	Locher		PD/PI		6.00					
2.													
3.													
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5.													
6.													
7.													
8.													
9. Total I	unds reques	sted for al	I Senior Key Pers	ons in the attached	file								
											Total Ser	nior/Key Person	
Addit	ional Senior	Key Perso	ons:			Add Attachment	Delete Attac	hment	View	Attachme		ior/Key Person	
Addit	ional Senior	Key Perso	ons:			Add Attachment	Delete Attac	hment	View	Attachme		nior/Key Person	
	ional Senior ner Personne	-	ons:			Add Attachment	Delete Attac	hment	View	Attachme		iior/Key Person	
B. Oth	ner Personne Number of	-	ons:				Delete Attac	Cal.	Acad.	Sum.	* Requested	* Fringe	
B. Oth	ner Personne	-	ons:	*	Project Role		Delete Attac	Cal.		Sum.	* Requested	* Fringe	* Funds Requested (\$)
B. Oth	ner Personne Number of	el	ons:	*1	Project Role		Delete Attac	Cal.	Acad.	Sum.	* Requested	* Fringe	
B. Oth	ner Personne Number of	Post Do Graduat	octoral Associates te Students	*1	Project Role		Delete Attac	Cal.	Acad.	Sum.	* Requested	* Fringe	
B. Oth	ner Personne Number of	Post Do Graduar Undergr	octoral Associates te Students raduate Students	*1	Project Role		Delete Attac	Cal.	Acad.	Sum.	* Requested	* Fringe	
B. Oth	ner Personne Number of	Post Do Graduar Undergr	octoral Associates te Students	*1	Project Role		Delete Attac	Cal.	Acad.	Sum.	* Requested	* Fringe	
B. Oth	ner Personne Number of	Post Do Graduar Undergr	octoral Associates te Students raduate Students	*	Project Role		Delete Attac	Cal.	Acad.	Sum.	* Requested	* Fringe	
B. Oth	ner Personne Number of	Post Do Graduar Undergr	octoral Associates te Students raduate Students	*	Project Role		Delete Attac	Cal.	Acad.	Sum.	* Requested	* Fringe	
B. Oth	ner Personne Number of	Post Do Graduar Undergr	octoral Associates te Students raduate Students	*	Project Role		Delete Attac	Cal.	Acad.	Sum.	* Requested	* Fringe	
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B. Oth	ner Personne Number of	Post Do Graduar Undergr	octoral Associates te Students raduate Students	*	Project Role		Delete Attac	Cal.	Acad.	Sum.	* Requested	* Fringe	
B. Oth	ner Personne Number of	Post Do Graduat Undergi Secreta	octoral Associates te Students raduate Students rial/Clerical		Project Role		Delete Attac	Cal.	Acad.	Sum.	* Requested Salary (\$)	* Fringe Benefits (\$)	* Funds Requested (\$)
B. Oth	ner Personne Number of	Post Do Graduat Undergi Secreta	octoral Associates te Students raduate Students		Project Role		Delete Attac	Cal. Months	Acad. Months	Sum. Months	* Requested Salary (\$)	* Fringe	* Funds Requested (\$)

RESEARCH & RELATED BUDGET - SECTION (	C, D, & E, BUDGE	ET PERIOD 5	
* <b>ORGANIZATIONAL DUNS:</b> 0636907050000			
* Budget Type: Project Subaward/Consortium			
Enter name of Organization: University of Alabama at Birmin			
Delete Entry * Start Date: 09/01/2016 * End Date: 08/31/2017 Budget F	eriod 5		
C. Equipment Description			
List items and dollar amount for each item exceeding \$5,000			
Equipment item	* Funds Reques	ted (\$)	
1.			
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11. Total funds requested for all equipment listed in the attached file			
Total Equipme	ent		
Additional Equipment:	ld Attachment	Delete Attachment	View Attachment
D. Travel	Funds Request	ed (\$)	
1. Domestic Travel Costs (Incl. Canada, Mexico and U.S. Possessions)			
2. Foreign Travel Costs			
Total Travel 0	Cost		
E. Participant/Trainee Support Costs			
1. Tuition/Fees/Health Insurance			
2. Stipends			
3. Travel			
4. Subsistence			
Other  Number of Participant/Trainees	nete		

RESEARCH & RELATED Budget {C-E} (Funds Requested)

## **RESEARCH & RELATED BUDGET - SECTION F-K, BUDGET PERIOD 5** \* ORGANIZATIONAL DUNS: 0636907050000 \* Budget Type: Project Subaward/Consortium Enter name of Organization: University of Alabama at Birmin Start Date: 09/01/2016 \* End Date: 08/31/2017 **Budget Period 5** Delete Entry F. Other Direct Costs Funds Requested (\$) 1. Materials and Supplies 2. Publication Costs 3. Consultant Services 4. ADP/Computer Services 5. Subawards/Consortium/Contractual Costs Equipment or Facility Rental/User Fees 6. 7. Alterations and Renovations 8. External Advisors 9. Pilot Projects 10. **Total Other Direct Costs G. Direct Costs** Funds Requested (\$) Total Direct Costs (A thru F) **H. Indirect Costs Indirect Cost Indirect Cost Indirect Cost Type** Rate (%) Base (\$) \* Funds Requested (\$) Other Sponsored Activities 8.00 2. 3. **Total Indirect Costs** Cognizant Federal Agency DHHS, Steven Zuraf 301-492-4855 (Agency Name, POC Name, and POC Phone Number) I. Total Direct and Indirect Costs **Funds Requested (\$)** Total Direct and Indirect Institutional Costs (G + H) J. Fee Funds Requested (\$)

RESEARCH & RELATED Budget (F-K) (Funds Requested) Detailed Budget - Year 5

K. \* Budget Justification 1263-JLL K07 Budget Justification.pdf

(Only attach one file.)

**Delete Attachment** 

View Attachment

Add Attachment

## **Budget Justification**

## Personnel

Julie L. Locher, PhD MSPH will serve as Project Director/Principal Investigator of the Academic Career Leadership Award. She will devote 6.0 (CY) person months to the program activities and assume full responsibility for scientific and administrative direction of the grant. Dr. Locher is a Medical Sociologist and Health Services Research and an Associate Professor of Medicine in the Division of Gerontology, Geriatrics, and Palliative Care at UAB. She is also Director of the Public Policy and Aging Program, jointly sponsored by the UAB Center for Aging and the Lister Hill Center for Health Policy and Associate Director of Enrichment for the UAB Nutrition and Obesity Research Center. She has over fifteen years of experience in the roles of Principal Investigator and Project Manager on numerous research projects (including R01 level funding) supported by the National Institute on Aging and numerous other funding agencies. Her work has focused almost exclusively on translational nutrition and aging research. She serves as Senior Mentor on numerous training grants supported by NIH, AHRQ, and other institutes. Dr. Locher will direct the activities of the proposed program and coordinate its' activities, including providing leadership in identifying faculty and resources to support the program. She will work closely with the Internal and External Advisory Committees to set priorities for the program and for the research area and evaluate the program's progress. She will provide high quality educational experiences to trainees, including development of relevant curriculum and appropriate mentored experiences. She will be responsible for ensuring Responsible Conduct of Research in association with the grant and will ensure that papers are prepared for presentation and publication, and progress reports are prepared for the funding agency.

Internal Advisory Committee: The Internal Advisory Committee will be comprised of leading scientists in their respective areas of expertise who occupy leadership positions within UAB. All of these Directors of Centers, Divisions, and Research Units have already provided considerable informal and formal administrative and scientific support and input regarding preparation of this application. Once the application is funded, this group will be formally responsible for providing a broad base of administrative and scientific advice regarding the Program's direction, priorities, and progress. Members will also help select awardees of pilot and travel grants. The Internal Advisory Committee will meet three times a year and as needed. No salary support is requested for members of the Committee. The Committee includes:

<u>Richard M. Allman, MD</u> is the Parrish Endowed Professor and Director of the UAB Division of Gerontology, Geriatrics, and Palliative Care. He is also Director of the UAB Center for Aging; the Birmingham/Atlanta VA Geriatric Research, Education, and Clinical Center; and the Deep South Resource Center for Minority Aging Research (NIA) and the Co-Director of the Southeast Center of Excellence in Geriatric Medicine (John A. Hartford Foundation). He is one of the leading aging researchers in the US. His NIA-supported UAB Study of Aging is in its third cycle of funding and a major focus is on nutrition.

<u>David B. Allison, PhD</u> is the Associate Dean for Science and Distinguished Professor at the UAB School of Public Health. He is the Director of the newly created UAB Office of Energetics and the UAB Nutrition and Obesity Research Center. Dr. Allison has an international reputation as one of the leading obesity scholars. His work is supported by numerous NIH institutes, including NIA where is studies matters related to nutrition and longevity.

Kenneth G. Saag, MD is a Professor in the UAB Department of Medicine. He is Director of the Center for Outcomes and Effectiveness Research and Education and the Deep South Musculoskeletal Center for Education and Research on Therapeutics. Dr. Saag is one of the world's leading health services researchers in the area of musculoskeletal diseases. Dr. Saag has three training grants that support graduate students, post-doctoral fellows, and junior faculty.

<u>Michael A. Morrisey, PhD</u> is a Professor in the UAB Department of Health Care Organization and Policy and the Director of the UAB Lister Hill Center for Health Policy. Dr. Morrisey is a world-renowned health economist. He has had numerous grants and publications in the area over several decades.

<u>Barbara A. Gower, PhD</u> is a Professor in the UAB Department of Nutrition Sciences. She also serves as Director of the Metabolism Core for both the UAB Nutrition and Obesity Research Center and the Center for Clinical and Translational Sciences. She and Dr. Locher serve on multiple grants together, including on one as Co-Pls. Additionally, they have co-mentored multiple students together.

## Key Staff

<u>Janet McCoy, MPA</u> will serve as Program Administrator for the program. She will devote 2.4 person months that will be contributed by UAB as Institutional Support. Ms. McCoy is a Program Administrator within the Division of Gerontology, Geriatrics, and Palliative Care. She has a Master's Degree in Program Administration. She will assist Dr. Locher with organizing activities of the program and providing advice to mentees of the program regarding application procedures for pilot and travel funds. She will coordinate meeting and travel arrangements of the External Advisory Committee and Visiting Scholars. Additionally, she will create and maintain a database that tracks program benchmarks. She will coordinate with the Education Program Director, as needed, for curriculum activities. Last, she will assist Dr. Locher with preparation of progress reports for the NIA.

Ms. Channing Ford, MPA MA will serve as Director of Curriculum Development. Ms. Ford's effort will be on an as-needed basis and will be contributed by UAB as Institutional Support. Ms. Ford serves as Education Program Director for the Division of Gerontology, Geriatrics and Palliative Care. She will assist Dr. Locher in integrating the proposed curriculum for the Translational Nutrition and Aging Research Program into a cohesive educational strategy within existing programs and to promote the K07 educational programs more effectively to UAB and community partners. She will additionally assist with evaluating outcomes for the proposed curriculum.

#### **Consultant Costs**

External Advisory Committee: Members of the External Advisory Committee will provide overall guidance to Dr. Locher and the Internal Advisory Committee on program direction and progress, serve as rotating Visiting Scholars, and meet with interested faculty and trainees during their UAB on-campus visits. One meeting will be held per year, preferably with members face-to-face but teleconference will be acceptable. Members of the Committee include:

Connie W. Bales, PhD RD is a Professor in the Division of Geriatric Medicine, Department of Medicine at Duke University, and Associate Director for Education/Evaluation of the Geriatrics Research, Education and Clinical Center at the Durham VA Medical Center. Her research endeavors over the past two decades have focused on a variety of topics in the field of geriatric nutrition and she has published broadly on nutrition and aging-related topics, including nutritional frailty. Dr. Bales edits the Handbook of Clinical Nutrition in Aging, is a past-president of the American College of Nutrition and chair of the Experimental Biology Board. She Co-Chairs the Nutrition Interest Group of the Gerontological Society of America with Dr. Locher.

Heather Keller, PhD RD is a nutritional epidemiologist and dietitian. Her research expertise includes nutrition risk screening, assessment and nutrition intervention for seniors in general and seniors with dementia in particular. Her research spans community and institutional sectors. She is a Professor in the Department of Kinesiology, University of Waterloo and a Schlegel Research Chair in Nutrition & Aging. Dr. Keller has published extensively in the area of nutrition and older adults. Her current research is focused on eating in dementia, social aspects of eating, weight loss, nutrition risk programs and interventions. She is co-chair of the Canadian Malnutrition Task Force. In 2007 she received the Betty Havens Knowledge Translation Award from the Institute of Aging, CIHR. Dr. Keller engages in extensive community engaged scholarship and knowledge translation and exchange.

Gordon Jensen, MD is Professor and Head of the Department of Nutritional Sciences at Penn State, the vice president elect of the American Society for Nutrition (ASN). Jensen's research interests have focused largely on nutrition concerns in older populations. He and his colleagues develop and test nutrition screening and assessment tools that focus on specific functional and health care resource outcomes for older people. In particular, they study the impact of obesity on these outcomes. Jensen also has promoted understanding of the central roles of inflammatory responses in malnutrition and obesity. Jensen has served on advisory panels, study sections, or work groups for the National Institutes of Health, the American Dietetic Association, and the Food and Nutrition Board, and he currently is serving his second term as a member of the Food and Nutrition Board. Jensen has served on several editorial boards of leading nutrition journals and as an ad hoc reviewer for many other journals. He has authored more than 100 journal articles, reviews, and book chapters, and he has given presentations at numerous national and international meetings.

<u>Joseph R. Sharkey, PhD RD</u> is a Professor of Social and Behavioral Health in the School of Rural Health at Texas A & M University. He also serves as Director of: the Program for Research in Nutrition and Health Disparities, the Texas Healthy Aging Research Network (supported by CDC), and the Texas Nutrition and Obesity Policy Research and Evaluation Network. His work focusing on nutritional and functional assessment, nutrition policy and aging, and the influence of environmental factors and lifestyle on nutrition and health have been consistently supported by NIA and other agencies.

Nancy S. Wellman, PhD RD is an affiliated faculty member at Tufts University's Friedman School of Nutrition Science and Policy. She recently retired as Professor of Dietetics and Nutrition in the School of Public Health at Florida International University, the public research university in Miami. She is the former director of the National Resource Center on Nutrition, Physical Activity and Aging. Dr. Wellman is a past President of the American Dietetic Association and has been a member of committees for the National Academy of Sciences and the Institute of Medicine. She currently serves as Chair of the Board of Directors for the International Food Information Council Foundation, is a member of the American Society for Nutrition (ASN) Public Information Committee, and is an ASN national spokesperson.

\$ is requested for consultant costs per year (for three consultants per year) to cover expenses of the External Advisory Committee including travel to Birmingham and a small honorarium. Having worked extensively with members of this committee over the years, it is anticipated that it is unlikely that time will be convenient for all members to be present face-to-face each year. That is why we budget monies for only three trips. The others will participate in meetings via teleconference.

## **Travel**

We request funds for travel for two trainees or faculty members (new to the area of translational nutrition and aging research) for each year to attend a professional meeting to present study findings. A total of \$ per year (\$ each for two scholars) is requested to cover costs of meeting registration, travel, and lodging.

## **Other Expenses**

We request \$ per year to support pilot projects of pre-doctoral trainees, post-doctoral fellows, and junior and transitional faculty. Pilot project monies will adhere to NIH policies.

