

UAB MINORITY HEALTH AND HEALTH DISPARITIES RESEARCH CENTER

A University-Wide Interdisciplinary Research Center Since 2005 • 2017 Edition

THE MHRC

IMPROVING HEALTH.
IMPROVING LIVES.



A Word from Dr. Mona Fouad



2017 is a hallmark year for the Minority Health & Health Disparities Research Center (MHRC) as we celebrate 15 years of challenging, groundbreaking work to understand, address, and eliminate health disparities among ethnic and racial minorities. As we've enjoyed the expansion of our mission to global sites, we continue to cultivate the vision and

infrastructure here in the American South to uncover ways to improve the health of men, women, and children close to home.

The MHRC's unique three-pillar approach, which unites research, training, and community engagement, has yielded meaningful results. Not only has there been an unprecedented expansion of health disparities research, here at UAB and in collaborative relationships with national and international grant partners, we have overseen an increase in the number of researchers and young scholars pursuing a career in minority health and health disparities, and helped empower communities to take charge of their own health. The dynamic interplay between research, training, and community engagement enables each pillar to function more vitally and effectively, increases capacity, and lays a framework for health disparities investigations for the years and decades to come.

In this issue of the UAB MHRC Magazine, we reflect on the foundation and growth of the Center, as well as share and celebrate our current progress in research, training, and community engagement programs. This September, we celebrate the return of the MHRC Young Professionals Board's Casino Royale fundraiser Harlem in the 'Ham, and highlight the local, national, and international impact of our work in investigating and combatting health disparities: from urban Alabama, to rural Mississippi, to industrial areas of the United Kingdom – and as far afield as Alexandria, Egypt.

I would be remiss if I did not recognize the co-founders of the MHRC: Dr. Selwyn Vickers, Vice President, Medicine UAB, for his remarkable vision for the center and Dr. Ed Partridge, Director of the UAB Comprehensive Cancer Center, for his crucial contributions to the MHRC. Ed retired this year after an illustrious career of nearly 50 years, serving patients, communities, and the pursuit of health science in countless ways. I am grateful to Ed for his vision and wisdom in helping establishing the MHRC. He is a colleague and a friend who always believed that our research must lead to improved lives. We wish you the best!

Mona Fouad

MHRC Staff

Mona Fouad, MD, MPH

Director, MHRC

Senior Associate Dean for Diversity & Inclusion,

UAB School of Medicine

Professor and Director,

Division of Preventive Medicine

Edward E. Partridge, MD

Co-Director, MHRC

Director, UAB Comprehensive

Cancer Center

Maria C. Norena, BSocSci

Associate Center Director,

Strategy and Innovation

Gabriela Oates, PhD

Director, Research

Will Anderson, PhD

Research Associate

Joanice Thompson

Director, Community Outreach

Bianca Hawk, MSW, MP

Program Manager, Community Outreach

Tiffany Osborne

Program Coordinator

Community Outreach

Ann Smith, MPH

Director, Training

Dawn Fizer

Program Manager, Training

Susan J. Driggers

Director, Communications

Laura Heider, MBA

Communication Specialist

Graphic Design Artist

Randi Gilinson

Assistant to the Director





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THE MHRC: CREATING A LEGACY OF HEALTH

FOR 15 YEARS, THE MINORITY HEALTH AND HEALTH DISPARITIES RESEARCH CENTER HAS BEEN REVOLUTIONIZING RESEARCH AND INTERVENTIONS IN HEALTH DISPARITIES.

Fifteen years ago, the study of health disparities was not considered a scientific research priority.

In 2002, when Mona Fouad, MD, MPH, received funding to investigate the differences in health and health outcomes between groups of people living in the United States, the term “health disparities” was largely unused. Although the U.S. Department of Health and Human Services had acknowledged in the 1980s that members of minority communities, especially those in economically challenged areas, were more likely to suffer serious health problems than those living in largely white, affluent areas, the attempts to understand why weren’t considered serious scientific investigations.

The enterprise that would become the Minority Health & Health Disparities Research

Center (MHRC) came into being on a new, growing understanding of what the most recent research was making clear: that society could make you sick.

Today, the study of health disparities is accepted as a science. It is an acknowledged reality that your race, your education level, your income, and numerous other factors play critical roles in determining your likelihood of developing chronic and acute diseases.

For many years, however, an intrepid group of researchers, including Fouad, and the MHRC’s co-directors Edward Partridge, MD and Selwyn Vickers, MD, FACS, labored within the scientific establishment to establish the validity of the study of health disparities.

In 2000, Fouad’s expertise was recognized on the national level as she asked, along with other experts, to assist in the establishment

of the health disparities initiatives for the National Institute on Minority Health and Health Disparities (NIMHD). With the establishment of the MHRC two years later, Fouad's success was a validation of the importance of health disparities research.

As one of the initial centers created in the United States to study issues of differential health outcomes experienced by racial and ethnic minorities and underserved populations, the MHRC was crucial to building the foundation for investigation into matters that could result in better health for vulnerable communities.



Ed Partridge, Dudley Reynolds, Lajuana Bradford, Charles Barkley, Koko Mackin, Mona Fouad, and Dick Marchase celebrate Barkley's support of the MHRC at the 2012 Gala.

equation wasn't nearly so straightforward – and that rigorous scientific research could, in fact, establish whether or not there was a conclusive link between demographic factors, such as race, education, and income level, and a heightened risk of disease and death for minority groups.

Mona Fouad, Edward Partridge, and Selwyn Vickers collaborated on the proposal to the UAB Board of Trustees that would establish the MHRC as a University-wide interdisciplinary research center dedicated to investigating minority health and health disparities.

“When we were establishing and growing the MHRC, my whole life was spent convincing the scientific community that the study of health

EARLY DAYS OF THE MHRC

Fouad was awarded \$50,000 in pilot funding by the University of Alabama at Birmingham (UAB) to begin health disparities research. Six months later, the Center received its first federal funding, with a P60 grant awarded under the leadership of PI Selwyn Vickers. Still, Fouad was faced with a significant task: to begin to trace the linkages between the factors that impact health within disadvantaged communities.

Conventional wisdom held that health was a combination of good genes and personal choice. If you weren't predisposed to genetic disease, the theory went, you could maintain health throughout your lifetime with a combination of diet, exercise, and periodic checkups with the doctor. The MHRC was established on the hypothesis that the health

disparities is not simply community research – it is a science,” explains Mona Fouad, MD, MPH, director of the MHRC. “We are investigating the entire health spectrum: the intersection of biological and non-biological factors, from discovery to delivery.”

One of the early problems faced by health researchers was the lack of health information specific to minority groups. There were not many minority participants in clinical trials, which meant that faulty assumptions were possible because they weren't being tested with minority people. The work by Fouad, and community health advocate Joatrice Thompson, dramatically increased minority recruitment in clinical trials. This effort laid the



2002

- MHRC established
- REACH 2010 grant awarded and Community Health Advisors begin work



2004

- Charles Barkley supports young investigators with a major gift



2003

- NIMHD awards National Center of Excellence Phase I



2005

- MHRC approved as a UWIRC
- 1st UAB Health Disparities Research Symposium
- MSM/TU/UAB Cancer Partnership established
- Fouad Receives Sullivan Award

Since its inception, the MHRC has received more than \$163 million in external funding

foundation for what would later become the MHRC's community engagement program.

The MHRC was built on an innovative interdisciplinary model which combined research, training and community engagement. Training a new generation of researchers to build the pipeline of minority scholars and healthcare professionals was essential to addressing the concerns of minority communities who all too often wondered why their healthcare providers looked nothing like them. Community engagement programs translated health disparities research into action, forging meaningful connections between the academic institutions which generate health disparities research, and the communities who would enjoy the greatest lessons learned from the research.

The MHRC's tri-fold model of research, training, and outreach has subsequently been modeled not only in similar centers in the United States, but also in the United Kingdom.

GROWING A SCIENCE

The innovative model of the MHRC facilitated its ability to secure additional grant funding, led by Dr. Selwyn Vickers. In 2003 the Center was funded as a National Center of Excellence for Health Disparities Research by the National Institute for Minority Health and Health Disparities (NIMHD) at the NIH. The following year, the Center received the support of basketball superstar Charles Barkley, who established a program to provide pilot project funding to young investigators. That same year, Mona Fouad received the Sullivan Best Practice Award for Excellence in Overcoming Disparities from the Association of Academic Health Centers.

In 2005, the UAB Board of Trustees approved the MHRC as a full University-Wide Interdisciplinary Research Center (UWIRC), and the first annual MHRC Gala raised more than \$150,000 to fund its research programs. The same year, Fouad also received the American Medical Association's Award of Excellence in Eliminating Health Disparities. In the succeeding years, the MHRC was funded twice more as an NIMHD P60 Center of Excellence, under the leadership of Dr. Fouad and Dr. Partridge.

In addition, the Centers for Disease Control and Prevention funded the Racial and Ethnic Approaches to Community Health (REACH), which enabled research initiatives to not only build community relationships, but to determine if these relationships could improve the rate of cancer screening among African American women in rural Alabama. This research found that training a community's natural leaders as health advisors could improve healthy behaviors, a further validation of the MHRC's model of integrating research with community outreach.

In 2010, the MHRC, through REACH, convened the Health and Economic Development Summit to



2006

- WALK Feel Alive & Healthy Happy Kids programs begin
- Community Advisory Board established
- Annual gala raises more than \$238,000



2008

- Dr. Mona Fouad appointed to NIMHD Advisory Council
- Name changed to Minority Health & Health Disparities Research Center



2007

- MHRC receives NIMHD Phase II Center of Excellence funding
- MHRC Excellence in Mentoring award established
- REACH US funded by CDC



2010

- Maya Angelou is a special guest at 5th MHRC Gala
- Young Professionals Board begins



develop an action plan for improving health outcomes and economic growth in Alabama. The think tank of more than 100 researchers, policy makers, elected officials, health and economic development specialists, community leaders, and residents from rural and inner-city neighborhoods identified education, transportation, and equity as the top priorities.

The work of the MHRC was expanding and beginning to explore the many factors of health disparities at both the individual and socio-ecological levels. The research, which spanned a number of disciplines, was making clear that solid scientific evidence existed that a number of factors played key roles in health outcomes. In fact, your race, income, education level, cultural understanding, upbringing, and the neighborhood in which you live all help determine what diseases you are likely to experience, and how long you are likely to live.

“Because the problem of health disparities among minorities is so complex and nuanced, we are engaged in a process of continual investigation,” says Fouad.

BUILDING INFRASTRUCTURE

In 2012, the MHRC redoubled focus on the social determinants of health, as it became part of the first of what would ultimately become three research centers. The Mid-South Transdisciplinary Collaborative Center for Health Disparities Research (Mid-South TCC), funded by the NIMHD, became one of the first groups nationwide to investigate the social determinants of health and health disparities, and their impact on biological and non-biological factors for obesity and chronic diseases.

The Mid-South TCC was only the beginning of the significant efforts to improve understanding of the social determinants of health. Because of its integrative research infrastructure, the MHRC supports three of the NIH’s seven national Transdisciplinary Collaborative Centers: not only the Mid-South TCC, but the Center for Health African American Men Through Partnerships (CHAAMPS), led by Dr. Selwyn Vickers, and the Gulf States Health Policy Center (GSHPC), led by Dr. Regina Benjamin.