## **RESEARCH & RELATED BUDGET - Cumulative Budget**

		lotais	(\$)
Se	ction A, Senior/Key Person		
Se	ction B, Other Personnel		
To	tal Number Other Personnel		
То	tal Salary, Wages and Fringe Benefits (A+B)		
Se	ction C, Equipment		
Se	ction D, Travel		
1.	Domestic		
2.	Foreign		
Se	ction E, Participant/Trainee Support Costs		
1.	Tuition/Fees/Health Insurance		
2.	Stipends		
3.	Travel		
4.	Subsistence		
5.	Other		
6.	Number of Participants/Trainees		
Se	ction F, Other Direct Costs		
1.	Materials and Supplies		
2.	Publication Costs		
3.	Consultant Services		
4.	ADP/Computer Services		
5.	Subawards/Consortium/Contractual Costs		
6.	Equipment or Facility Rental/User Fees		
7.	Alterations and Renovations		
8.	Other 1		
9.	Other 2		
10.	Other 3		
Se	ction G, Direct Costs (A thru F)		
Se	ction H, Indirect Costs		
Se	ction I, Total Direct and Indirect Costs (G + H)		
Se	ction J, Fee		

Cumulative Budget

Page 133

## **PHS 398 Cover Page Supplement**

OMB Number: 0925-0001

1. Project Di	rector / Principal Inv	estigator (PD/PI)		
Prefix:	Dr.	* First Name:	Juli	е
Middle Name:	L			
* Last Name:	Locher			
Suffix:				
2. Human Su	ıbjects			
Clinical Trial?		⊠ No		
* Agency-Defin	ed Phase III Clinical Trial?	No Yes		
	Organization Contactontacted on matters involvi	ng this application		
Prefix:	Mr.	* First Name:	Morg	gan
Middle Name:				
* Last Name:	Amos			
Suffix:				
* Phono Number	: 205-996-5660			Fax Number: (205) 975-5977
	namos@uab.edu			Tax Number: (203) 973-3977
Linaii. Illorga	namos@uap.edu			
* Title: Sponso:	red Programs Officer			
* Street1:	1530 3rd Avenue Sou	th		
Street2:				
* City:	Birmingham			
County/Parish:				
* State:		AL: Alabama		
Province:				
* Country: USA	: UNITED STATES			* Zip / Postal Code: 352940111

Clinical Trial & HESC

## **PHS 398 Cover Page Supplement**

* Does the proposed project involve human embryonic stem cells? No Yes								
specific cell line(s) f	ect involves human embryonic stem cells, om the following list: http://stemcells.nih.g be referenced at this time, please check	ov/research/registry/. Or, i	f a specific					
Cell Line(s):	Specific stem cell line cannot be refe	erenced at this time. One	from the registry will be used.					

Clinical Trial & HESC Page 135

## **PHS 398 Checklist**

OMB Number: 0925-0001

1. Application Type: From SF 424 (R&R) Cover Page. The responses provided on the R&R cover page are repeated here for your reference, as you answer the questions that are specific to the PHS398.
* Type of Application:
New Resubmission Renewal Continuation Revision
Federal Identifier: 11060683
2. Change of Investigator / Change of Institution Questions
Change of principal investigator / program director
Name of former principal investigator / program director:
Prefix:  * First Name:  Middle Name:  * Last Name:
Suffix:
Change of Grantee Institution
* Name of former institution:
3. Inventions and Patents (For renewal applications only)
* Inventions and Patents: Yes No No
If the answer is "Yes" then please answer the following:
* Previously Reported: Yes No No

Checklist Page 136

4. * Program Income					
Is program income anticipated during the pe	eriods for which the grant support is requested?				
Yes No					
If you checked "yes" above (indicating that source(s). Otherwise, leave this section bla	program income is anticipated), then use the format below to reflect the amount and ank.				
*Budget Period *Anticipated Amount (\$)	*Source(s)				
5. * Disclosure Permission Statement  If this application does not result in an award, is the Government permitted to disclose the title of your proposed project, and the name, address, telephone number and e-mail address of the official signing for the applicant organization, to organizations that may be interested in contacting you for further information (e.g., possible collaborations, investment)?  Yes No					

Checklist Page 137

## PHS 398 Career Development Award Supplemental Form

OMB Number: 0925-0001 1. Application Type: From SF424 (R&R) Cover Page. The response provided on that page, regarding the type of application being submitted, is repeated here for your reference, as you attach the sections that are appropriate for this Career Development Award. New Resubmission Renewal Continuation Revision 2. Career Development Award Attachments: Please attach applicable sections, below. Introduction (if applicable) Delete Attachment View Attachment Add Attachment 1. Introduction to Application (for RESUBMISSION applications only) **Candidate Information** Add Attachment Delete Attachment View Attachment 2. Candidate's Background 1252-Candidate's Background.pdf 3. Career Goals and Objectives Add Attachment Delete Attachment View Attachment 1253-Career Goals and Objectives 4. Career Development/Training 1254-Career Development and Train Add Attachment Delete Attachment View Attachment Activities During Award Period 5. Training in the Responsible Conduct View Attachment Add Attachment Delete Attachment 1255-JLL K07 Training in the Resp of Research 6. Mentoring Plan Delete Attachment View Attachment Add Attachment (when applicable) Statements of Support 7. Statements by Mentor, Co-Mentors, Add Attachment Delete Attachment View Attachment 1256-JLL K07 Letter of Support.pd Consultants, Contributors (as appropriate) **Environment and Institutional Commitment to Candidate** 8. Description of Institutional Environment  $|_{1257-{\tt Descript}}$  ion of Institutional Add Attachment Delete Attachment View Attachment Insitutional Commitment to Candidate's Add Attachment Delete Attachment View Attachment 1258-Institutional Commitment.pdf Research Career Development Research Plan Delete Attachment View Attachment 10. Specific Aims 1259-Specific Aims.pdf Add Attachment Add Attachment Delete Attachment View Attachment 11. \* Research Strategy 1260-Research Strategy.pdf 12. Inclusion Enrollment Report Add Attachment Delete Attachment View Attachment (for RENEWAL applications only) 13. Progress Report Publication List Add Attachment **Delete Attachment** View Attachment (for RENEWAL applications only) **Human Subject Sections** Add Attachment Delete Attachment View Attachment 14. Protection of Human Subjects Add Attachment Delete Attachment View Attachment 15. Inclusion of Women and Minorities 16. Targeted/Planned Enrollment Add Attachment Delete Attachment View Attachment 17. Inclusion of Children Add Attachment **Delete Attachment** View Attachment

## PHS 398 Career Development Award Supplemental Form

2. Career Development Award Attachments (continued):						
Other Research Plan Sections						
18. Vertebrate Animals		Add Attachment	Delete Attachment	View Attachment		
19. Select Agent Research		Add Attachment	Delete Attachment	View Attachment		
20. Consortium/Contractual Arrangements		Add Attachment	Delete Attachment	View Attachment		
21. Resource Sharing Plan(s)	1261-21. Resource Sharing Plan.pd	Add Attachment	Delete Attachment	View Attachment		
Appendix (if applicable)  22. Appendix  Add Attachments	Delete Attachments View Attachments					
3. * Citizenship:						
U.S. Citizen or noncitizen national			Permanent Resident of U.S. Pending			
Permanent Resident of U.S. (If a permanent resident of the U.S., a notarized statement must be provided by the time of award)			Non-U.S. Citizen with temporary U.S. visa			

PHS 398 Career Development Award Supplemental Form

## 2. Candidate's Background

The candidate, Julie L. Locher, is a Medical Sociologist and Health Services Researcher whose work as an independent investigator has been devoted to the study of: 1) eating behaviors and nutrition issues of older adults in community and hospital settings and 2) the various dimensions through which nutrition affects patient-centered outcomes in older adults. Most of her work focuses on social and environmental factors, including community and health care practices and policies that affect eating behaviors and nutrition-related health outcomes in this population. She is uniquely trained in mixed quantitative and qualitative applied research methods. All of her research involves multi-disciplinary collaborations. Dr. Locher possesses the professional qualifications and personal qualities necessary for developing a substantive and sustainable <a href="Program in Translational Nutrition and Aging Research">Program in Translational Nutrition and Aging Research</a> that is both timely and cutting-edge. The emphasis of the Program is on research that helps older adults maintain their health and independence in the community.

- 2.1. Evidence of Candidate's Capacity to Provide Leadership as a Researcher and Teacher. Dr. Locher accepted a position at the University of Alabama at Birmingham (UAB) in the Division of Gerontology, Geriatrics, and Palliative Care within the Department of Medicine in 1992 as a Research Associate working on National Institutes of Health (NIH)-funded projects with prominent aging researchers; earned her PhD in Medical Sociology from UAB in 1999; was promoted to Research Assistant Professor in 2000; earned an MSPH in Health Policy and Outcomes from UAB in 2005; and was promoted to a tenure-earning Assistant Professor position in 2005. In 2007, she was appointed Director of the Public Policy and Aging Program (dually supported by the UAB Center for Aging and the Lister Hill Center for Health Policy) and accepted a joint appointment with formal responsibilities in the Department of Health Care Organization and Policy in the School of Public Health. In 2008, she was promoted to Associate Professor and was awarded tenure in 2009. In 2011, she was appointed Associate Director for Enrichment of the UAB Nutrition and Obesity Research Center (NORC) (funded by the National Institute of Diabetes and Digestive and Kidney Diseases [NIDDK]).
- 2.1.1. Leadership as a researcher. Dr. Locher's work in the area of nutrition and aging has been consistently supported by the National Institute on Aging (NIA) with four distinct grants awarded to her as Principal Investigator since September of 2001. Additionally, she has received extramural support from other agencies where she served as Principal Investigator (PI) (American Cancer Society and the Lucille Beeson Trust Fund) and as Co-PI or Co-Investigator from multiple agencies to support research focused on nutrition and aging. She has published or has in press more than 60 peer-reviewed data-based manuscripts on nutrition and aging and related topics. Dr. Locher was fortunate to be the recipient of a Mentored Research Scientist Development Award (MRSDA/K01) from the NIA that kick-started her career in the area of nutrition and aging. Receipt of the MRSDA enabled her to conduct a longitudinal observational study of nutritional behaviors and outcomes of older adults who had recently experienced an acute medical event or an exacerbation of a chronic condition that necessitated the use of home health services. Concomitant with that award, she received a smaller NIA R03 grant to study nutritional concerns of older adults diagnosed with cancer along with their caregivers and doctors using in-depth qualitative interviews. Based upon findings from the MRSDA, she was able to secure additional R21 funding from NIA to conduct a randomized controlled trial (RCT) evaluating a Behavioral Nutrition Intervention in Community Elders (B-NICE) targeted at addressing heightened nutritional risk that occurs during a home health encounter (especially following a hospitalization) that may contribute to a downward spiral leading to frailty and poor health outcomes, including increased health services utilization and mortality. She was awarded a five-year R01 in 2009 to conduct another RCT examining the effects of a lifestyle intervention on multiple outcomes (disease risk, function, health service utilization, and quality of life) in obese community-dwelling older adults with co-morbid conditions. Work on the latter two studies is ongoing.
- Dr. Locher has been a good steward of NIA's investment in her career development, including paying it forward through mentorship of young investigators in their career development. For example, data collected from her MRSDA alone: 1) has been used in six manuscripts published in leading gerontology and geriatrics journals and 2) has been the source of data for two dissertations and one master's thesis. Three additional papers are currently under review with the lead authors all being mentees. Dr. Locher is currently the primary mentor or co-primary mentor for numerous junior faculty, post-doctoral fellows, and pre-doctoral fellows (See Appendix I for a complete listing of mentees and Section 6. Mentoring Plan for details.).
- **2.1.2.** Leadership as a teacher. Dr. Locher's leadership activities as a teacher extend to: 1) formal classroom instruction; 2) mentorship of junior faculty, post-doctoral fellows, and pre-doctoral fellows; and 3) translational training and education.

- **2.1.2.1. Formal classroom instruction/Curriculum Development.** Dr. Locher has designed, organized, and taught courses in Aging Policy (graduate level); Statistics; Medical Sociology; Introduction to Aging, Health & Society; Social and Cultural Aspects of Food and Eating; and Introduction to Sociology. She has consistently received superior evaluations from students. In fact, since 2005 when she began teaching the Aging Policy course, 90% of her students (including MD and PhD fellows and graduate students from medicine, nursing, health administration, sociology, psychology, and public health) "strongly agree" that Dr. Locher is "Overall an Excellent Teacher." As further evidence of her leadership as a teacher, the Chair of the Department of Health Care Organization and Policy asked Dr. Locher to teach a newly-structured course on Patient-Centered Outcomes. She accepted the invitation and is teaching the first class in Spring, 2012. She is a frequent guest lecture in numerous venues throughout the School of Medicine and other Schools.
- 2.1.2.2. Mentoring. Dr. Locher currently mentors (and previously has mentored) pre-doctoral students, post-doctoral fellows, and junior faculty. She has served or currently serves on fifteen thesis and dissertation committees in the Departments of Sociology, Biostatistics, Health Behavior, Health Care Organization and Policy, and Nutrition Sciences. She is a Senior Mentor on seven T- or K-series training grants currently supported by numerous NIH Institutes (See Section 6. Mentoring Plan.). She is a faculty mentor for the School of Medicine's innovative Medical Student Scholarly Activity Project that requires third year medical students to participate in a structured research experience. Her mentees have successfully completed doctoral dissertations, published work in top journals, received awards for outstanding research, and secured meaningful positions (See Appendix I.). This past year alone, five of Dr. Locher's pre-doctoral mentees had first-author papers published or accepted for publication on topics related to nutrition and aging. In 2011, Dr. Locher was awarded the UAB Graduate Dean's Award for Excellence in Mentorship (See Appendix II for Letters of Nomination for the Award.).
- 2.1.2.3. Translational training and education. Dr. Locher has developed curricula focused specifically on nutrition and aging targeted at various community constituencies and the professional workforce. She has worked steadfastly to build community partnerships that direct attention toward key aging policy concerns. Under Dr. Locher's leadership, UAB has sponsored an Aging Policy Conference in collaboration with AARP Alabama that brings together leading national experts with local policy makers, politicians, and key stakeholders in the community. In 2010, Dr. Locher was awarded the Champion for Change award by AARP in Alabama. In 2011, she was invited to collaborate on a Public Health Training Center grant supported by the US Health Resources and Service Administration (HRSA) to help strengthen the technical, scientific, managerial, and leadership competence of the public health workforce, specifically those working in the medically underserved areas of AL and MS, for improved health outcomes related to nutrition services and obesity prevention. Dr. Locher currently serves at the state-level on a committee to develop a new "State Plan on Aging" for Alabama, and in 2010-11 worked with the Florida Department of Elder Affairs to revise their programs related to Geriatric Nutrition and Community Service Provisions. In 2011, Dr. Locher was awarded the UAB Center for Aging Faculty Service Award in recognition of her collaborative research efforts with community partners, including: 1) Area Agencies on Aging supported by the Older Americans Act, 2) Medicare and Medicaid Providers, 3) not-for-profit agencies, and 4) neighborhood and religious organizations that support nutrition initiatives for older adults. Most recently, Dr. Locher was asked by Nestlé Nutrition Institute to serve on an International Panel of Experts on the topic, 'Quality of care improvement: Designing a comprehensive patient management protocol for early screening and intervention among at-risk and elderly patients'. This expert panel will convene later in 2012.
- **2.2.** Acknowledged Scientific Expertise and Leadership Skills of the Candidate. Dr. Locher's reputation as a nutrition and aging expert is well-established at the national and international level by formal professional organizations and colleagues.
- **2.2.1.** Expertise, leadership, and service on national committees. In 2010, Dr. Locher was invited to participate, as part of a select group of investigators, in a Researcher Roundtable convened by the AARP Foundation (Washington, DC) to identify research priorities related to food security and hunger issues of older adults residing in the community. Also, in 2010, Dr. Locher was invited to serve as a member of the Centers for Disease Control Healthy Aging Research Network's Nutrition Workgroup. In 2011, she was invited to serve as a member of the Institute of Medicine's Planning Committee for A Workshop on Nutrition and Healthy Aging in the Community (The workshop was held in October, 2011.). Dr. Locher serves on the editorial board of the Journal of Nutrition in Gerontology and Geriatrics. Since 2004, she has served with Dr. Connie Bales as Co-Convener of the Nutrition Interest Group of the Gerontological Society of America. In 2011, she was invited by:

  1) Dr. Bales to serve as Co-Editor of the 3<sup>rd</sup> edition of her book entitled Handbook of Clinical Nutrition and

Aging<sup>2</sup> and 2) Dr. Joseph Sharkey (Chair, CDC Nutrition Workgroup) to serve as Guest Editor of a special issue on the topic of Nutrition and Aging: Nutritional Health Inequities for the *Journal of Aging Research*.