2011

- NIMHD funds Center of Excellence Phase III
- US-UK Communities for Health partnership formed with University of Staffordshire, U.K.
- UAB HealthSmart opens



2013

- NIMHD funds 2 more U54 centers for African American Men’s Health and Health Policy



2012

- NIMHD awards U54 funding for Mid-South TCC to study social determinants of health
- First Lady Michelle Obama visits Healthy Happy Kids childhood obesity prevention program



2014

- CDC awards U58 grant for Birmingham REACH for Better Health



The MHRC's research has discovered crucial linkages between race and gender and cancer rates, uncovered connections between stress and poor health outcomes, and explored the practical results of community-based participatory research. Maternal health, and its connections to race and income, has been studied and linked to the health of their children. Geocoding has provided critical insights into why particular neighborhoods suffer, on average, greater health problems than their counterparts a few miles away.

More than this, the development of Community Health Advocates within low-income communities has helped patients suffering from a wide variety of health challenges improve their health outcomes, and provided crucial information on how to prevent disease through taking control of nutrition and exercise.

The research, training, and community engagement which underpins the MHRC has contributed to policy change on local, state, and national levels, as well as reaching overseas to impact communities several time zones away.

The success of the Center is in its groundbreaking, multifaceted approach. This approach rejects a perception that health challenges exist in isolation from the economic and social factors which play such a significant role in

the lives of individuals and communities.

Since 2005, the MHRC has provided a comprehensive infrastructure that has helped secure more than \$100 million in competitive awards from the Federal government. Additionally, it has granted \$6.18 million in pilot funding to 130 investigators, and has leveraged their funds to generate \$163 million additional extramural funding. This means that for every dollar invested in research, \$26 in funding is obtained from outside sources to facilitate investigative work into health disparities – a remarkable achievement. In 2016 – 2017 alone, the MHRC boasted 130 unique publications in peer-reviewed journals, and 23 of the Center's previous pilot grant recipients received \$44.5 million in total funding to continue their research. This has allowed comprehensive and meaningful research into the greatest challenges in addressing health disparities, and the community interventions that are most likely to be effective.



Acclaimed American poet, Maya Angelou, was the guest of honor at an event in 2010 to raise funding for a women's health initiative.

interventions that are most likely to be effective.

"The MHRC laid the foundation for the scientific exploration of health disparities in the United States," says Selwyn Vickers, MD, Senior Vice President for Medicine. "The work performed by its scientists will have implications for health disparities research for decades to come, not only in the United States, but around the globe."



2015

- 10th annual UAB Health Disparities Research Symposium



2017

- UAB chosen as a STEP-UP coordinating research site for a national research program, funded by NIDDK
- In only 15 years, the MHRC has returned more than \$163 million in external funding to UAB



2016

- REACH Parks Rx launched
- UAB HealthSmart moves to Medical Towers



RESEARCH DRIVES THE MHRC

THE MHRC DRAWS UPON INNOVATIVE RESEARCH FROM CRITICAL CENTER GRANTS

The innovative nature of the MHRC indicates that the research involved to support it will be wide-ranging and comprehensive, embracing and uniting a variety of disciplines. No interventions, training initiatives, or community programs will be implemented without relying on a solid foundation of scientific research. Along with other crucial funding sources, three key center grants, funded by the National Institutes of Health, provide the funding for this critical research: the Mid-South Transdisciplinary Collaborative Center (Mid-South TCC), the Gulf States Health Policy Center (GS-HPC), and the Center for Healthy African American Men Through Partnerships (CHAAMPS).

MID-SOUTH TCC

The Mid-South TCC began in 2013 as a coalition of academic institutions and community partners in Alabama, Arkansas, Kentucky, Louisiana, Mississippi and Tennessee, home to some of the starkest health disparities in the nation. The Mid-South TCC was built on a framework created by the MHRC through the REACH initiative in six states that would later become the core of the Mid-South TCC.

Through partnerships among three academic institutions and more than 110 community partners, the Mid-South TCC has funded two full research endeavors, thirteen pilot research projects, and fifteen secondary data analyses. Findings have been published in peer-reviewed publications across the country, including in a special issue of the American Journal of Preventive Medicine in 2016. Principal investigators are Mona Fouad, MD, MPH, Ed Partridge, MD, both of UAB; Marinelle Payton, MD, PhD, MPH of Jackson State University; Mario Sims, PhD of

University of Mississippi Medical Center; and Lucio Miele, MD and Richard Scribner, PhD, both of LSU.

The Mid-South TCC team used a novel research approach: investigating pathways to obesity and resulting chronic diseases focused on the social determinants of health. They built supportive academic-community partnerships that have yielded impactful research and meaningful interventions. The research sponsored and supported by the Mid-South TCC has yielded new insights into maternal and childhood obesity, the effectiveness of a variety of community programs, and the linkages between environment and a number of disease predictors.

The Mid-South TCC approach has generated a systematic integration of research perspectives, along with developing a cost-effective way to share resources among collaborating researchers and community partners. These long-term collaborative interactions with stakeholders have paved the way for more meaningful interventions and new research paths, and built relationships that can be used for new research endeavors moving into the future. Some of the key outcomes of this work include the creation of a social determinant of health toolkit, based on an integrative research structure, with resources that can be used by investigators on new projects; the cultivation of expertise for mentored research and training, and building capacity on a community level to help neighborhoods meaningfully address their own health problems.

The Mid-South TCC is funded by the National Institute on Minority Health and Health Disparities Award # U54MD008176.



GULF STATES HEALTH POLICY CENTER

The Gulf States Health Policy Center (GS-HPC) conducts health policy research to improve health outcomes and reduce health disparities in the Gulf States region (Alabama, Mississippi, Louisiana, Texas, and Florida). The Center supports primary research projects that examine obesity prevention, disaster impact, and physical activity, as well as pilot projects led by co-Principal Investigators from academic institutions and community organizations that address a range of health policies.

GS-HPC also fosters exchange and collaboration between academic and community partners via the Gulf States Health Policy Coalition. Comprised of over 90 organizations, the coalition meets monthly in four locations to develop and promote community-based research. Through the coalition, members have increased their networks, knowledge, and efforts in health in the region, as evidenced in GS-HPC's social network analysis.

In 2016, GS-HPC launched the Gulf States Community Research Fellows Program, a 16-week course designed to train community members in the basics of research, health policy,

and health disparities in order to improve health in their communities. By May 2017, GS-HPC will have graduated 82 Fellows, who will be poised to serve as informed partners in academic research, improve health using evidence based methods, pursue grants to support their work, and publish scholarly works.

In 2017, GS-HPC looks forward to sharing its research and work, along with contributors in the Southern Gulf States, in a special issue of *Progress in Community Health Partnerships: Research, Education, and Action*, a journal produced by Johns Hopkins University Press. This GS-HPC special issue will highlight community-academic research, featuring best practices in Community Based Participatory Research (CBPR), health policy research, coalition-building, and dissemination.

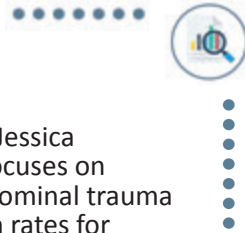
GS-HPC principal investigators are Regina Benjamin, MD, MBA – BayouClinic, Michelle Martin, PhD and Maria Pisu, PhD – UAB. It is funded by the NIH - National Institute on Minority Health and Health Disparities, Award #U54MD008602.



Below: Dr. Regina Benjamin, center, with pilot project investigators Joyce Esters and Olivia Ismail.

Right: Donald Ponquiette and Lisa Davis, GSHPC coalition members, attend a meeting in Bayou LaBatre.





Skube, MD and Jessica Williams, PhD focuses on penetrating abdominal trauma and readmission rates for acute myocardial infarction, respectively.

A forum, held in conjunction with the CHAAMPS National Meeting, sought to raise awareness and begin a discussion via a public forum “Reducing Violence Against African American Males”. A keynote address by Dr. Deborah Prothrow-Stith, one of the pre-eminent leaders in addressing violence as a public health issue, followed by a panel discussion moderated by Minnesota Public Radio news host Tom Weber provided a forum to discuss this timely issue. The forum was attended by conference attendees, along with University of Minnesota students, staff and faculty; community organization members; and public and government members.

Data show that there is much work yet to be done to close the gap in health disparities. Partnerships with the National USA Foundation, Inc. (Pastor Marcus Davidson) and 100 Black Men of America, Inc. (Dr. Mark Alexander) are invaluable to the continued success of CHAAMPS. Moving forward, research efforts continue to focus on discoveries and solutions aimed at reducing health disparities in African American boys and men.

CHAAMPS is led by principal investigators Selwyn Vickers, MD - UAB, Badri Konety, MD – University of Minnesota, and James Shikany, DrPH – UAB. It is funded by the National Institute on Minority Health and Health Disparities, Award # U54MD008620.

CHAAMPS

The Center for Healthy African American Men through Partnerships (CHAAMPS) is working to change the health of African American men with a new research approach.

Typically, African American (AA) men’s health research focuses on disease risk factors. Traditional research often ignores the multiple complex interplay of socio-environmental, behavioral and biological factors that drive and sustain the pronounced disparities in AA men. By investigating the socioeconomic and environmental factors involved in AA men’s health, CHAAMPS takes a life-course approach, pinpointing critical periods in a person’s life, such as youth/adolescence, young adulthood, middle age and older adulthood, when social context may affect physiology or shape health behavior.

The CHAAMPS research portfolio includes 16 projects focused on diabetes, cardiovascular disease, cancer, violence and adolescent risk-taking Investigators and community partners work together in partnership, to help change the current trajectory of the health of AA males.

The CHAAMPS Disparities Scholars Program (CDSP) was introduced in 2016. It provides junior research investigators the opportunity to conduct research under the mentorship of senior CHAAMPS investigators and analysts. Scholars have access to analyzed datasets from national databases along with biostatistical and study design support.

CDSP scholars have been productive. Elliot Arsoniadis, MD presented his research investigating whether AA men undergo a higher rate of anal-sphincter-sacrificing surgery for rectal cancer compared to non-African American men at the American College of Surgeons Clinical Congress, this past October. Ricardo Franco, MD, is investigating racial disparities in specific outcomes of end-stage liver disease among hepatitis C-infected individuals. Additional research by scholars Steven





HEALTH DISPARITIES RESEARCH SYMPOSIUM 2017

IN MAY 2017, INVESTIGATORS FROM ALL OVER THE UNITED STATES
GATHERED TO SHARE CRUCIAL RESEARCH FINDINGS

On May 3, about 210 physicians, scientists, academic investigators, community partners, and students convened at the annual UAB Health Disparities Research Symposium to share the latest research in the field of health disparities. Participants took an in-depth look at the role of social determinants, discussing the complex factors that affect the health of communities and how to improve the nation's health.

The symposium began 12 years ago to bring in scientists and community members to share their knowledge, interventions and models, and learn from each other to address health problems. This year's focus was the role of social determinants in population health.