**2.2.2. Research collaboration.** Dr. Locher has been recognized by her colleagues as a leader in the area of nutrition and aging. Most notably, she has been invited to serve as an expert collaborator on several grants submitted to the NIH from outside of UAB: 1) DiMaria-Ghalili RA/Drexel University/Nutrition Risk and Aging in Place/R15 submitted to NINR; 2) Amella E/Medical University of South Carolina/Mealtime Training in Respite & Adult Daycare Centers for Caregivers of Participants with Dementia/R01 submitted to NIA; and 3) Zizza C/Auburn University/Lifetime Changes in Body Composition and Medicare Expenditures/R03 submitted to NIA. Dr. Locher is also a collaborator on numerous past, current, and pending applications related to nutrition and aging submitted by colleagues within UAB.

# 2.3. Evidence of the Candidate's Commitment to an Academic Research Career in a Field of Interest to the National Institutes of Health and the National Institute of Aging. The achievement and maintenance of

good nutritional Table 1. National Institute of Aging Research Funding Opportunities Explicitly Focused on Nutrition and Aging health are essential Nutrition and Diet in the Causation, Prevention, and Management of Heart Failure (R21) physical and PA-11-165 Nutrition and Diet in the Causation, Prevention, and Management of Heart Failure (R01) PA-11-123 Translational Research to Help Older Adults Maintain their Health and Independence in the Community (R01) cognitive function, Translational Research to Help Older Adults Maintain their Health and Independence in the Community (R21) PA-11-124 the prevention or PA-10-152 Diet Composition and Energy Balance (R01) delay of chronic PAR-09-225 Improving Diet and Physical Activity Assessment (R21) disease and PAR-09-224 Improving Diet and Physical Activity Assessment (R01) disease-related PA-09-190 Bioenergetics, Fatigability, and Activity Limitations in Aging (R01) complications, and PA-09-192 Bioenergetics, Fatigability, and Activity Limitations in Aging (R03) overall quality of PA-09-191 Bioenergetics, Fatigability, and Activity Limitations in Aging (R21) life for all persons PA-08-077 Research on the Economics of Diet, Activity and Energy Balance (R21)

across the life-course. Nutrition is a top priority across all institutes at NIH, including NIA—and, within all NIA Divisions (Aging Biology, Behavioral and Social Research, Geriatrics and Clinical Gerontology, and Neurosciences). As of 12.12.11, the NIA was supporting 129 R-series initiatives. While arguably it is plausible that nearly all Program Announcements (PAs) sponsored by NIA are germane to some dimension of nutrition and aging research, it is clear that close to one in ten NIA-sponsored PAs solicits research targeted explicitly at elucidating some aspect of nutrition and aging-including, specifically within the community setting. As evidence of its' interest in the topic, the NIH (the Division of Nutrition Research Coordination, the Office of Dietary Supplements, and the NIA) was a sponsor of the IOM's 2011 Workshop on Nutrition and Healthy Aging in the Community (of which Dr. Locher served as an expert on the planning committee) (http://www.iom.edu/Activities/Nutrition/NutritionAgingCommunity.aspx). Dr. Judy Hannah (NIA Project Officer) described nutrition and aging as a priority of NIA and called particular attention to PAs-11-123/124 (See Table 1.)—new funding opportunities sponsored jointly by NIA and the Administration on Aging (AoA) designed to support "translational research that moves evidence-based research findings towards the development of new interventions, programs, policies, practices, and tools that can be used by community-based organizations to help elderly individuals remain healthy and independent, and living in their own homes and communities." Nutrition is a major focus of the initiative and is precisely what the candidate has committed her career to studying AND the focus of the proposed Career Leadership Award.

2.4. Evidence that the Candidate Has the Commitment to Develop and Implement Course(s) or Curricula that Are Based on Sound Research Concepts and Educational Principles and that Meet the Scientific and Educational Requirements of the Corresponding Scientific Field(s) and UAB. The proposed program curricula (described in greater detail in Sections 4.5 and 11.3) will comprise several components, including: 1) integration of program aims into existing US DHHS-supported training programs, 2) completion of a UAB Nutrition and Aging T32 Institutional Training Grant application to be submitted to NIA, 3) didactic coursework integration into existing curricula, 4) establishment of an annual UAB-wide research retreat for mentors and trainees, 5) sponsorship of a research seminar in nutrition and aging in the community that will be integrated into existing seminar series, and 6) establishment of a vising scholars program.

Because of her adherence to the highest standards of research and educational integrity, Dr. Locher has been invited by UAB faculty to serve as a Primary Mentor on more than seven training grants funded by the Department of Health and Human Services that support pre- and post-doctoral fellows and junior faculty (See Section 6. Mentoring Plan.). In 2011, she was asked by Dr. David Allison (one of the preeminent scholars in nutrition and obesity research) to serve as Associate Director for Enrichment for the UAB NORC and as Co-Chair of the Research Training Work Group for the Alabama Obesity Initiative (described in Facilities and

Other Resources). Both of these roles involve a commitment by the Candidate to focus on: 1) the expansion of formal Pre- and Post-doctoral Training Programs and 2) the development of partnerships with other institutions, designed to foster nutrition and obesity research and to implement research findings beyond UAB. An increased focus of the NORC is explicitly on nutrition and obesity research as it relates to aging.

As noted above in Section 2.1.2.1, Dr. Locher is course-master for two classes taught in the School of Public Health: Aging Policy (since 2005) and Patient-Centered Health Outcomes (beginning in 2012) (described in detail in Section 4.4 below). Dr. Locher's courses meet and exceed the standards and critical core competencies outlined by the Council on Education for Public Health that ensure the accreditation of UAB's School of Public Health. Dr. Locher also directs the UAB/AARP Aging Policy Conference that brings together leading national experts with local policy makers, politicians, and key stakeholders in the community. This conference is in its 5<sup>th</sup> year and going strong.

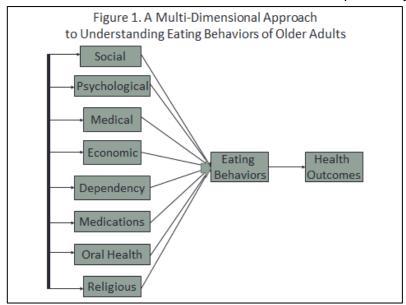
2.5. Planned Collaborations with Other Individuals to Develop Course(s) and Curricula. Dr. Locher will collaborate closely with Directors and Collaborators of Education Programs for development of intramural courses and curricula development; with members of her Internal Advisory Committee and UAB Center Directors for sponsorship of seminars, special conferences, and workshops; and with members of her External Advisory Committee for development of extramural training activities, including proposal for planning grant curriculum. These collaborations are described throughout the application and especially in Section 4.5 Curriculum Development Plan and Section 7. Statements of Support.

# 3. Career Goals and Objectives

The candidate's career in the area of nutrition and aging has followed a clear and focused trajectory and the proposed Leadership Award represents a logical next step in her career development towards leadership.

3.1. Past Scientific History and How the Award Fits into Past and Future Research Career Development. Dr. Locher's earliest work began with observational and epidemiological studies that attempted to comprehensively understand the many and varied factors within different domains that could potentially

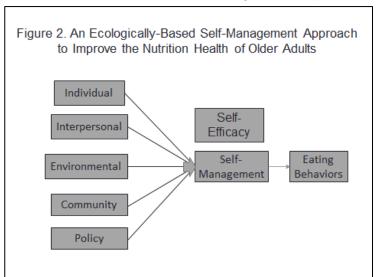
simultaneously affect eating behaviors and nutrition-related health outcomes (See Figure 1.). Notable among the findings generated from her NIA-supported research are that many older adults experience undetected nutritional risk—based upon the Mini-Nutritional Assessment, 12.0% of older adults included in her study sample malnourished and 51.0% were at risk for malnourishment.<sup>3</sup> Furthermore, 70% of them were not consuming enough calories to maintain their current body weight, and 8% of them were already underweight.<sup>4</sup> She and her colleagues tailored nutritional intake measures specific to a frail population and evaluated their psychometric properties.<sup>5</sup> They also explored ethical considerations involved with conducting nutritional research in the home of



potentially vulnerable older adults, namely that involving therapeutic misconception and role conflict. They identified numerous motivations and barriers that influenced older adults' eating behaviors; and they identified factors associated with being at-risk for experiencing under-nutrition. Their work revealed that one of the strongest predictors contributing to under-nutrition in this vulnerable population was a recent hospitalization (even after controlling for comorbidity and functional status). Not surprisingly, after a one-year follow-up, they found that older adults who experienced nutritional risk at baseline demonstrated much higher rates of both health service utilization and mortality. They also found that overweight or obese older adults who experienced nutritional risk, were more likely to enter a nursing home. Recent work is examining nutritional processes and transitions of care and the ways in which multiple systems may exacerbate nutritional problems. Processes

Insights gained from that work led to the development of RCTs of interventions designed to improve the

nutritional intake and status of older adults. The interventions are based on the application of principles derived from an ecological model combined with the use of self-management patientcentered strategies to deliver the multi-level tailored intervention (See Figure 2). One intervention is designed to address increased nutritional risk that occurs during a home health encounter (especially following a hospitalization) that may contribute to the downward spiral leading to frailty, poor health outcomes and increased health services utilization and mortality. 12 The intervention is based upon the social ecological model and encompasses multiple levels where opportunities may exist to intervene. Another RCT, with Dr. Jamy Ard, MD as Co-PI involves a lifestyle intervention aimed at improving dietary and physical activity behaviors in obese



older adults in the community. This study is now recruiting for its' third cohort of participants.

Dr. Locher is a key investigator on Dr. Allman's UAB Study of Aging (a prospective, observational study of a population-based sample of 1000 community-dwelling Medicare beneficiaries now beginning its 3<sup>rd</sup> cycle of NIA R01 funding). The hypothesis underlying this major research initiative is that potentially modifiable factors

predict mobility (life-space) trajectories associated with aging and may do so differently for African Americans and whites. Dr. Locher leads efforts aimed at determining the relationship between nutritional status and life-space trajectories and transitions of care (a new specific aim of the last R01 submission). Dr. Locher's work on the study has revealed that African Americans experience greater nutritional risk than whites; and, that African American men who have weak social networks, social support, and social capital experience even higher nutritional risk. Her work from the Study of Aging also demonstrated that unintentional weight loss (but, not intentional weight loss) and low body mass index (but, not overweight or obese body mass index) were associated with increased mortality and declines in functional status and life-space mobility in older adults. 14, 15

Finally, a sub-set of Dr. Locher's work supported by NIA and the American Cancer Society focuses on nutrition and aging in cancer patients and survivors. Using in-depth interview methods, Dr. Locher discovered that nutritional concerns are a major source of distress for patients and caregivers and that social support (especially from spouses) may facilitate use of nutritional support services and contribute to better outcomes. <sup>17, 18</sup> Using linked SEER-Medicare Data and sophisticated analytical techniques, Dr. Locher and her colleagues are examining patterns, predictors, and outcome of use of feeding tubes in head and neck cancer patients and survivors aged 65+. Practice variation and partner status both figure prominently in this line of inquiry. <sup>19, 20, 21</sup>

Past work (all published and that will continue concomitant with the Leadership Award) has focused on: 1) methodological challenges involved with a) recruitment and b) assessment of eating behaviors and dietary intake in community and hospital settings, 2) ethical considerations involving nutritional research conducted in community and hospital settings; 3) statistical modeling challenges necessitating use of sophisticated analytical approaches; 4) economic evaluation of the effects of nutritional programs and policies; and 5) promulgation of "evidence-based research findings that lead to the development of interventions, programs, policies, practices, and tools that can be used by community-based organizations to help older individuals remain healthy and independent, and living in their own homes and communities" (the focus of PAs-11-123 and -124). There is clear evidence that the proposed Career Development Award fits into past and future research efforts that lends support to creation of a Program in Translational Nutrition and Aging Research.

3.2. Immediate and Long-term Objectives of the Leadership Award and How These Will Meet the Needs for Expansion or Enhancement of the Academic or Research Capacity of the Institution. The immediate objectives of the leadership award are to develop a Program in Translational Nutrition and Aging Research at UAB whose Specific Aims are to: 1) provide leadership, core faculty, and resources that support innovative, integrated, interdisciplinary, clinical, behavioral, and policy-related collaborations focused on translational nutrition and aging research; 2) provide high quality educational experiences related to translational nutrition and aging research for pre-doctoral trainees, post-doctoral fellows, junior and transitional faculty, and community stakeholders, including policy makers and the geriatric workforce; and 3) identify gaps in the current evidence base, address methodological issues, and set priorities for translational nutrition and aging research. The long-term objectives are: 1) to create a new generation of interdisciplinary investigators and mentors in Translational Nutrition and Aging Research, 2) for UAB and its statewide partners to be recognized as a leading center of excellence in the area of Translational Nutrition and Aging Research, and 3) to create state-of-the art models and methods that can be adopted and adapted nationally and internationally.

As described in much greater detail in Facilities and Other Resources and Sections 7-9 of the Career Development Award Supplemental Forms the objectives of this leadership award are firmly aligned with University-wide and School-based strategic plans to ensure optimal synergy for the proposed program with ongoing institutional initiatives. The immediate and long-term objectives of the Leadership Award are specifically aligned with the strategic plans of the Center for Aging, the Nutrition and Obesity Research Center, and the Center for Outcomes and Effectiveness Research and Education and their efforts to partner with one another in promoting and developing collaborative efforts in translational nutrition and aging research. The proposed program will capitalize particularly on UAB's strengths in: 1) geriatrics, gerontology, palliative and supportive care research, education, and clinical care; 2) nutrition and obesity research, education, and clinical care; and 3) patient-centered outcomes and comparative effectiveness research and training.

3.3. How the Leadership Award Will Increase the Visibility and Overall Research Support or Academic Capacity within the Academic Medical/Health and Research Community. A major barrier limiting the value and importance placed upon nutrition assessment, intervention, and services among older adults residing in non-institutional settings has been an absence of outcomes and health services research that clearly establishes that nutrition affects patient outcomes and health care costs. In the short-term, it is expected that the Leadership Award will contribute to: 1) the evidence base wherein nutritional considerations figure more

prominently as key components in transitions of care for improved coordination and cost effective long term care and 2) helping to define the methods, metrics, and ethical standards by which translational nutrition and aging research would be conducted and evaluated. In the long-term, it is anticipated that the Leadership Award would impact practices and policies that lead to enhanced utilization and improved coordination of nutrition services that result in: prevention of both hospitalizations and hospital readmissions, prevention of nursing home placement, improved health outcomes, improved efficiency of care, reductions in health care costs, and increased patient satisfaction.

#### 4. Career Development/Training Activities during Award Period

Training activities to be pursued with this Academic Career Leadership Award represent a comprehensive plan that consists of career development of the Candidate and formal training activities for mentees. In Section 4.1, the personal career development plan is described and in Section 4.2, the focus on others' career development is presented (Section 6 describes in greater detail the Mentoring Plan.). The candidate will engage in a series of training activities that focus on mentorship and leadership within an academic setting.