Keynote speaker, Catarina Kiefe, PhD, MD, Chair and Professor, Department of Quantitative Health Sciences and Medicine at the University of Massachusetts Medical School, said there is a "striking need for equity of healthcare" throughout the nation. There is a recognized pathway from poverty to Type 2 diabetes. "Socioeconomic deprivation is linked to relative risk," Kiefe said. "We know that poverty, race and ethnicity are strongly associated with Type 2 diabetes. There's strong observational evidence that links Type 2 diabetes to minority, racial and ethnic status."

Also speaking was Jeroan Allison, MD, MS, Professor and Vice Chair of the Department of Quantitative Health Sciences at University of Massachusetts Medical School. He discussed how to fix the social determinants of health, citing emerging lessons from education, practice, and policy.

Other symposium highlights included oral presentations and poster sessions featuring original health disparities research in basic science, clinical research, social and behavioral science, and community-based approaches to research.

The year's symposium was produced by the MHRC and co-sponsored by two national centers for health disparities research: Mid-South Transdisciplinary Collaborative Center, led by Mona Fouad, MD, MPH, and Gulf States Health Policy Center, led by Regina Benjamin, MD, MBA, Founder and CEO of BayouClinic and 18th U.S. Surgeon General.

“Eliminating health disparities makes the entire population healthier. The MHRC connects different academic disciplines to investigate differences in health outcomes while developing partnerships with communities to put research into action.”

“Eliminating health disparities makes the entire population healthier,” said Mona Fouad, MD, MPH, Director of the UAB Minority Health and Health Disparities Research Center (MHRC). “We want to bring people together to address the issue of health disparities, which unfortunately is very complex,” Fouad said. “The MHRC connects different academic disciplines to investigate differences in health outcomes while developing partnerships with communities to put research into action to improve population health,” she added.



BUILDING THE PIPELINE

SUMMER TRAINING PROGRAMS MAKE AN IMPACT

One mechanism to address health disparities is to train minority researchers and healthcare providers. The MHRC takes this mission seriously, offering comprehensive summer training programs for the health professions.

This year, the summer training programs have expanded substantially. This was the inaugural summer for the STEP-UP program, while the long-standing SEP and HDRTP programs celebrated their 10th successful year. MHRC's training programs, implemented by Training Director Ann Smith, MPH, and Program Manager Dawn Fizer, have helped hundreds of students enter the health professions.

The Short-Term Research Experience for Underrepresented Persons, or STEP-UP, is in its first year. This program provides students with 8-10 weeks of research experience. Undergraduate students from all across the U.S. are paired with mentors, who guide their research, including training in the responsible conduct of research. STEP-UP is under the direction of multiple principal investigators: Mona Fouad, MD, MPH, Tim Garvey, MD, and David Allison, PhD. It is managed and supported by the Office of Minority Health Research Coordination (OMHRC) in the National Institute of Diabetes and Digestive and Kidney (NIDDK) at the National Institutes of Health (NIH). The overall goal of STEP-UP is to build and sustain a biomedical, behavioral, clinical and social science research pipeline.

In the year-long Health Disparities Research Training Program (HDRTP), post-doctoral scholars and junior faculty are matched with a mentor who guides them in research, grant application, and manuscript development. During a three-day grant

writing retreat, participants prepare and present a mock grant proposal in a review session. Successful scholars receive a Certificate in Health Disparities Research, signifying their specialized training.

The Summer Enrichment Program (SEP), helps undergraduates learn about careers in healthcare and health disparities research. The program is available to students from UAB, Alabama A&M, Alabama State University, Miles College, Oakwood University, Stillman College, and Tuskegee University. Participants spend three consecutive summers at UAB, allowing them to delve more deeply into health-related work and research. By their final year, scholars are equipped to complete comprehensive research projects, the outcomes of which are presented at the UAB Undergraduate Research Expo and SEP awards ceremony.

SEP enjoys high retention, and has successfully shepherded hosts of students into healthcare professions in a number of fields. Many scholars have been accepted to medical school or optometry school, and nursing school; many students have been listed as authors on academic papers.

"The most satisfying part," says Ann Smith, "is having the opportunity to watch the students grow over time."

One of the contributions of all the training programs is to expose students to career paths they otherwise would not have considered. Participants have credited SEP with guiding them toward their ideal career path. One graduate wrote, "Thank you for exposing me to the life of healthcare beyond [my] undergraduate [study.] I hope you and the MHRC program continue to impact future MHRC scholars the way you've impacted me."





MHRC GOES GLOBAL

THE MHRC IS REACHING BEYOND THE BORDERS OF THE UNITED STATES TO IMPACT COMMUNITIES AROUND THE WORLD

The rain was torrential, pelting the cars with sheets of water as they made their slow way toward Wilcox County, Alabama in November 2011. The small group of travelers was determined to achieve their destination: meetings with representatives from the local government and the high schools of Wilcox County, one of Alabama's poorest counties.

Inside the cars creeping along the interstate in the pouring rain were representatives from UAB's Minority

Health & Health Disparities Research Center (MHRC), led by Theresa Wynn-Wallace, PhD; representatives from the U.S. Center for Disease Control (CDC), and community leaders and researchers from Stoke-on-Trent, an industrial town in the United Kingdom.

This trip to rural Alabama had been months in the planning, and was the culmination of efforts to launch a partnership between the two cities of Birmingham, Alabama, and Stoke-on-Trent, UK. Like Birmingham, Stoke-on-Trent is an industrial city; however,



where Birmingham’s industry was built on steel, Stoke-on-Trent’s was built on pottery. And, as in Alabama, Stoke-on-Trent grappled with health outcomes that were worse than the national average, including obesity-related diseases.

The pairing of the two cities was initiated by the CDC at the instigation of Theresa Wynn-Wallace, Project Manager for the REACH grant for the MHRC. She learned about the possibility of pairing with a sister city at a CDC conference of investigators in Atlanta and jumped at the chance. After creating a comprehensive profile of the challenges facing Birmingham and its surrounding areas, UAB’s REACH program was matched with community advocates from Stoke-on-Trent, led by Judy Kurth.

The November 2011 meeting was the first face-to-face contact between the two cities. Representatives from Stoke-on-Trent were most interested in learning more about an outreach program to Wilcox County, a program that was initiated and administered by both REACH and the UAB Collat School of Business.

With the intention of growing and retaining local intellectual talent in Wilcox County, the UAB researchers had developed connections between high school students at the two local high schools. The high schools were highly racially segregated, with white students populating the student body at the private high school, and African American students filling out the population of the public high school. Students at the two schools were brought together, along with business interns from UAB, to brainstorm and innovate ways to stimulate the local economy. Eric Jack, Ph., of the Collat School of Business (who currently serves as its Dean), helped develop and spearhead the program.

The seed of the idea that would become the Wilcox County initiative was proposed

at a symposium hosted by REACH in 2010 – a symposium based around exploring the intersection of health and economics. Blue ribbon speakers came from all over the country; the relationship between poverty, health, and social change was discussed at length. Jack noted that many of the students in the UAB Collat School of Business needed internship opportunities, and that Wilcox County needed the expertise and enthusiasm the students could provide. REACH could provide support, research, and insight into the health equation.

Ultimately, UAB collaborated with Wilcox

County high school students to build a website showcasing the opportunities for outdoor activities available in the area, including hiking, fishing, and duck hunting. “The website highlighted the treasures of Wilcox County,” Wallace says. “We had a number of meetings with the local officials; the city council, mayor, and school officials all bought into the idea. It was the students who came up with an idea of what they wanted to do to bring their community together, to make their community whole, and to try to bring some type of economic revitalization.”



In February 2017, Dr. Mona Fouad traveled to the U.K. to offer counsel to Judy Kurth as she created her MHRC-inspired Centre for Health and Development.

It was this combination of innovation, holistic thinking, and community engagement that appealed to the officials from Stoke-on-Trent. Economically segregated, the UK community was dealing with its own set of challenges to health and financial well-being.

Arriving in Wilcox County on that rainy November day, the delegation from UAB, the CDC, and Stoke-on-Trent was greeted by both the ROTC and the color guards from the high schools in Wilcox County. Local officials enthusiastically described the collaboration with UAB and its successes. Both the public and private high schools offered tours of their facilities.

“They were so welcoming,” Wallace remembers. “The community understood their




Judy Kurth, Director, Centre for Health and Development, Stoke-on-Trent, U.K.

differences, and the history of why there were differences, but they understood that in spite of that, there was unity.”

Debriefing at UAB following day, Stoke-on-Trent representatives felt that the model they had seen offered a meaningful framework on which to build. Health challenges faced by their community, they felt, were a result of a complicated economic matrix and could best be addressed through bolstering community growth as a whole.

The fruit of that initial visit would grow into an international initiative modeled on the MHRC: the Centre for Health and Development (CHAD), an innovative partnership between the Stoke-on-Trent City Council, Staffordshire County Council, and Staffordshire University. Modeled after the MHRC’s three pillars of research, training, and outreach, CHAD embraces the vision of being both locally relevant and internationally excellent.

Because CHAD wished to emulate the MHRC framework, Mona Fouad, MD, MPH, the founding director of the MHRC, was invited to sit on their board, and in June, 2012, the UAB team visited their sister city in the United Kingdom. These initial interactions blossomed into individual and collective initiatives that altered the understanding of the social factors affecting health in both the United States and the United Kingdom.



The expertise of Professor Sir Michael Marmot, who pioneered much of the initial research internationally on social determinants of health, and served as the World Health Organization’s Chair of the Commission on Social Determinants of Health (2005-2008), provided insight into the research component of the researchers on both sides of the ocean.

The impact of the MHRC’s international efforts isn’t limited to UAB’s English-speaking neighbor across the Atlantic: the ripples of its work are being felt as far afield as Alexandria University in Egypt, where researchers are being trained to examine barriers to screening for colorectal cancer.

Egypt experiences high morbidity and mortality rates due to colorectal cancer. UAB, through the MHRC, and the University of Alexandria Faculty of Medicine (UAFM), successfully collaborated on a grant to lay the foundation for a comprehensive colorectal cancer research program in Egypt. Like Birmingham and Stoke-on-Trent, Egypt faced the challenge of socioeconomic segregation in addressing health concerns. In Spring 2017, researchers from UAB trained 24 medical students and junior faculty to use accelerometers, perform coding and analysis of research pertaining to colorectal cancer, and gather both qualitative and quantitative data.

Their goal is comprehensive and audacious: to identify populations who are at a higher risk of colorectal cancer, develop interventions to increase the likelihood the members of these populations will survive, and provide effective and culturally appropriate

“Although we’re miles and miles apart, we’re not really all that different. We all face similar challenges and struggles, and we’re all working as hard as we can to address them.”



messages to enhance the prevention of colorectal cancer.

The intention of the program is to grow with time. All research and intervention work will take place in Egypt, with UAB investigators providing scientific expertise and technical support. As Egyptian medical students and junior faculty undergo training, the MHRC is building a meaningful pipeline of local scholars with experience dealing with health disparities, and generating outreach to underserved communities.

The MHRC's model of research, training, and outreach has proved so successful in Stoke-on-Trent and in the Mid-South region of the United States that it is likely to boast similar success in Egypt, although the project is still in its initial stages.