- 4.1. Career Development Plan Incorporating Consideration of the Candidate's Goals and Prior Experience Including Details of the Plans to Obtain the Necessary Research and Pedagogical Experience to Facilitate Further Development as an Academician. The overarching goal of Dr. Locher's MRSDA was to provide her with the training and research experience necessary to become an independent investigator in the area of translational nutrition and aging research. Her career development plan for that award consisted of training in nutrition sciences, research design, and advanced statistical techniques. She exceeded the goals she set for herself and earned an MSPH degree in Health Policy and Outcomes. She has clearly established herself as an independent investigator in translational nutrition and aging research. Thus, for this award, her career development plans are consistent with development as a senior leader and are twofold: 1) fostering her own pedagogical and leadership skills and 2) fostering the academic and research expertise of trainees in Translational Nutrition and Aging Research. Section 4.1. focuses on the former.
- 4.1.1. Participate in the American Association of Medical Colleges Mid-Career Women Faculty Professional Development Workshop (https://www.aamc.org/meetings/143366/2011-midwim\_seminar.html). The Mid-Career Women Faculty Professional Development Seminar is a three and a half-day program designed for women primarily at the associate professor level. The seminar covers skills related to the formation and use of teams, central to effective collaboration in various mission-critical activities. Leadership topics are organized into workshop tracks covering communication skills, institutional finance, and management issues. Small-group sessions focus on mentoring participants in strategic thinking about career development. The seminar is for medical school appointees holding leadership positions within their discipline, department or institution.
- 4.1.2. Participate in UAB's Leadership Development Program. UAB offers education opportunities to individuals in leadership positions at UAB (http://www.hrm.uab.edu/main/traindev/leadership\_pgm.html). Specifically, the Leadership Program offers in-depth cutting edge leadership training in the form of Workshops and Seminars focused on: Mission/Vision, Empowerment, Teambuilding, Delegating, Motivation, Trust, Project Planning, Decision Making, Creativity, Managing Adversity, Change, Management, Goal Setting, Employee Growth/Development, Employee Retention, and Ethics. Dr. Locher has already taken the Diversity Training Workshop and The Seven Habits of Highly Effective People. She will continue to participate in the Program throughout the Award period to enhance her leadership skills within the UAB environment.
- 4.1.3. Participate in Mindfulness Leadership Training Dr. Locher will participate in two Mindfulness Leadership Training Workshops: 1) Connections: Mindful Communication and Leadership and 2) Leading Differently: The Power of the Purposeful Pause (<a href="http://www.instituteformindfulleadership.org/">http://www.instituteformindfulleadership.org/</a>). The first workshop explores mindfulness and the ways in which mindful communication improves clarity, innovation, and compassion. The second workshop uses mindfulness practice and practical applications of mindfulness to explore ways in which our ability to create space in our day affects our ability to lead. Dr. Locher has been participating in mindfulness activities, and has found them to be effective in her personal and professional life.
- 4.1.4. Engage in a Formal 360 Degree Evaluation Process. (http://www.custominsight.com/360-degree-feedback/360-delivering-feedback.asp). Dr. Locher will enhance her leadership skills by participating in a 360 Degree Evaluation Process made available through UAB. Receipt of feedback from the people who work around her, including managers and trainees, regarding her strengths and weaknesses, will provide Dr. Locher input necessary to become a more effective leader by identifying areas of improvement to focus and areas of strength to continue.
- 4.2. How the Results of the Formal Training Plan Will Contribute to an Increase in the Pool of Individuals with Academic or Research Expertise and/or Enhance the Educational or Research Capacity at the Sponsoring Institution. Dr. Locher proposes a broad-based curriculum that will: Integrate program aims in Translational Nutrition and Aging Research into existing education and training programs. These include: 1) Integrate didactic coursework into existing curricula (Nutrition through The Life Course, Aging Policy, and Patient-centered Health Outcomes); 2) Develop a 1-credit hour course on Translational Nutrition and Aging as part of the Gerontology Education Program; 3) Develop a "Track" in Translational Nutrition and Aging topic for the Geriatric Education Center; 4) Develop a half-day "Quarterly Session" and companion 2-

hour Web-based Self-Study Session on Translational Nutrition and Aging topic for the Faculty Scholars Program; 5) Develop a Module on Nutritional Processes of Care in Hospital Settings and with Transitions of Care to the Home for the Geriatric Scholars Program. Integration of educational aims into existing programs will increase program visibility and enhance its sustainability. These programs vary according to content and duration and attract participants representing diverse disciplines and career stages (See Table 2 below.).

Table 2. Integration of Training Aims of Program in Translational Nutrition and Aging Research Into Existing Educational and Training Programs							
Activity	Content	Program Participants (N and Disciplines Represented)	<b>Evaluation Procedures</b>				
Integrate Didactic Coursework into							
Existing Curricula:	0 191	05 / 1 / 1	E UBEAD & (L. C.				
Nutrition through the Life Course (NUT 725) Program: Nutrition Sciences Meets Every Other Fall Semester	3 credit hour required course examines nutrition and health through the life cycle. Dr. Locher teaches the 2 1/2 hour class on aging.	~25 students who are mostly doctoral students enrolled in the PhD program in Nutrition Sciences	· ·				
Aging Policy (HCO 680/780)  Program: HCOP MSPH and DrPH in Outcomes Research and Gerontology Education Program Certificate in Aging Meets Every May Semester	3 credit hour elective course provides an overview of aging policy in the US. Dr. Locher teaches each session. One class session focuses on policies and programs related to nutrition and aging. Material is updated annually.	~10-15 students who are MD & PhD fellows and graduate students from medicine, nursing, health administration, sociology, psychology, and public health.	Formal IDEA Rating of Instruction focused on learning objects are conducted online (See Appendix III.).				
Patient-centered Health Outcomes (HCO 677/777) Program: HCOP MSPH and DrPH in Outcomes Research Meets Every Spring Semester	3 credit hour <u>required</u> course provides an overview of patient-centered outcomes, including design, measurement, instruments, and analyses. Dr. Locher will integrate nutrition and aging outcomes as exemplars in this class.	~10-15 students who are MD & PhD fellows and graduate students from medicine, nursing, sociology, psychology, and public health.COERE fellows enroll.	Formal IDEA Rating of Instruction focused on learning objects are conducted online (See Appendix III.).				
Course on Translational Nutrition and Aging Program: Gerontology Education Program Graduate Meets Every Summer Semester	This 1-credit hour course will be developed as part of this Award and will focus on an overview of Translational Nutrition and Aging topics. This will be an online course and will complement this new method of teaching in the Gerontology Education Program.	Graduate students representing diverse traditional disciplines in the biological, behavioral, medical, and social sciences are enrollees in the Gerontology Education Program.	Formal IDEA Rating of Instruction focused on learning objects are conducted online (See Appendix III.).				
Develop/Lead Track for Inter- professional Geriatric Conference Program: Geriatric Education Meets Every Winter for Two	There are currently four conference "tracks". Nutrition and Aging will be a 'hybrid' track. There are 38 sessions and 4 workshops over two days. We will integrate ~6 sessions a year.	> 250 participants representing 12 disciplines (dentistry, medicine, nursing, nutrition, optometry, pharmacy, PT, OT, social work, and others.	There is a two part evaluation: 1) a general speaker evaluation and 2) an overall evaluation (with needs assessment to identify future topics) (See Appendix IV.).				
Develop/Direct Quarterly Session and Self-Study for Faculty Scholars Program Program: Geriatric Education Meets Quarterly & Ad Lib	One-year program, scholars complete 160 hours of mixed curriculum. Dr. Locher, in collaboration with clinical colleagues, will integrate 4 hours of nutrition and aging content into quarterly in-person sessions, with self-study module of additional content and resources.	~20 faculty participate per year representing dentistry, medicine, nursing, nutrition, optometry, occupational therapy, physical therapy, pharmacy, and social work. Others may participate.	There is a two part evaluation: 1) a general speaker evaluation and 2) an overall evaluation.				
Develop/Lead Module in Geriatric Scholars Program Program: Geriatric Education Meets Quarterly & Ad Lib	Two-year hospital-based program with mixed curriculum of didactics and practicum learning. Dr. Locher will develop a module in partnership with Dr. Flood focused on processes and transitions of care.	~ 20 Nurses, Physician Assistants, Recreational Therapists, and Pharmacists participate per year.	There is a two part evaluation: 1) a general speaker evaluation and 2) an overall evaluation.				

**4.3. Curriculum Development Plan.** The proposed curriculum development plan fits into the institutional plans and goals to grow programs in nutrition and aging (See Statements of Support.). Leaders of the Departments of Nutrition Science and Health Care Organization and Policy, the Gerontology Education Program and Geriatric Education Center, and Clinical and Public Health Programs have all explained how nutrition and aging programs are not a focus of any current curricula (including any training programs currently receiving NIH support or other federally funded support), but how such a focus: 1) is greatly desired and 2) could be easily integrated into the existing educational infrastructure and framework.

Dr. Locher will work closely with Ms. Channing Ford (the Education Program Director for the Division of Gerontology, Geriatrics and Palliative Care) and Dr. Monika Safford (the Assistant Dean for Continuing Medical Education) in order to enlist the support of professional and other organizations involved in continuing education for multiple disciplines (e.g., medicine, nursing, social work, dietitians, etc). We have much experience in such activities. The plans for when curriculum changes will be institutionalized are presented in the Timeline in Table 4. Plans and procedures to evaluate the progress and outcomes of the curriculum development initiatives are specific to the activity and are presented in Table 2 below and the Appendix. Finally, in regard to sharing curricula and any new educational materials, we will publicize program activities and disseminate resources widely. Our plans for dissemination are described in Section 11.3.16.

# 5. Training in the Responsible Conduct of Research (RCR)

Dr. Locher recognizes in concurrence with the NIH that ongoing RCR training of varied forms is integral to the career development activities associated with the proposed award. She has been actively engaged in RCR training activities and will continue to be. She is in compliance with UAB policies regarding receipt of training (See Appendix IV) and will continue to comply with her institutional requirements for RCR training. Additionally, Dr. Locher has participated and will continue to participate in numerous other RCR training activities, including:

- Course Director for Aging Policy HCO 680/780 and Patient-Based/Centered Health Outcomes, HCO 677/777 (both 3 Credit Hour Graduate Level Courses that are taught once a year). RCR is integrated throughout lectures in both classes, but especially the latter wherein students are expected to write a paper suitable for publication or a grant suitable for submission to an extramural funding agency. RCR training is required for these activities. RCR subject matter includes: Conflict of Interest Personal, Professional, and Financial; Policies Regarding Human Subjects; Mentor/Mentee Responsibilities And Relationships; Collaborative Research Including Collaborations With Industry; Peer Review; Data Acquisition And Laboratory Tools, Management, Sharing And Ownership; Research Misconduct And Policies For Handling Misconduct; Responsible Authorship and Publication; The Scientist As A Responsible Member Of Society, Contemporary Ethical Issues In Biomedical Research, And The Environmental And Societal Impacts Of Scientific Research. The plan is to continue with these activities.
- Student of Alabama Ethics Law Training/Taped Video Training on 4.25.11. This is a 1 ½ hour video required to be viewed by Alabama state employees. RCR content includes: Conflict of Interest Personal, Professional, and Financial. Dr. Locher will ensure that trainees complete training.
- Student of NIA Safety Training (Conducted By KAI Research, Inc.) on 10.12.10. This was a 1 ½ hour teleconference with didactic component and group discussion with leaders and investigators throughout the USA on the topic of Collection, Reporting, and Coding of Adverse Events in Clinical Studies. Dr. Locher required all of her pre- and post-doctoral trainees to participate and will recommend that trainees, where relevant, view the recorded contents of this training.
- Mentor and Author for Published Manuscript Based upon NIA Research Focused on Nutrition and Aging (ongoing). Dr. Locher has a particular interest in research ethics. She has published one paper on this topic and included trainees (underlined) as co-authors: Locher JL, Bronstein J, Ritchie CS, Robinson CO, Williams C. Ethical issues involving research conducted in the home with homebound older adults: therapeutic misconception and role conflict. Gerontologist. 2006 Apr;46(2):160-4. RCR content includes: Conflict of Interest—Personal, Professional; Policies Regarding Human Subjects; The Scientist as a Responsible Member of Society, Contemporary Ethical Issues In Biomedical Research, and the Environmental and Societal Impacts of Scientific Research. This paper has been used at other institutions to lead RCR discussions. As part of this Academic Career Leadership Award, Dr. Locher plans to write additional papers in collaboration with interested others (including mentees) related to RCR—namely in the areas of: 1) the Ethics of Conducting Nutrition Risk Screening In the Community and 2) Ethical Issues Related to Biometric Measurements Taken in the Course of Research Conducted with Older Adults.
- Faculty Mentor in UAB T32 Training Programs Associated with the COERE (ongoing RCR meetings ~twice a year). Dr. Locher is one among several faculty members who lead discussions relevant to RCR. Topics include: Mentor/Mentee Responsibilities and Relationships; Collaborative Research Including Collaborations with Industry; Peer Review. She will continue with these leadership activities.
- Dr. Locher will diligently participate and remain cognizant of opportunities to provide RCR informal instruction in educational settings and in multiple formal research training experiences and will make trainees aware of these opportunities as relevant. At a minimum, all trainees who receive support from the K07 Award will be required to complete human subjects training through the CITI program or UAB's internal training. Completion of requisite training is documented by the UAB Institutional Review Board. All trainees at UAB also will be strongly encouraged to participate in instruction in RCR and in scholarly integrity activities through one or more of the following venues: 1) GRD717 Principles of Scientific Integrity (a 3-credit hour course taught through the UAB Graduate School that surveys ethical issues and principles in the practice of science); 2) Seminars and Symposia Sponsored by the UAB Center for Ethics and Values in Science (specifically those focued on issues related to scientific integrity and research ethics training); and 3) Online RCR Modules Developed by the UAB Center for Ethics and Values in Science (<a href="http://www.uab.edu/ethicscenter/educational-materials/rcr-materials">https://www.uab.edu/ethicscenter/educational-materials/rcr-materials</a>) in collaboration with the <a href="Center for Clinical & Translational Science">Center for Clinical & Translational Science</a> through an award from the NIH. RCR modules are available on demand.



February 6, 2012

NIA-S: Behavioral and Social Science of Aging Review Committee

RE: Julie L. Locher, PhD MSPH K07 Academic Career Leadership Award, Program in Translational Nutrition and Aging Research

Dear NIA-S Review Committee Members:

We are writing to enthusiastically support Dr. Julie Locher's application for a K07 Academic Career Leadership Award to establish a Program in Translational Nutrition and Aging Research. The proposed program represents an important part of our university-wide efforts to become recognized as a leader in nutrition and aging research. Dr. Locher has proven herself to be a successful and productive researcher, a superior and effective teacher, and an asset to the Gerontology program both within UAB and the community-at-large.

Statements by Contributors are limited to six pages as described in SF424 (R&R) Application Guide. Therefore, this letter describes our own commitment to Dr. Locher and the program she proposes and synthesizes Statements of Support she received from more than thirty institutional leaders within the UAB greater community and members of her Internal and External Advisory Committees. All have pledged their backing of the program and have emphasized the confidence they have in Dr. Locher's ability to provide leadership given her proven track record of excellence in activities related to research and mentorship.

Designation of the Program in Translational Nutrition and Aging Research as a Formal Research Program within the UAB Center for Aging

As a first step, Dr. Allman will designate the Program in Translational Nutrition and Aging Research as a formally recognized "Research Program" within the Center for Aging concomitant with funding of the award. At the same time, Dr. Locher will be promoted to an Associate Director position within the Center for Aging. These distinctions represent meaningful support of the Candidate and signify the value placed upon the Program and Dr. Locher. It is anticipated that these changes will increase substantially the awareness of the program and elevate its' status, thus contributing to its increased likelihood of success and sustainability.

#### Statements of Support from Members of the Internal Advisory Committee

Dr. Locher has wisely set up a strong Internal Advisory Committee, whose members will be: Barbara Gower, PhD; Michael Morrisey, MD; Ken Saag, MD (Biosketches are included in this application.), and ourselves. Collectively, the committee represents academic leaders with strong records of accomplishment in building solid and long-standing research and training programs that are world-renowned for their scholarship. These particular faculty members also have long histories of working collegially with one another in numerous activities. They are also committed to supporting the Program that Dr. Locher proposes and to her personal success. In fact, explicit goals of the Center for Aging (directed by Dr. Allman) and the Nutrition and Obesity Research Center (directed by Dr. Allison) are to develop the research and training portfolio in nutrition and aging and to increase collaboration between "aging" researchers and "nutrition/obesity" researchers. Furthermore, in his letter of support, Dr. Morrisey (Director of the Lister Hill Center for Health Policy) expressed his enthusiasm that the "areas that Dr. Locher wishes to expand include health economics and methodological issues relevant for nutrition and aging."

All of the members of the Internal Advisory Committee have committed to providing Dr. Locher with administrative and scientific advice, as well as tangible resources to ensure the success of the program. Dr. Allman has committed to providing support for a Program Manager for 2.4 person months (valued at \$10,964.00 per year). They have all

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committed specifically to providing her input regarding mentoring activities and to helping her select trainees most deserving of funding for pilot studies and travel. Dr. Gower specifically notes: "I have both the background and interest in seeing the K07's training component excel. Thanks to a strong research faculty and several existing training grants, UAB attracts strong applicants for trainee positions (pre-doctoral trainees, post-doctoral fellows, and junior faculty) in the area of nutrition. I believe that the K07 can point many of these applicants towards research in translational nutrition and aging by offering a rich training environment, access to research resources, and assistance with the research process."