From humble beginnings six years ago, the partnership between CHAD and the MHRC has yielded important findings on the impact of socioeconomic factors on public health and numerous meaningful interventions. The 2012 meeting led to the signing of an affiliation agreement between Staffordshire University and UAB, which also spurred mirror projects. Stoke-on-Trent's partnership with a local soccer team, in an effort to combat sports-

related injuries, inspired a partnership between the MHRC and national partners including the National Football League to research African American men's health.

The partnership also led to the creation of a dual master's program in Sustainable Smart Cities, with faculty at UAB and Staffordshire University equipping students with the knowledge and skills to help build the sustainable smart cities of the future.

From community gardens to obesity prevention measures, from mental health interventions to the impact of maternal obesity on infants, research and community engagement generated by CHAD and the MHRC is altering the landscape of scientific investigations into health and health – proving that the MHRC model can be used anywhere across the globe to combat health disparities.

“Although we're miles and miles apart, we're not really all that different,” Fouad says. “We all face similar challenges and struggles, and we're all working as hard as we can to address them. It's so helpful to know that we're not doing this in siloes. It's different countries, and different time zones, but we're all working toward a common cause – to advance health by eliminating and addressing health disparities.”





OUTREACH: PARKS RX PUTS LEGS TO RESEARCH

THE MHRC'S REACH PROJECT ENGAGES COMMUNITY MEMBERS FOR GREATER HEALTH

The idea of exercise as medicine isn't a new one, but a Birmingham academic-community partnership is applying the concept in a fresh and innovative way. In order to address high obesity rates and obesity-linked diseases, Parks Rx, a project of Birmingham REACH for Better Health, provides resources to help get people moving outside.

The UAB Minority Health & Health Disparities Research Center (MHRC) partnered with the Jefferson County Department of Health, the Freshwater Land Trust, Birmingham Park and Recreation and local healthcare providers to launch Parks Rx, funded by the Centers for Disease Control and Prevention.

Launched in September 2016, Parks Rx is modeled on national initiatives in which healthcare providers prescribe exercise for their patients, directing them to resources to find local parks in which to exercise. With Alabama ranking second in the nation for overall adult obesity rates, and consistently high incidence rates of type 2 diabetes, heart disease, and cancer, Parks Rx offers a proactive way to combat these health risks. Parks Rx is under the leadership of Mona Fouad, MD, MPH, and Theresa Wynn-Wallace, PhD, UAB Minority Health & Health Disparities Research Center, Mark Wilson, MD, Jefferson County Health Officer and Libba Vaughan, Executive Director, Freshwater Land Trust.

Under the Parks Rx program, healthcare providers are equipped with tools to reinforce counseling for healthy lifestyles, including a printed

prescription with healthy living reminders and an interactive map of over 140 local parks where users can search by ZIP code for detailed park information. In the program's first 10 months, 23 providers "prescribed" exercise as medicine for 7,367 adult and pediatric patients at the Jefferson County Department of Health, and the program was expanded to UAB's Breast Health Clinic. Permanent

Parks Rx signs, featuring healthy living tips, were installed in some of Birmingham larger parks. The Freshwater Land Trust leveraged the initial success of Parks Rx and received funding from a local foundation to expand the program to parks in Jefferson County.

"Only 25 percent of American adults get the recommended amount of physical activity, and 29 percent don't engage in any leisure time physical activity at all," says Mona Fouad, MD, principal investigator for REACH, director of the UAB Division of Preventive Medicine, and director of the UAB Minority Health and Health Disparities Research Center.

Studies have shown that access to the outdoors and green spaces reduces stress, encourages physical activity, and results in a roughly 50% increase in exercise.

The initial success of Parks Rx has drawn attention from national conservation and health partners. The National Land Trust Alliance and Birmingham's Freshwater Land Trust plan to use Parks Rx as an example of how land trusts and conservation groups can leverage funding to implement similar programs to promote physical activity on public green spaces and preserves.





MAYORS TRANSFORM COMMUNITIES

LOCAL ACTIVISM CHANGES THE HEALTH OF A REGION, ONE COMMUNITY AT A TIME

It's true that the most significant, transformative change takes place on a local level. Sweeping policies passed by distant governments seldom spur individual change – people experience the day-to-day realities of life within their communities.

This guiding principle is the inspiration for Mayors Mentoring Mayors (3M). Launched in Arkansas, and supported by the Mid-South Transdisciplinary Collaborative Center (Mid-South TCC) for Health Disparities Research, 3M has expanded throughout the Southeast, helping local mayors create healthy initiatives for their citizens.

Mayors Mentoring Mayors inspires local leaders to take ownership of the health and well-being of their hometown residents. Seven years ago, when the Arkansas Coalition for Obesity Prevention (ArCOP) began providing training for communities on how to improve their health, they understood that locally-based efforts were most likely to bear fruit.

As ArCOP rolled out their initiatives, incentivizing neighborhoods to earn the designation of “Growing Healthy Communities,” they realized that a key component was missing: local stakeholders. Leadership on a community level was essential to ensure that programs

didn't simply start up and then collapse. Town mayors needed to be recruited, as well as other city officials and business leaders. Helping these leaders cultivate a personal stake in the health of their communities would be the single most important determining factor of success. Because mayors know that healthy cities are economically secure cities.

SMALL BEGINNINGS

In 2013, ArCOP launched a series of five “Lunch and Learn” events in the five regions of Arkansas. Each event featured a mayor from a larger city and a mayor from a more rural area discussing successful health initiatives. Because they each brought unique experiences and challenges to the discussion, observed Katrina Betancourt, PhD, ArCOP chair, they were often able to help one another with cost-saving ideas and program concepts. One neighborhood had prisoners work in their community garden; another instituted agriculture programs in their schools.