Four members of the Advisory Committee serve as Directors of extramurally-supported training programs that support junior faculty and pre- and post-doctoral fellows. Six trainees whose work focuses on nutrition and aging are currently being supported by these programs and Dr. Locher serves as a primary mentor for three of the trainees and as a co-mentor for the other three. Each of these Directors has committed to continuing to support qualified trainees interested in pursuing research relevant to translational nutrition and aging. Dr. Allison has committed to provide \$3,500.00 each year from discretionary funds to support the Annual Research Retreat (for meal and trainee award expenses not covered by NIH).

Since 2007, Dr. Locher has served as Director of the Public Policy and Aging Program, jointly sponsored by the Center for Aging and the Lister Hill Center for Health Policy (directed by Dr. Morrisey); and in 2012, she began serving as Associate Director for Enrichment for the UAB Nutrition and Obesity Research Center. Resources are provided to support Dr. Locher in these roles that are compatible with and enhance the likelihood of success of the goals of the Program in Translational Nutrition and Aging Research. Most notably, each year for the past five years, Dr. Locher in collaboration with AARP Alabama sponsors an aging policy conference that brings together leading national experts with local stakeholders to discuss and debate pressing concerns. Drs. Allman, Allison, and Morrisey have committed to providing financial support for these conferences (\$1,000.00 each per year), many of which focus on translational nutrition and aging (e.g., last year's focus on hunger and food insecurity and this year's upcoming focus on environmental threats to healthy aging).

All Directors of Centers have pledged to increase the visibility of the Translational Nutrition and Aging Research Program in efforts to promote collaboration among faculty and attract new investigators and trainees to the area. A primary way in which this will be accomplished is to sponsor or co-sponsor guest speakers for seminars, conferences, and workshops. Both the Centers for Aging and the NORC sponsor weekly seminar series; all sponsor special conferences; the NORC and Lister Hill Center for Health Policy sponsor workshops (focused on career development and methodological issues); and the Lister Hill Center for Health Policy and Center for Outcomes and Effectiveness Research and Education co-sponsor Works-In-Progress where researchers can present study proposals or analytical challenges that they wish to receive feedback. Each of the Center Directors has committed to sponsor at least one speaker per year over the next five years whose work focuses on Translational Nutrition and Aging Research (\$1,000.00 each per year).

Dr. Ken Saag (Director of the Center for Outcomes and Effectiveness Research and Education) expresses most succinctly the overall sentiments of the Internal Advisory Committee in regard to Dr. Locher's application: "I will help in *any* way I can."

# Statements of Support from Education Leader Collaborators to Develop Course(s) and Curricula

Dr. Locher proposes development of a comprehensive set of curriculums that cut across disciplines to maximize impact, uses different venues to reach distinct audiences, and is integrated into existing programs to enhance sustainability. She has the strong support of educational leaders across campus in support of these efforts.

First, Dr. Locher proposes to integrate translational nutrition and aging research material into existing course that will be updated annually within the Departments of Health Care Organization and Policy (graduate level courses in Aging Policy and Patient-Centered Outcomes) and Nutrition Sciences (graduate level course in Nutrition through the Life Course). Dr. Locher has taught the course in Aging Policy since 2005 and began teaching the Patient-Centered Outcomes course in 2012 at the request of Dr. Peter Ginter (Chair of the Department), who values tremendously Dr. Locher's contribution to his Department and the positive evaluations she receives for the classes she teaches—with nearly all of her students strongly agreeing that she is "overall an excellent teacher." He fully supports the integration of nutrition and aging matters into her lectures as exemplars of outcomes research. As described in detail in Dr. Locher's application, these classes are comprised of students representing a diversity of

disciplines and the classes are scheduled yearly. Dr. Locher will also teach one session for the Nutrition through the Life Course. Dr. Tim Garvey (Chair of the Department of Nutrition Sciences) is supportive of this continued contribution to his Department.

Dr. Locher proposes to develop a graduate level course focused on Translational Nutrition and Aging as part of the Gerontology Education Program. Dr. Patricia Sawyer, Director of the Gerontology Education Program, is "thrilled" that Dr. Locher will create the new one-credit hour course. She notes: "Not only will this course cover an important aspect of aging, our students will have increased options for fulfilling requirements for the Gerontology Certificate Program." She additionally notes that: "This on-line course also will enhance the distance-learning opportunities for students."

Dr. Locher also proposes to develop two sets of instruction for the Geriatric Education Center (GEC) (supported by a 5-year renewable grant from the US Department of Health and Human Resources and Service Administration). First, she proposes to develop 1) a "Track" in Translational Nutrition and Aging for the Inter-professional Geriatric Conference and 2) a half-day "Quarterly Session" and companion two-hour Web-based Self-Study Session on a Translational Nutrition and Aging topic for the Geriatric Faculty Scholars Program. The first involves an annual conference that attracts hundreds of participants from across the state of Alabama representing many different health-related disciplines. The second involves the training and retraining of faculty and preceptors in geriatric topics. It is a two-year mentoring program available to faculty from Dentistry, Medicine, Nursing, Occupational Therapy, Optometry, Physical Therapy, Social Work, Pharmacy, and Nutrition. Dr. Cynthia Brown directs the GEC and both of these programs. She is excited that Dr. Locher is proposing to develop what she describes as "this much need curriculum." In fact, she notes: "while there has been increased interest in nutrition and aging and one faculty scholar is a nutrition scientist (who Dr. Locher mentors), there has been no curriculum developed on the topic. I welcome Dr. Locher taking the lead role in collaborating with colleagues to develop these greatly needed Tracks and Sessions."

Finally, with respect to Curriculum Development, Dr. Locher proposes to add to the two-day orientation curriculum of the Geriatric Scholars Program a module that she will develop in partnership with Dr. Flood focused on nutritional process of care in the hospital setting and with transitions of care to the home. The Geriatric Scholars Program is hospital-based and available to any health care professional, but frequently attracts nurses and physician's assistants. Dr. Flood and Dr. Locher have a growing clinician/researcher partnership focused on the proposed topic for this curriculum. Dr. Flood notes: "It's perfect and something we really need. Thanks!!!" She additionally commented: "I appreciate so much your energy and leadership in moving projects forward and getting our important research published and recognized. I am looking forward to our work together examining nutritional processes of care, especially as these relate to transitions of care from the hospital to the home and community. Please know that in my role as Medical Director for all inpatient geriatric programs at UAB and in particular the Acute Care for Elders (ACE) Unit, I will support research initiatives to the fullest extent."

# Statements of Support from Members of the External Advisory Committee

The composition of Dr. Locher's External Advisory Committee provides strong testament to the high regard that others outside of the University have for Dr. Locher's work in Translational Nutrition and Aging. All members represent leaders in the field of nutrition and aging from diverse disciplines and include: Connie W. Bales, PhD RD (Professor in the Division of Geriatric Medicine, Department of Medicine at Duke University, and Associate Director for Education/ Evaluation of the Geriatrics Research, Education and Clinical Center at the Durham VA Medical Center); Heather Keller, PhD RD (A Nutritional Epidemiologist and Dietitian; Professor in the Department of Kinesiology, University of Waterloo; and a Schlegel Research Chair in Nutrition & Aging); Gordon Jensen, MD (Professor and Head of the Department of Nutritional Sciences at Penn State University and Vice President-elect of the American Society for Nutrition); Joseph R. Sharkey, PhD RD (Professor of Social and Behavioral Health in the School of Rural Health at Texas A & M University; Director of: the Program for Research in Nutrition and Health Disparities, the Texas Healthy Aging Research Network, and the Texas Nutrition and Obesity Policy Research and Evaluation Network); and Nancy S. Wellman, PhD RD (Affiliated Faculty Member at Tufts University's Friedman School of Nutrition Science and Policy and Emeritus Director of the National Resource Center on Nutrition, Physical Activity, and Aging and Professor of Dietetics and Nutrition in the School of Public Health at Florida International University). All members of the Committee have agreed to provide Dr. Locher with guidance on the overall direction and evaluation of her proposed program and to convene once a year for this purpose. They have also agreed to

participate in the Visiting Scholars Program at least once during their five-year service on the Committee. Some excerpts from their Letters of Support follow.

Dr. Jensen notes: "I am thrilled to offer my assistance as a member of the External Advisory Committee. . . Your research interests, and leadership and mentorship expertise make this a very strong proposal. The impressive faculty, students, and resources at University of Alabama-Birmingham make this an even more attractive opportunity. I am most appreciative of our recent collaborations investigating dietary patterns and diet quality among the diverse sample of older persons in the University of Alabama-Birmingham Study of Aging and in our collaboration for the Nutrition and Healthy Aging in the Community Workshop for the Institute of Medicine. . .I look forward to continuing our fruitful collaboration. . ."

Dr. Sharkey similarly observes: "Based on my personal observations, you provide exemplary scientific leadership in (numerous) activities . . . I recently had the pleasure of visiting you at UAB. . . I was impressed with all of the nutrition and aging research going on at UAB. . . I believe you are uniquely poised as an investigator and within UAB to carry out the aims you propose. I look forward to continuing to work with you as you build the national research and dissemination agenda related to translational nutrition and aging research."

Nancy Wellman points out: "Having been in the field of nutrition and aging for several decades, I am impressed by the steadfastness Julie demonstrates in pursuit of her research goals and work quality. Julie is establishing herself firmly as an expert on the frontier of nutrition and aging research. Julie's work, along with that of only a handful of others, will be setting the agenda for future aging and nutrition policy. . . Strongly committed to her success, I am willing to serve as a member of her External Advisory Committee to offer insight into the direction of the program and its progress. I am also happy to help broaden Julie's network in the nutrition and aging policy arena. Based on her productivity to date as well as her noteworthy collegiality and interdisciplinary commitment, I expect her reputation will continue to grow. Thus, it is most fitting that Dr. Julie Locher's application be approved for funding to pursue her goal of promoting nutrition in health and aging policy and practice."

Heather Keller, who is Canada's leading translational nutrition and aging researcher, recently invited Dr. Locher to present her research and meet with faculty from the University of Waterloo and Guelph University in Ontario. She notes: "As my American counterpoint and a fellow-leader in nutrition and aging research, I am looking forward to working on this unique opportunity with you. . . . (The proposed interdisciplinary) focus is required to innovate and lead in solutions to the current and future challenges around nutritional care and prevention for older adults. . . . Such collaborations will lead the world in its understanding of how best to address the translational nutrition issues for older adults. Thank you for this opportunity to contribute and collaborate."

# Statements of Support from Contributing Institutional Leaders

Building a program like that proposed by Dr. Locher requires commitment and participation from multiple partners. Dr. Locher has already garnered tremendous support from numerous leaders who represent the most productive and successful researchers within UAB and from community partners. Here we provide a sampling:

#### Within UAB:

Dr. Timothy Garvey (Professor and Chairman of the Department of Nutrition Sciences) has provided a strong endorsement: "we are committed to moving forward on fostering cross-cutting interests in aging and nutrition research under Julie's leadership. The Department of Nutrition Sciences especially looks forward to this opportunity, as we have committed the faculty positions and resources for nutrition and aging research, including especially in the area of obesity, diabetes, and cancer survivorship. We regard this area as a major new area for program development in both clinical and research levels. This is also an important endeavor in the context of our Diabetes Research and Training Center (DK-079626) for which I serve as PI. . . The Department of Nutrition Sciences is firmly committed to partnering with Julie in this effort, and as Director of both the Department of Nutrition Sciences and the Diabetes Research Training Center, I can also affirm the Medical School and University are strongly committed to development of new programs and excellence in both nutrition and aging research."

Cora E. Lewis, MD MSPH (internist and epidemiologist who is PI or Co-I of many large, multisite observational studies, including CARDIA, Look AHEAD, MrOS, Women's Health Initiative, and more) wrote: "I have followed the remarkable progress you have made over the years in firmly establishing your career in nutrition and aging in

community settings and in the many and varied partnerships you have formed within and outside the university that support your research. These interdisciplinary close times will by key to the success of your application. . . I am especially intrigued by your interest to bring together researchers of various backgrounds to examine outcomes related to nutrition and aging in real world settings. . . . I envision with the Program you are proposing, studies (linking large epidemiological studies that include numerous lifestyle and dietary measures with Medicare claims data to examine outcomes and costs) will take place on campus, and I will support you in our mutual efforts to accomplish the goal of making UAB a recognized center of excellence in this area."

Marcas M. Bamman, PhD (Professor of Physiology and Director of the Center for Exercise Medicine) observed: "This Program would serve as a valuable nucleus to help grow existing research programs focused on inactivity-related diseases, and to foster new, multidisciplinary research programs on nutrition and aging. The Program would also provide a strong network for research training, which is much-needed in the areas of nutrition and lifestyle interventions. . . . The opportunity to grow our areas of research via collaborations that partner nutrition and aging researchers with our Center faculty and trainees would be most welcome. . . Thanks for taking this important step."

Dr. Mona Fouad, MD, MPH (Director of the Division of Preventive Medicine and the UAB Minority Health and Health Disparities Research Center) wrote to Dr. Locher: "I sincerely appreciate your contribution of knowledge and expertise as a mentor to our trainees through the years. Please know that I will continue to rely upon you as a mentor in our programs. As you know, our programs serve young investigators throughout the state of Alabama and the Southeast, including historically black institutions such as Tuskegee University and Morehouse College. Your valuable work helps the career development of young faculty and sculpts the future researchers who will make important contributions to the science of health disparities especially as it relates to nutrition and aging concerns. Thank you! . . . I fully support your initiative to develop a program in Translational Nutrition and Aging research."

Wendy Demark-Wahnefried, PhD (Associate Director, UAB Comprehensive Cancer Center) has already partnered with Dr. Locher on an R01 grant application to NCI (Harvest to Health) which involves aging, nutrition, and community translational research. She wrote to Dr. Locher: "As you know, much of my own work focuses on nutrition-related concerns of cancer patients, as well as determining effective lifestyle interventions that improve the overall health of cancer survivors and their families—many of whom are older adults. This is an area of research I am working hard to expand, and the Program you propose would support and complement my efforts as the Associate Director for Cancer Prevention and Control of the UAB Comprehensive Cancer Center. Having been recently recruited to UAB, I was provided a generous start-up package. I am committed to fostering multi-disciplinary partnerships and recruiting new faculty whose work focuses on survivorship and nutrition and lifestyle interventions. I believe there are strong synergies between our efforts and I am happy to partner with you in advancing our mutual goals that would support a translational program in nutrition and aging. . . . I look forward to our growing collaboration. Thank you for taking the initiative to prepare this application that could have tremendous impact in the field."

Monika Safford, MD (Assistant Dean for Continuing Medical Education and Associate Director of the Center for Outcomes and Effectiveness Research) wrote: I am thrilled to learn of your plans to submit an Academic Career Leadership Award in the area of Translational Nutrition and Aging Research. The Program you propose is cuttingedge and at the intersection of nutrition, aging, and outcomes and health services research. . . I am committed to work involving translation of innovative research, conducted here and in other academic medical centers, into clinical practice. I will support you and your colleagues to develop quality educational programs based on solid research that better serves patients. Additionally, I will assist you in identifying partners within the Alabama and Mississippi Practice-Based CME Networks. Your plan to improve the evidence base in the area of nutrition and aging is greatly needed and could have a significant impact in the community. . . . With such a substantial commitment from UAB, from both the Center for Aging and the Nutrition and Obesity Research Center and other entities across campus, your application leverages NIA funding in a unique and coordinated manner, thereby enhancing your opportunities for scientific success and the advancement of patient quality of care. Good luck with this well-conceived and exciting initiative!"

#### Outside UAB:

John G. Beard, MBA/JD (President of Alacare Home Health & Hospice) wrote to Dr. Locher: "As you are doubtless aware, recent changes in healthcare policy and financing have brought about changes in the way care is delivered in the home and Medicare's Hospital Readmission Reduction Program has increased the need for Home Health

Agencies to focus resources on ensuring smooth transitions of care from the hospital to the home and on partnering with multiple community organizations and research institutions to evaluate the care that is delivered. . .We have partnered with you on two NIA-supported nutritional studies, . . .We at Alacare strongly support research and will continue to partner with UAB investigators. If we can assist, we would find it tremendously rewarding to be able to offer our patients and family caregivers the potential to participate in studies that hopefully achieve positive outcomes. Congratulations on your success to-date and to the success of this application, a well."

Neal Morrison (Commissioner of Aging for the State of Alabama) and Julie Miller (Programs and Planning Division Chief for the Alabama Department of Senior Services) jointly endorsed Dr. Locher's application: "You have been a long time partner of ours, working to create a new home-delivered meals route in an inner city neighborhood in Birmingham in Jefferson county, presenting your research findings to our State Unit on Aging nutrition leaders, involving us in national efforts of the Institute of Medicine, and now serving on the committee to Develop a State Plan on Aging for Alabama. Please know that we will continue to support your efforts in the communities of Alabama and look forward to the opportunity to partner with you on research and evaluation projects in the future."

# Summation of Statements of Support

Dr. Locher has prepared a thoughtful application with input from multiple individuals and organizations. The program she proposes is built upon a strong foundation of research and research partners. Thus, the program she proposes is solid and imminently doable. The strong Letters of Support from Collaborators and Contributors provide strong evidence that the program she proposes will succeed.

Above and beyond all the monies specified above, we (Drs. Allison, Allman, and Ginter) collectively will provide additional matching funds of \$ per year to be used to support the Program in Translational Nutrition and Aging Research. These monies represent our strong commitment to Dr. Locher and can be used by her to develop research and training initiatives at the interface of nutrition and aging as needs arise and the program evolves. In sum, the institutional financial support of this application totals more than \$ per year and represents a % match of NIA funds that will contribute substantially to ensuring the success of the program.

As summarized by one of Dr. Locher's closest colleagues, Dr. Barbara Gower: "UAB has strong programs in Aging, Nutrition, and Health Services Research; a large number of investigators with research interests in these areas; and extensive infrastructure to support these activities. The leadership that will come from the K07 will serve to maximize the gain from these existing resources, focusing on translational nutrition and aging research. UAB's aging, nutrition, and health services-related research base is interdisciplinary, spanning Nutrition, Geriatrics/Gerontology, Nursing, Physiology, Endocrinology, Public Health, Epidemiology, Economics, and Sociology, to name a few. The K07 will provide a mechanism for integrating this wealth of expertise to generate novel translational research projects in the area of nutrition and aging. UAB also has the expertise and leadership to identify the key questions that need to be asked, and the study designs needed to address them. This strength benefits not only the K07, but the broader Translational Nutrition and Aging Research community."

We support Dr. Locher's application with great enthusiasm, and are confident that you will agree with our assessment that the Program in Translational Nutrition and Aging Research that she proposes merits funding from the National Institute on Aging. Thank you for your careful consideration of her application. Please do not hesitate to call if you have any questions.

Sincerely,

Richard M. Allman, MD Professor and Director

Wichard Mallman

Center for Aging

Div. of Gerontology, Geriatric Medicine, & Palliative Care

David B. Allison, PhD
Associate Dean and Director
Nutrition and Obesity Research Center
School of Public Health

Henry A. A.

#### **Description of Institutional Environment**

**General Overview:** As one of the top research universities in the country, UAB receives more than \$460 million annually in grants and contracts. UAB is a multidisciplinary academic and research institution with 36 doctoral programs and almost 100 research centers, which are the institutional infrastructure of its collaborative research enterprise. Research at UAB is well supported both by traditional extramural funding and is dramatically stimulated by a rich culture of interdisciplinary collaboration supported through University Wide Interdisciplinary Research Centers (UWIRC). This network of UWIRCs (n=28), is supported by a University investment of over \$5 million annually.

Primary Intramural Collaborations: UAB is a world-renowned leader in three domains whose missions are most germane to the development of a Translational Nutrition and Aging Research Program. These include: 1) geriatrics, gerontology, palliative and supportive care research, education, and clinical care; 2) nutrition and obesity research, education, and clinical care; and 3) patient-centered outcomes and comparative effectiveness research and training. The aging program at UAB is comprised of a broad-based, comprehensive, and integrated set of activities that emanate largely from the UAB Center for Aging and the Division of Gerontology, Geriatrics, and Palliative Care located within the Department and School of Medicine. The nutrition (and obesity) program at UAB is comprised of a broad-based, comprehensive, and integrated set of activities that emanate largely from the UAB Nutrition and Obesity Research Center and the Department of Nutrition Sciences located jointly within the School of Health Professions and the Department and School of Medicine. UAB has one of the most distinguished health services research and training programs in the world. This program revolves around activities emanating largely from the Center for Outcomes Effectiveness Research and Education, the Lister Hill Center for Health Policy, the Department of Health Care Organization and Policy, the Division of Preventive Medicine, as well as other entities.

**Secondary Intramural Collaborations.** UAB is a vibrant campus with many opportunities for multidisciplinary research and training. Additional, strong research centers include: the Comprehensive Cancer Center, The Center for Clinical and Translational Sciences, and the Minority Health and Health Disparities Research Center. The School of Nursing and the Department of Sociology are strong and growing.

**Health- and Community-based Partnerships.** UAB has particularly strong relationships and that are central to the overarching goal of the Program in Translational Nutrition and Aging Research. These include: AARP Alabama, Alabama Department of Senior Services, Alacare Home Health and Hospice, Alabama Quality Assurance Foundation, and United Way of Central Alabama.

**Research and Trainee Base.** Currently, there are about 1,900 active research grants, which were awarded to the six health science schools (Medicine, Dentistry, Public Health, Optometry, Nursing, and Health Professions) and the College of Arts and Sciences and the Joint Basic Sciences programs. There are 34 T-and K-series training grants at UAB that attract strong applicants for trainee positions (pre-doctoral trainees, post-doctoral fellows, junior faculty).

Relevant Cohorts and Databases Available to Support Program. There are numerous opportunities for translational nutrition and aging research initiatives with datasets emanating directly from work of UAB investigators. Dr. Locher has had four studies supported by the National Institutes on Aging (one ongoing). UAB researchers are PIs (or have access to and/or expertise with) of internationally and nationally recognized datasets relevant for the proposed program.

A complete and thorough description of the Institutional Environment is provided in the Facilities and Other Resources Section.



**Department of Medicine** 

February 2, 2012

To Whom It May Concern:

This letter is to confirm that we are fully committed to Dr. Locher's development as a leader at the University of Alabama at Birmingham. Previously, our institution supported her progress as an independent investigator when she received her Mentored Research Scientist Development Award from the National Institute on Aging (NIA) in 2001. It is with no regrets. Dr. Locher has been successfully supported by the NIA with four grants for more than twelve consecutive years. She has had numerous publications and honors to show for it and has brought credit to our institution. Dr. Locher has mentored many junior faculty and trainees who have benefitted from the experience; and this past year, after being nominated by those mentees, she received the Graduate Dean's Award for Excellence in Mentorship.

Dr. Locher has served with distinction since first coming to UAB in 1992. Her performance over the last several years especially provides convincing evidence of her ability to develop and lead a program in Translational Nutrition and Aging Research. Independent of the receipt of the Career Development Award, we are committed to Dr. Locher's career advancement. In fact, we were happy to endorse her promotion to Associate Professor with tenure in 2009. This clearly demonstrates the strong commitment of the Departments of Medicine and Health Care Organization and Policy to her development, and also illustrates our confidence in her ability to develop and lead an externally funded research program that complements ongoing research in aging, nutrition, outcomes, and policy here at UAB.

In accordance with NIH requirements:

- The Division of Gerontology, Geriatrics, and Palliative Care (DGGPC) and the Department of Health Care
  Organization and Policy (DHCOP) agree to provide Dr. Locher with at least 50% protected time to
  accomplish the leadership development and research training activities outlined in her proposal.
- Dr. Locher has offices and computers in the DGGPC and DHCOP. She will continue to have that space. She additionally has office space for three trainees in the DGGPC. She will continue to have that space for future trainees. Within the DHCOP, Dr. Locher has and will continue to have access to the exceptional computer facilities necessary for working with large administrative databases. As described in the letter written by Drs. Allman and David Allison, Dr. Locher will have access to many resources and facilities, including access to clinical and research populations and databases that will support her research plan.
- Dr. Richard Allman has agreed to provide Dr. Locher with program support in the form of 2.4 person months for a Program Manager and as much support as she needs from the Education Program Director within the Division to develop the curriculum proposed in the grant. As described in the letter written by Drs. Allman and David Allison, Dr. Locher will have tremendous support from university leaders and faculty throughout the university and access to the resources available through university-wide centers. Most notably, she will have 65% matching institutional support to develop the Translational Nutrition and Aging Research Program.

Without question, we are fully committed to providing her with whatever support is necessary to make her successful in her research efforts. We expect to play an important role in bridging interests across campus over the next five years. If we can be of any further assistance to your committee, please do not hesitate to contact one of us.

Anupam Agarwal, MD

Professor and Interim Chairman

Department of Medicine

Peter M. Ginter, PhD

Professor and Chairman,

Department of Health Care Organization and Policy

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The University of Alabama at Birmingham

Boshell Diabetes Building 420 • 1808 7th Avenue South

Birmingham, Alabama 35294

#### 10. Specific Aims

The overarching goal of this K07 Academic Career Leadership Award is to develop a sustainable Program in Translational Nutrition and Aging Research based at the University of Alabama at Birmingham and in partnership with organizations and individuals within the state of Alabama who have an interest in collaborating on translational nutrition and aging research initiatives.

The achievement and maintenance of good nutritional health are essential to physical and cognitive function, the prevention or delay of chronic disease and disease-related complications, and overall quality of life across the life course. 1, 25 A growing body of research, including much of the candidate's work, is demonstrating that many community-dwelling older adults (because of many and varied influences) experience poor nutritional status that is associated with poor health outcomes and increased health-related costs. Interventions, programs, and policies that could potentially address nutritional needs of older adults living in the community (including those who are hospitalized and will be discharged to the community) are ineffectual, inadequate, underutilized, and/or non-existent for a whole host of reasons.

Demographic and economic imperatives highlight the reality that nutritional matters are too costly to ignore in our rapidly aging society. This is especially true in consideration of two important policy-related developments. First, there are increasing efforts directed toward improving transitions of care linking hospital and home health services with community-based services in order to reduce preventable healthcare utilization—especially, repeat hospitalizations. Research has demonstrated that nutrition-related illnesses and complications are among those most likely to contribute to patients' re-hospitalization. Second, increasing initiatives emanating from both the federal and state levels to rebalance long-term care so that older adults can remain active and healthy in the community for as long as possible versus having to enter a nursing home prematurely repeatedly find that nutritional support and services are lacking at multiple potential points of intervention, particularly for those who are most vulnerable. Finally, there are rising rates of overweight and obese Baby Boomers who are entering into older adulthood with concomitant obesity-related comorbidities and disability present. This presents additional and pressing complicating challenges to trends in aging policy that have not been well-addressed.

The Institute of Medicine held a Workshop on Nutrition and Healthy Aging in the Community in October of 2011(<a href="http://www.iom.edu/Activities/Nutrition/NutritionAgingCommunity.aspx">http://www.iom.edu/Activities/Nutrition/NutritionAgingCommunity.aspx</a>) wherein the candidate played a key role in planning. Speakers noted that the role that nutrition plays in healthy aging was "under-appreciated" and "understudied" and concluded that increased dialogue and research is needed critically. Participants further observed that the current state of research is marked by: 1) a weak evidence base to support adoption of existing nutrition initiatives and 2) a dearth of investigators with the necessary skill-sets to conduct current and future translational nutrition and aging research. Thus, the Specific Aims of this Academic Career Leadership Award to establish a Program in Translational Nutrition and Aging Research are threefold:

**Specific Aim #1:** To provide leadership, core faculty, and resources that support innovative, integrated, interdisciplinary, clinical, behavioral, and policy-related collaborations focused on translational nutrition and aging research.

**Specific Aim #2:** To provide high quality educational experiences related to translational nutrition and aging research for pre-doctoral trainees, post-doctoral fellows, junior and transitional faculty, and community stakeholders, including policy makers and the geriatric workforce.

**Specific Aim #3:** To identify gaps in the current evidence base, address methodological issues, and set priorities for translational nutrition and aging research.

A better understanding of the vital roles that nutrition and nutritional services may play in contributing to the health and well-being of older adults residing in community settings is important and timely. It is anticipated that activities associated with the proposed Translational Nutrition and Aging Research Academic Career Leadership Award will contribute to long-lasting and far-reaching changes in the state of teaching and research. The expected outcome of this award is to produce a community of scholars representing diverse backgrounds and interests who possess the knowledge and skills necessary to conduct relevant and impactful research in the area of nutrition and aging. While the focus of the Program is to build capacity within UAB and with its state partners, the greater scientific community will benefit from the activities associated with this award, as well. Accomplishments of the Translational Nutrition and Aging Research Program ultimately have the potential to reduce burdens on older individuals and society as a whole.

Specific Aims Page 158

# 11. Research Strategy

Dr. Locher's proposal to develop a sustainable Program in Translational Nutrition and Aging Research based at the University of Alabama at Birmingham and in partnership with organizations and individuals within the state of Alabama who have an interest in collaborating on translational nutrition and aging research initiatives is clearly consistent with her level of research development and career development plan as delineated in Sections 2, 3, and 4 and reflected in the quality of her work presented in these sections. In this Section, she describes the impact of the proposed Program, including its novelty, significance, and creativity, and the ability of the candidate to carry out the Program as proposed.

11.1. Significance. Nutrition plays a vital role in maintaining the health of older adults and in the management of multiple co-morbid conditions that older adults frequently experience. Similarly, a whole host of adverse outcomes suffered by older adults is a consequence of poor nutrition. On October 5, 2011, the IOM held a public workshop entitled "Nutrition and Healthy Aging in the Community." The explicit purpose of the workshop was to: 1) address the strengths and limitations of community-based delivery of nutrition services for older persons; 2) identify beneficial nutrition interventions and model programs: a) to promote successful transitions from acute, sub-acute, and chronic care to home and b) to promote health and independent living in the community; and 3) highlight needed research priorities.

Important conclusions reached by participants of the Workshop (including NIH/NIA members and leading researchers, practitioners, and policy makers) were that: 1) Outcomes research, including that research demonstrating consequences of nutrition *and* nutrition interventions and programs, on patient-centered outcomes and costs, is needed; 2) Development and evaluation of research integrating food and nutrition care and services from community, out-patient, rehabilitation, assisted living, and other settings is needed; and 3) The translational nutrition and aging research workforce is small and must grow to address major gaps in research that have tremendous impact on the health and well-being of older adults.

The Candidate has steadily and unwaveringly devoted her entire career to translational nutrition and aging research. She has formed critical partnerships with colleagues representing many and diverse disciplines and with healthcare and community organizations necessary to develop the proposed program. She is uniquely poised as an investigator and within UAB to increase the quantity and quality of the science and the number of scientists engaged in translational nutrition and aging research that has direct impact on improving clinical care and public health practice.

11.2. Innovation. There are at least three important ways in which the proposed application represents a substantially different way of addressing a serious and growing public health problem. First, there are no institutions within the US with a clear focus on Translational Nutrition and Aging Research integrated within its research, training, and service activities. Individual researchers (including, e.g., those who participated in the IOM Workshop and the AARP Researcher Roundtable and current members of the CDC's Healthy Aging Research Network's Nutrition Workgroup) within several institutions certainly do engage in related research, but frequently in partnership with those from other institutions; and while Tufts University is notable for their USDA-supported Human Nutrition Research Center on Aging, their research expertise, as described in their "Strategic Plan, 2011-2015" represents "cellular and molecular studies, animal studies, human metabolic studies, and epidemiological research," not outcomes, health services research, and community-based research that are major research strengths at UAB that we will leverage in the proposed Program.<sup>26</sup>

Second, while particular strengths at UAB include its' portfolio on 1) aging, 2) nutrition, and 3) health services research, this proposal represents a novel effort in combining the three areas of expertise into a single unified program—something that leaders of each of these areas strongly desire. As required by NIA, it is important to note (based upon a search of NIH Reporter for the period 2006-2012) that UAB received one Academic Career Leadership Award in the past (Advanced Illness and Multi-morbidity; PI: C.S. Ritchie). Effective March, 2012, Dr. Ritchie resigned from UAB and accepted a position at the University of California San Francisco; thus, the award ended at UAB. The proposed award does not extend or conflict or overlap with the previous award (which focused on serious, progressive, incurable disease); however it does represent the confidence that previous reviewers and NIA placed in UAB to carry out a Career Leadership Award.

Finally, the Candidate learned that during the time that this application was being prepared, there were six Career Leadership Awards being supported by NIA. Five supported MD Candidates and one supported a PharmD Candidate; none supported a PhD Candidate. Thus, this application is unique in that it would support a PhD health services researcher with a deep appreciation for a Team Science approach to research and learning. Problems related to nutrition and aging are complex and multi-factorial; they require a

Research Strategy Page 159

multidisciplinary approach to understanding. This is a unique emphasis and strength of the proposed Career Leadership Award. Of note, five of the six Candidates generously shared their application with Dr. Locher and offered her guidance in preparing her application. For this, she is extremely grateful. It must be acknowledged that some strengths of this application are in large part based upon exemplary model programs developed by the other Candidates in completely different programmatic areas at other institutions.

- **11.3. Approach.** This section describes for each Specific Aim the explicit research and organizational plan to expand academic and research development in the area of Translational Nutrition and Aging Research—an area of particular interest to the NIA (as already described in Section 2.3).
- **Specific Aim #1:** To provide leadership, core faculty, and resources that support innovative, integrated, interdisciplinary, clinical, behavioral, and policy-related collaborations focused on translational nutrition and aging research.
- 11.3.1. (Leadership) Establish Internal Advisory Committee. Drs. Richard Allman (Director of the UAB Center for Aging), David Allison (Director of the UAB NORC), Ken Saag (Director of the UAB COERE), Michael Morrisey (Director, of the UAB Lister Hill Center for Health Policy), and Barbara Gower (Director of the Metabolism Core in Multiple Units) have all agreed to serve on the Internal Advisory Committee. These individuals represent leaders in their respective areas of study and within UAB. They will be formally responsible for providing a broad base of administrative and scientific advice regarding the Program's direction, priorities, and progress. Members will also help select awardees of pilot and travel grants. The Internal Advisory Committee will meet three times a year and as needed. In reality and depending upon the circumstances, Dr. Locher meets with some of these people weekly and emails with some daily.
- 11.3.2. (Leadership) Foster the pedagogical and leadership skills of the candidate. As already described in detail in Section 4.1, Dr. Locher's career development plan consists of participation in: 1) the AAMC Mid-Career Women Faculty Professional Development Workshop, 2) UAB's Leadership Development Program, 3) Mindfulness Leadership Training Workshops; and 4) a Formal 360 Degree Evaluation Process.
- 11.3.3. (Core Faculty) Identify and recruit faculty available for collaboration and mentorship. This task will involve ongoing related activities throughout the award period that build and enhance the infrastructure. Specifically, we will create a web-based catalog of current research and research opportunities in the area and engage in recruitment activities to support the program.
- 11.3.3.1. Create a web-based catalog of current research and research opportunities in the area. Already, Dr. Locher has formally identified a Research Base (described in the Facilities and Other Resources Section) of UAB investigators engaged in nutrition research (some related to translational nutrition and aging) whose work will be supported by NIH during the proposed application award period. Dr. Locher, with support from her Program Manager (Ms. Janet McCoy), will keep abreast of new funding received by investigators from UAB and its partners and these will be entered into a web-based catalog. Such a database may be used by all to identify common research collaborators, as well as by mentees to identify potential mentors. For each study, research opportunities for trainees will be explicitly described.
- 11.3.3.2. Recruit faculty to support translational nutrition and aging research program. In order to grow and sustain a viable Program in Translational Nutrition Aging Research for collaboration and mentorship, it is necessary to recruit and retain core faculty engaged in such work. We have in-place already a critical mass of key faculty members who can develop the program (Research Base is described in Facilities and Other Resources and in Letters of Support.). Additionally, Dr. Locher, in partnership especially with Drs. Allman and Allison will actively engage in recruitment of additional faculty as the program evolves and needs are identified. One particular area that we wish to grow immediately, and where Dr. Ginter has pledged his support, is in the recruitment of health economists and policy analysts whose work focuses on modeling and evaluation of outcomes (See Statements of Support.).
- 11.3.4. (Core Faculty) Obtain extramural funding to support translational nutrition and aging research. Receipt of extramural support is necessary to support the program. Dr. Locher currently serves as PI on two grants supported by NIA (one R01 and one R21), Co-PI on a two-year grant that just started supported by The American Egg Board (PI: B. Gower), Co-I on three other grants (one NIA R01, PI: R. Allman; one NIDDK P30, PI: D. Allison; one HRSA Training Grant, PI: L. McCormack). She has two grants under review at NIH—one as PI (an NCI R21 that received a fundable score) and as Co-I (an NCI R01 with W. Demark-Wahnefried as PI); and she plans to submit two R01s (one to NIA and one to NCI) in 2012. All of

these grants are relevant for the proposed Translational Nutrition and Aging Research Program and will support mentoring activities for the foreseeable future.

- 11.3.5. (Resources) Identify research opportunities (community-based partners and databases). Dr. Locher has extensive ties to community partners engaged in providing health care and supportive services to older adults—especially related to nutritional support. She will catalog these partners and facilitate collaborations between potential investigators and community resources. Additionally, Dr. Locher (with support from her Program Manager and in collaboration with others across campus) will catalog relevant cohorts and databases that: 1) are readily available for use by UAB investigators (e.g., the UAB Study of Aging), 2) are more easily available through UAB's major participation in large multi-site studies (e.g., MrOS, Look AHEAD), and 3) are made more accessible because of UAB's expertise of use of the database (e.g., administrative claims data such as Medicare and Medicaid). Some relevant cohorts and databases are described in the Facilities and Other Resources Section.
- 11.3.6. (Resources) Identify extramural funding opportunities from diverse sources. A web-based catalog of research funding opportunities will also be created and regularly updated. Dr. Locher has already informally started this database. For example, she keeps abreast of NIH/NIA funding opportunities related to nutrition and aging. Additionally, Dr. Locher, with support from Ms. McCoy, will catalog other relevant funding opportunities. These include from: federal sources (e.g., Patient Centered Outcomes Research Institute, Centers for Medicare and Medicaid Services Innovation Center) professional societies (e.g., American Heart Association, American Society for Parenteral and Enteral Nutrition); private agencies (e.g., Lucille Beeson Trust, the Meals on Wheels Association of America); and industry (e.g., Nestle, Abbott Laboratories, the American Egg Board). Dr. Locher is frequently solicited to submit grants to these groups (including announcements that are not publicly or widely distributed), and has received funding from several of these non-traditional sources to support both research and training activities. She will make investigators and trainees associated with the Program aware of such opportunities and facilitate communication.
- 11.3.7. (Resources) Create Community Liaison Core to support community-based research. Challenges encountered in conducting community-based research involve those related to formation of community partnerships and recruitment of study participants. To deal with these challenges, Drs. Locher and Ard (Associate Dean for Clinical Affairs and Vice Chair for Clinical Activity of Nutrition Sciences) have initiated discussions about how to pool resources across grants for investigators studying nutrition research with older adults in an effort to support a "Community Liaison Core." Such a Core would provide economies of scope wherein a brand could be used by all investigative teams to promote multiple studies at a single point in time (e.g., at a community health fair). Drs. Locher and Ard have already begun design of a tabletop exhibition display that is easily portable and can be customized with any number of literature pockets, visuals, and other accessories. Additionally, the Community Liaison Core would serve as a single point of contact for recruitment of older persons into nutrition-related studies. The Core would involve community representatives, particularly those representing underserved populations. Such a Core does not currently exist and would be greatly facilitated through receipt of this grant as Dr. Locher could devote more time to such critical activities.

**Specific Aim #2:** To provide high quality educational experiences related to translational nutrition and aging research for pre-doctoral trainees, post-doctoral fellows, junior and transitional faculty, and community stakeholders, including policy makers and the geriatric workforce.

- 11.3.7. Identify training programs available for trainees. A variety of training programs (both intramural and extramural) will be cataloged and made available to trainees. This will be enhanced through creation of a web-based catalog of research training opportunities. These are described in Section 6 of the Mentoring Plan.
- 11.3.8. Integrate aims of Program in Translational Nutrition and Aging Research into existing education and training programs. The curriculum development activities associated with this award are described in great detail in Section 4.2. Briefly, these activities include: 1) integrate didactic coursework into existing curricula (Nutrition through The Life Course, Aging Policy, and Patient-centered Health Outcomes); 2) develop a one-credit hour course on Translational Nutrition and Aging as part of the Gerontology Education Program; 3) develop a "Track" in Translational Nutrition and Aging for the Geriatric Education Center (GEC) Inter-professional Geriatric Conference; 4) develop a half-day "Quarterly Session" and companion two-hour Web-based Self-Study Session on Translational Nutrition and Aging topic for the GEC Faculty Scholars Program, and 5) develop a Module on Nutritional Processes of Care in Hospital Settings and with Transitions of Care to the Home for the Geriatric Scholars Program.

- 11.3.9. Complete UAB Nutrition and Aging T32 Institutional Training Grant for post-doctoral fellows. Drs. Allison, Allman, and Locher are currently working on completion of a T32 Institutional Training Grant for Post-doctoral Fellows focused on Nutrition and Aging to be submitted on 05.25.12. In preparation for this application, the UAB Nutrition and Obesity Research Center and the Center for Aging are co-sponsoring an oncampus Nutrition and Aging Round Table Discussion for faculty who may be interested. This 2-hour forum will be held on 03.02.12 at lunchtime and will bring together a variety of scientists from across campus.
- 11.3.10. Establish annual UAB-wide research retreat for mentors and trainees. An annual Retreat for trainees of the various NIH- and AHRQ-supported fellowships (as well as all others) who are engaged in Translational Nutrition and Aging Research will be held. The retreat will be an occasion for trainees to meet other trainees, mentors, and interested faculty and senior staff. Trainees will also have the opportunity to present and discuss their research. This is described in Section 6. Mentoring Plan.
- 11.3.11. Sponsor a seminar in translational nutrition and aging research that will be integrated into existing seminar series (3 per year). The Translational Nutrition and Aging Research program will sponsor or co-sponsor guest speakers for seminars, conferences, and workshops as part of well-established and ongoing programs of the Center for Aging, Nutrition and Obesity Research Center (NORC), Center for Outcomes and Effectiveness Research and Education (COERE), and Lister Hill Center for Health Policy. Both the Centers for Aging and the NORC sponsor weekly scientific seminar series; all Centers sponsor special conferences; the NORC and Lister Hill Center sponsor career development and methodological workshops; and the Lister Hill Center and COERE co-sponsor Works-In-Progress where researchers can present study proposals or analytical challenges that they wish to receive feedback (See Letters of Support.). Integration of speakers into these existing programs will ensure the Program's visibility and enhance durability over time.

**11.3.12. Sponsor research development awards.** The Program will sponsor small pilot grants and travel awards. These are described in detail in Section 6. Mentoring Plan.

traver awards. These are described in detail in Section 6. IV																			
TABLE 1. TIMELINE OF TRANSLATIONAL NUTRITION AND AGING RESEARCH PROGRAM.		Year		_		ar 2			Yea				Yea			—	Yea		_
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interdisciplinary, clinical, behavioral, and policy-related collaborations .																			
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Foster the Pedagogical and Leadership Skills of the Candidate		· ·		_		1											$\overline{}$		
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Participate in OAB's Leadership Development Program  Participate in Mindfulness Leadership Training	-	-	-	_	^	-			Х							$\dashv$	$\rightarrow$	$\dashv$	-
Engage in a Formal 360 Degree Evaluation Process	-		+	+	-	1			<del>  ^  </del>				Х		$\dashv$	$\dashv$	_	$\dashv$	
Core Faculty:						<u> </u>			<u> </u>				^					_	$\dashv$
Identify and Recruit Faculty Available for Collaboration and Mentorship																			
Create/Maintain Web-Based Catalog of Research and Research Opportunities	Y	Y	7	y I y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	¥	Y
Recruit Faculty to Support Translational Nutrition and Aging Research Program	×	X	<del>` '</del>	x x	X	X	X	X	X	X	X	X	X	X	X	X	^	<del>^</del>	<del>^</del>
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Obtain/Maintain Extramural Funding to Support Research	Y	Y	7 ,	хТх	Y	V	Y	Y	Y	Y	Х	Y	Y	Y	Х	Y	Y	Х	Х
Identify Research Opportunities (Community-Based Partners and Databases)	X	X 2	( )	X X	X	X	X	X	X	X	X	X	Х	X	X	X	X	X	X
Identify Extramural Funding Possibilities from Diverse Sources	X	X )	_	x x		X	Х	Х	X	Х	Х	Х	Х	Х	X	Х	X	Х	X
Create/Maintain Community Liaison Core to Support Research	_^	^ /		X X		X	X	X	X	X	X	X	X	X	X	X		X	X
SA#2: Provide high quality educational experiences for pre-doctoral trainees, post-doctoral								$\stackrel{\sim}{-}$											
fellows, junior and transitional faculty, and community stakeholders, including policy																			
makers and the geriatric workforce.																			
Identify Training Programs Available for Trainees & Create/Maintain Web-based Catalog		X )	( )	хТх	X	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х
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Integrate Didactic Coursework into Existing Curricula		X X	(		Х	Х			Х	Χ			Х	Х			Χ	Х	
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Develop/Direct Quarterly Session and Self-Study for Faculty Scholars Program				Х				Х				Х				Х			
Develop/Lead Module in Geriatric Scholars Program				Х				Х				Х				Х	$\Box$	$\neg$	
Complete/Implement UAB Nutrition and Aging T32 Institutional Training Grant		)	( )	x x	X	Х	Х	Х	Х	Χ	Х	Х	Х	Х	Х	Х	Х	Х	Χ
Establish/Hold Annual University-Wide Research Retreat for Mentors and Trainees				Х				Х				Х				Х			
Sponsor Seminars/Workshops in Collaboration with Existing Seminar Series (3 per year)	Х	X )	<	Х	X	Х		Х	Х	Χ		Х	Х	Х		Х	Χ	Х	
Sponsor Research Development Awards																			П
Sponsor Small Pilot Grants	Χ			Х				Х				Х				Х			
Sponsor Travel Awards	Χ			Х				Х				Х				Χ			
SA#3: Identify gaps in the current evidence base, address methodological issues, and set																			
priorities.																			
Establish/Convene External Advisory Committee	Χ			Х				Х				Х				Χ			
Establish Visiting Scholars Program	Χ			Х				Χ				Χ			$oldsymbol{oldsymbol{oldsymbol{oldsymbol{\Box}}}$	Х			
Submit/Conduct R24 Planning Grant Application	Χ		_	X X		Х	Χ	Χ	Х	Χ	Χ	Χ	Χ	Χ	Χ	Х	Χ	Χ	Χ
Disseminate Program Activities in Translational Nutrition and Aging Research	Х	X 2		x x	X	Х	Χ	Χ	Х	Χ	Χ	Χ	Χ	Χ	Х	Х	Χ	Х	Χ
Prepare/Submit Annual Progress Report			;	X			Χ				Χ				Χ				Χ

**Specific Aim #3:** To identify gaps in the current evidence base, address methodological issues, and set priorities for translational nutrition and aging research.

- 11.3.13. Establish external advisory committee. An External Advisory Committee comprised of preeminent experts in the study of nutrition and aging who represent diverse disciplines and play different roles will make up the External Advisory Committee. They include: Connie W. Bales, PhD RD; Heather Keller, PhD RD; Gordon Jensen, MD; Joseph R. Sharkey, PhD RD; and Nancy S. Wellman, PhD RD (See Biosketches and Letters of Support for a fuller description of the Committee's expertise.). The Committee will provide guidance on the overall direction and evaluation of her proposed program and will meet once a year for this purpose. Members of the Committee will also participate in the Visiting Scholars Program and work with the Candidate in preparation of an R24 planning grant (See Section 6. Mentoring Plan and below.).
- 11.3.14. Establish Visiting Scholars Program. Members of the External Advisory Committee will rotate as Visiting Scholars in the Program. Details of this are described in Section 6. Mentoring Plan.
- 11.3.15. Submit R24 planning grant application. Dr. Locher has already begun working on an R24 planning grant to develop research concepts and questions related to translational nutrition and aging that fosters interdisciplinary collaboration and advancement of the field. This work stems out of participation in the IOM Workshop, the CDC Nutrition Workgroup, and the AARP Researcher Roundtable. External Advisory Committee members and UAB faculty and trainees will be included in activities associated with this grant.
- 11.3.16. Disseminate activities of the program in translational nutrition and aging research. Beyond presenting scientific results in peer reviewed publications and at national meetings, faculty and trainees will also be encouraged to communicate their findings to the public and medical community through: 1) internal and regional and national websites; 2) press releases; 3) extensive partnerships with local, regional, and national organizations; and 4) through collaborations with the UAB Office of Continuing Medical Education.

# 21. Resource Sharing Plan.

Dr. Locher concurs with NIH policies regarding sharing. Therefore, the following plans will be implemented:

- 1) We will publish in respected scientific journals, acknowledge NIA support in our publications, and ensure published results of NIH funded work be made available to the public at the NIH NLM PMC.
- 2) We will make publicly available upon request curriculum that will be developed in association with this program. Participants in education programs will have immediate access to resources.
- 3) We will make readily and freely available to the world-wide scientific community all videotaped seminars, conferences, and workshops.
- 4) We do not anticipate engaging in any activities associated with model organisms or genome wide association studies; therefore we have no plans for sharing these.

# SUMMARY STATEMENT

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( Privileged Communication )

Release Date: 07/17/2012

Application Number: 1 K07 AG043588-01

**Principal Investigator** 

**LOCHER, JULIE L PHD** 

Applicant Organization: UNIVERSITY OF ALABAMA AT BIRMINGHAM

Review Group: NIA-S

**Behavior and Social Science of Aging Review Committee** 

 Meeting Date:
 06/06/2012
 RFA/PA:
 PA11-192

 Council:
 OCT 2012
 PCC:
 2CEPIPA

Requested Start: 09/01/2012

Project Title: Translational Nutrition and Aging Research Academic Career Leadership Award

SRG Action: Impact/Priority Score:

Human Subjects: 10-No human subjects involved

Animal Subjects: 10-No live vertebrate animals involved for competing appl.

Project	Direct Costs	Estimated
Year	Requested	Total Cost
1	•	
2		
3		
4		
5		
TOTAL		

ADMINISTRATIVE BUDGET NOTE: The budget shown is the requested budget and has not been adjusted to reflect any recommendations made by reviewers. If an award is planned, the costs will be calculated by Institute grants management staff based on the recommendations outlined below in the COMMITTEE BUDGET RECOMMENDATIONS section.

**RESUME AND SUMMARY OF DISCUSSION:** This application for an Academic Career Award (K07) from the University of Alabama is on behalf of Dr. Julie Locher who is currently the Associate Director of enrichment at the University of Alabama Nutrition and Obesity Research Center. Dr. Locher proposes to develop a program of translational research in nutrition and aging and provide leadership for faculty, educational experiences for junior investigators, and develop policy for translational nutrition and aging research. This well-written application has numerous strengths. The topic is of high significance and the review panel expressed great enthusiasm for the candidate, the proposed plan of work, as well as with the commitment of Dr. Locher and her track record with mentees. The candidate's primary role will be to integrate these resources into a cohesive program that incrementally advances research training and research productivity, and career development activities focusing on leadership training are appropriate for this goal. The support of the institution was also noteworthy as was the underlying robust research of the faculty. The combined institutional resources from aging, nutrition. and health services are an additional strength. A few minor weaknesses were identified; for example, the outcome evaluation was limited in scope and it was unclear how the research and education at UAB would be advanced with this award. Despite these minor weaknesses, the application was received with high enthusiasm.

**DESCRIPTION (provided by applicant):** The overarching goal of this K07 Academic Career Leadership Award is to develop a sustainable Program in Translational Nutrition and Aging based at the University of Alabama at Birmingham (UAB) and in partnership with organizations and individuals within the state of Alabama who have an interest in collaborating on nutrition and aging research initiatives. Specific Aims are to: 1) provide leadership, core faculty, and resources that support innovative, integrated, interdisciplinary, clinical, behavioral, and policy-related collaborations focused on translational nutrition and aging research; 2) provide high quality educational experiences related to translational nutrition and aging research for pre-doctoral trainees, post-doctoral fellows, junior and transitional faculty, and community stakeholders, including policy makers and the geriatric workforce; and 3) identify gaps in the current evidence base, address methodological issues, and set priorities for translational nutrition and aging research. The candidate, Julie L. Locher, is a Medical Sociologist and Health Services Researcher whose work as an independent investigator has been devoted to the study of: 1) eating behaviors and nutrition issues of older adults and 2) the various dimensions through which nutrition affects patient-centered outcomes in older adults. Most of her work focuses on social and environmental factors, including community and health care practices and policies that affect eating behaviors and nutrition-related health outcomes in this population. She is uniquely trained in mixed quantitative and qualitative applied research methods. Dr. Locher possesses the professional qualifications and personal qualities necessary for developing and leading a substantive and sustainable Program in Translational Nutrition and Aging Research that is both timely and cutting-edge. UAB is a world leader in: 1) geriatrics, gerontology, palliative and supportive care research, education, and clinical care; 2) nutrition and obesity research, education, and clinical care; and 3) patient-centered outcomes and comparative effectiveness research and training. The candidate and UAB, with the support of a stellar External Advisory Committee, are particularly well-poised to carry out the proposed aims of the program. Demographic and economic imperatives highlight the reality that nutritional matters are too costly to ignore in our rapidly aging society. This is especially true in consideration of: 1) increasing efforts to improve transitions of care linking hospital and home health services with community-based services in order to reduce preventable healthcare utilization and 2) increasing initiatives to rebalance long-term care so that older adults can remain in the community versus having to enter an institution. Rising rates of overweight and obese Baby Boomers who enter into older adulthood with concomitant obesity-related comorbidities and disability present additional and complicating challenges to these trends wherein nutritional matters figure prominently.

**PUBLIC HEALTH RELEVANCE:** The expected outcome of this award is to produce a community of scholars representing diverse backgrounds and interests who possess the knowledge and skills necessary to conduct relevant and impactful research in the area of translational nutrition and aging

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research relevant to clinical care and population-based health initiatives. Accomplishments of the Program in Translational Nutrition and Aging Research ultimately have the potential to reduce burdens on older individuals and their caregivers and society as a whole.

#### **CRITIQUE 1:**

Candidate:

Career Development Plan/Career Goals/Plan to Provide Mentoring:

Research Plan:

Mentor(s), Co-Mentor(s), Consultant(s), Collaborator(s):

Environment, Commitment to the Candidate:

# **Overall Impact:**

Dr. Locher is seeking funding through the K07 mechanism to support her work as a mentor and in creating a Program in Translational Nutrition and Aging Research at the University of Alabama, Birmingham. The application fits well into the designated purpose of the K07 award for senior researchers. The mentoring portion of the application is strong and suggests that there is much to be gained from a program that would combine resources from the fields of aging, nutritional, and health services research. The application is well written and builds a convincing case for the synergies to be gained from such a program and the benefits provided to trainees.

#### 1. Candidate:

# **Strengths**

- Candidate is an associate professor of medicine and public health at the University of Alabama at Birmingham. She completed her Ph.D. in medical sociology, also at UAB in 1999 and has had an active and funded research agenda since that time including a K01 award and an R01.
- She has a large number of publications many as first author.
- She has been active in mentoring with T32 awardees and K awardees. She has been honored by UAB for her mentoring and by all indications does a stellar job with her mentees and is extremely generous with her time.

#### Weaknesses

There is some concern that her publication record has sacrificed quantity over quality.

# 2. Career Development Plan/Career Goals & Objectives/Plan to Provide Mentoring: Strengths

- The PI has a good deal of experience in mentoring and appears to be extraordinarily committed
  to the process. The application notes that she is frequently sought out to provide mentorship for
  trainees. Formalizing Dr. Locher's role and building an organizational structure into which
  trainees and others interested in similar research could interact would be extremely worthwhile.
- The plan consists of several important components which will link the various entities on campus. The research environment at UAB is already strong and through better communication can become an even more important producer of high quality research.
- The mentorship program as outlined here will provide a clearing house for trainees to be paired
  with mentors (and co-mentors) and a web-based structure to facilitate the exchange of
  information regarding research opportunities. The mentorship relationship will be formalized via
  a "contract." Trainees will have regular opportunities to present their work and there will be an
  annual retreat.
- The mentoring program is well developed and includes funding for pilot grants.

#### Weaknesses

None noted.

# 3. Research Plan:

# **Strengths**

- Dr. Locher appears to have a successful research program as evidenced by publications and grants.
- There is some funding available for pilot projects that would be made available to more senior scholars as well. This application has as one of its goal the generation of external funding.

#### Weaknesses

- While the mentoring portion of the application is strong, it is less clear how the award would be used to improve research on campus; although, the indirect effects involving the mentorship program will be large.
- There is little in the application explaining how the award would forward this aspect of her career or of others on campus.

# 4. Mentor(s), Consultant(s), Collaborator(s): Strengths

- Dr. Locher has proposed creating both internal and external advisory committees. These committees are staffed with distinguished researchers who hold important positions within the university (for the internal committee) and in the community (external committee). Their support is a strength of the application.
- Members of the external advisory board have agreed to serve as visiting scholars and to meet with mentees during the grant.

# Weaknesses

None noted.

# 5. Environment and Institutional Commitment to the Candidate: Strengths

- University of Alabama at Birmingham provides an excellent environment for the work. The Center on Aging appears to be particularly active in the community.
- The institution appears to be exceptionally supportive of Dr. Locher and her goal of building a formal research program in Translational Nutrition and Aging. She has backing from numerous entities on campus and in the community. This support is a real strength of the application.
- Dr. Allman of the Center for Aging at UAB will provide release time for Dr. Locher. This is an important component of her success. Additional support is provided for an annual conference.

# Weaknesses

None noted.

# **Protections for Human Subjects:**

Acceptable Risks and/or Adequate Protections.

#### **Vertebrate Animals:**

Not Applicable (No Vertebrate Animals).

#### **Biohazards:**

Not Applicable (No Biohazards).

#### Training in the Responsible Conduct of Research:

Acceptable.

#### **Select Agents:**

Not Applicable (No Select Agents).

# **Resource Sharing Plans:**

Not Applicable (No Relevant Resources).

# **Budget and Period of Support:**

Recommend as requested.

#### **CRITIQUE 2:**

Candidate:

Career Development Plan/Career Goals /Plan to Provide Mentoring:

Research Plan:

Mentor(s), Co-Mentor(s), Consultant(s), Collaborator(s):

Environment, Commitment to the Candidate:

# **Overall Impact:**

This leadership application will provide support for Dr. Locher to establish a Program in Translational Nutrition and Aging based at the University of Alabama at Birmingham (UAB). This program will integrate currently existing, strong research programs in nutrition, aging, and patient reported outcomes. Dr. Locher is a mid-career investigator with impressive research productivity, experience in teaching, mentoring, and curriculum development, and strong collaborations with major research programs at UAB. She is a very strong candidate for this award. The environment is also very strong and provides substantial resources for the Translational Nutrition and Aging Program. The institutional and program level of support for this application and for Dr. Locher is quite impressive and will contribute to a high likelihood of success. Overall, this is a very strong application. The major weakness is that there is not a clear, formal evaluation plan to document how this award will incrementally advance the research environment at UAB.

# 1. Candidate:

# **Strengths**

- Strong record of research productivity.
- Well integrated into aging and nutrition research programs at UAB.
- Experience in developing education curriculum.
- Unusually strong mentoring background given her level of career development.

# Weaknesses

None identified.

# 2. Career Development Plan/Career Goals & Objectives/Plan to Provide Mentoring: Strengths

- Focus of individual career development plan on leadership skills is appropriate given the broad integrative function the candidate will assume.
- Curriculum development plans integrate resources and educational activities related to this application.

# Weaknesses

Formal evaluation of outcomes is limited.

# 3. Research Plan:

#### **Strenaths**

- · Clear aims.
- Clearly specified methods for achieving aims.
- Strong integration of major research programs at UAB with active involvement of program leaders.

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Strong internal and external advisory committees to oversee progress.

#### Weaknesses

The evaluation criteria to determine if the aims are being met are not clearly specified. This application seeks to provide leadership to integrate translational research and research training across many different investigators and programs. The diversity and viability of the research environment at UAB is a major strength. Evaluating how this award will incrementally advance the research and education agenda at UAB is a central concern.

# 4. Mentor(s), Consultant(s), Collaborator(s): Strengths

- The candidate personally has a strong history of mentoring and is well integrated with research and education programs that provide ongoing mentoring.
- Availability of many potential mentors with funded research relevant to this application.

#### Weaknesses

None identified.

# 5. Environment and Institutional Commitment to the Candidate: **Strengths**

- Availability of substantial funded research relevant to this application.
- High level of institutional enthusiasm and support for the candidate and this application.

#### Weaknesses

None identified.

# **Protections for Human Subjects:**

Not Applicable (No Human Subjects).

#### **Vertebrate Animals:**

Not Applicable (No Vertebrate Animals).

#### **Biohazards:**

Not Applicable (No Biohazards).

# **Training in the Responsible Conduct of Research:**

Acceptable.

Comments on Format:

Acceptable.

Comments on Subject Matter:

Acceptable.

Comments on Faculty Participation:

Acceptable.

Comments on Duration:

Acceptable.

Comments on Frequency:

Acceptable.

#### **Select Agents:**

Not Applicable (No Select Agents).

#### **Resource Sharing Plans:**

Acceptable.

# **Budget and Period of Support:**

Recommend as requested.

#### **CRITIQUE 3:**

Candidate:

Career Development Plan/Career Goals/Plan to Provide Mentoring:

Research Plan:

Mentor(s), Co-Mentor(s), Consultant(s), Collaborator(s):

Environment, Commitment to the Candidate:

#### **Overall Impact:**

This is an outstanding application by a highly competent researcher, supported by an outstanding mentoring team, to develop a sustainable Program in Translational Nutrition and Aging based at UAB, Birmingham – which has a remarkably rich environment and demonstrated institutional support. If successful, this Program will have a major impact on clinical care and population-based health initiatives in nutrition and aging.

# 3. Research Plan:

# **Strengths**

• The research strategy clearly links the specific aims with a specific plan to expand and sustain research development in translational nutrition and aging research.

#### Weaknesses

None noted.

# 4. Mentor(s), Consultant(s), Collaborator(s):

#### **Strengths**

 Outstanding team of mentors, clearly supportive, skills and aligned to support the development of the candidate and the program.

#### Weaknesses

None noted.

# 5. Environment and Institutional Commitment to the Candidate:

# **Strengths**

Robust environmental infrastructure and clear institutional commitment to the candidate.

#### Weaknesses

• None noted.

THE FOLLOWING RESUME SECTIONS WERE PREPARED BY THE SCIENTIFIC REVIEW OFFICER TO SUMMARIZE THE OUTCOME OF DISCUSSIONS OF THE REVIEW COMMITTEE ON THE FOLLOWING ISSUES:

COMMITTEE BUDGET RECOMMENDATIONS: The budget was recommended as requested.

NIH has modified its policy regarding the receipt of resubmissions (amended applications). See Guide Notice NOT-OD-10-080 at http://grants.nih.gov/grants/guide/notice-files/NOT-OD-10-080.html.

The impact/priority score is calculated after discussion of an application by averaging the overall scores (1-9) given by all voting reviewers on the committee and multiplying by 10. The criterion scores are submitted prior to the meeting by the individual reviewers assigned to an application, and are not discussed specifically at the review meeting or calculated into the overall impact score. For details on the review process, see http://grants.nih.gov/grants/peer\_review\_process.htm#scoring.

#### **MEETING ROSTER**

# Behavior and Social Science of Aging Review Committee National Institute on Aging Initial Review Group NATIONAL INSTITUTE ON AGING NIA-S 1

June 06, 2012 - June 07, 2012

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\* Temporary Member. For grant applications, temporary members may participate in the entire meeting or may review only selected applications as needed.

Consultants are required to absent themselves from the room during the review of any application if their presence would constitute or appear to constitute a conflict of interest.