The program snowballed as new mayors were drawn into the program and spearheaded successful initiatives ranging from new bike trails to healthier vending machine options at parks.. Each mayor was in a unique position

to understand what his or her counterparts in another area were experiencing and to provide guidance. Success built on success; peer-based support and community response incentivized local leaders to attempt more ambitious initiatives.

GROWING REGIONALLY, LEADING NATIONALLY

The 3M initiative, which began with only seven mayors in a limited region, expanded across the state, including representatives from all regions of Arkansas. Thanks to Mid-South TCC funding, ArCOP was also able to create an online toolkit for communities to use when launching their own initiatives. Based on Arkansas' success, the Mid-South TCC expanded the program to the Alabama, Kentucky, Louisiana, Mississippi, and Tennessee.

The initial goal was to encourage two mayors in each state to participate. Utilizing community partners in each state, mayors who might have an interest in an initiative of this type were invited to participate in Mayors Mentoring Mayors. If the mayor was interested, a feasibility study was performed to determine potential challenges and avenues for growth. Katrina Betancourt spearheaded the program; stakeholders in each neighborhood were identified, and a core team or task force was developed.

“ArCOP is founded on the belief that vibrant communities can create good health and economic opportunity for all,” Betancourt says. “With a diverse network of mayors through the 3M initiative, mayors support and stimulate economic activity through shared ideas and tactics.”

Partnering with UAB Mid-South TCC representatives Joanice Thompson, UAB MHRC Associate Director for Community Engagement and Sequoya Eady, MPH, Betancourt has visited each expansion site in order to communicate the importance of the work to be done and to provide support.

In each location, mayors and stakeholders are encouraged to adopt a specific project, with the idea that initial success will spur future work. As each city nears readiness in launching their project, the Mid-South TCC provides \$1,000 as seed funding to help the mayor and their task force take the lead. This money is then often

leveraged to acquire additional funding for expanded initiatives.

This approach is already bearing fruit. Hattiesburg, Mississippi, launched their initiative, a “Mayor Light-Up Bike Event,” celebrating the opening of a new bike trail – the hallmark project for that community. Partnering with Hubfest, an annual event held in the city which draws thousands of people, Hattiesburg Mayor Johnny DuPree and his task force were able to broadly disseminate information about health and health disparities.

In Alabama, the Mayors Mentoring Mayors approach was combined with already existing community engagement infrastructure, developed

years before by Joanice Thompson. “Mayors need support,” Thompson notes. “A task force can help a mayor identify what needs to be done, and implement initiatives. The program works most effectively if it isn’t reliant on a single person.” The benefits of creating a task force include the creation of effective vehicles for exchanging knowledge and ideas, and improving trust, communication, and collaboration.

Mayors enjoyed the support of task forces in the two Alabama communities

in which the 3M program was introduced. Bessemer, Alabama recently opened a new community recreation center and announced a walking challenge. Their launch event, held on April 1, 2017, included a health fair featuring blood pressure screenings, cholesterol testing, and a healthy cooking demonstration. In Hobson City, Mayor Alberta McCory helped establish a community garden.

The Alabama Conference of Black Mayors has enthusiastically adopted the principles behind 3M and has developed a partnership with MHRC in order to build on the program’s success by seeking funding and resources to continue existing efforts and establish new ones.

“This program really allows mayors to encourage other mayors to push for a healthier community in a way that is important to them,” observes Sequoya Eady, Mid-South TCC Program Administrator. “Not only will it improve the health of the community, but it also speaks to the economic stability of the community. It’s a way for mayors to encourage healthy behaviors in a way that is important and relatable to other mayors.”



Katrina Betancourt, ArCOP; Kenneth E. Gulley, Mayor of Bessemer; and Mechelle Winslow, ArCOP





HARLEM IN THE 'HAM

THE MHRC YOUNG PROFESSIONALS BOARD REVIVES CASINO ROYALE

The lamplit room, richly decorated with crystal and velvet, fills with the sound of soft jazz music and lively conversation. Women in fringed gowns lounge against the polished wood of the bar and linger by the roulette wheel, and gentlemen in dapper suits gather around the blackjack table. At this speakeasy, the secret entrance is found through a telephone call box, and admission is by invitation. A scene from prohibition-era America? No – it's the much-awaited revival of Casino Royale, one of Birmingham's most popular fundraising events.

Casino Royale returns this fall as the UAB Minority Health & Health Disparities Research Center (MHRC)

Young Professionals Board presents Harlem in the 'Ham, raising funds to help prevent childhood obesity.

On Saturday, September 23rd, The Harbert Center will be transformed into a 1920's casino, where guests can enjoy exceptional food and cocktails and stellar entertainment, all while participating in exciting games of chance. There will also be numerous opportunities to win great prizes. "We are so excited to bring a fresh, new take on Casino Royale," says YP Board president, Rayna Dyck, MD.

WVTM 13 News anchor and comedian Eunice Elliott will be the Mistress of Ceremonies. Guests will enjoy traditional casino games, such as

Texas Hold' Em, Roulette, and Blackjack. Celebrity Diamond Dealers who will hold court at the gaming tables include entertainer Caprenia Anthony, JW Carpenter, Birmingham Education Foundation, Danny Carr, Jefferson County Deputy District Attorney, Chris Coleman, French Broadcasting, Jason Eppenger, Citizen's Trust Bank, Josh Gauntt, WBRC Fox 6 News, James Gettys, Birmingham Times, Deon Gordon, REV Birmingham, Dr. Corey Hartman, Alabama Skin Wellness Center, Anthony Hood, UAB, Natasha Rogers, Negro Southern League Museum, Jay Roberson, City of Birmingham, attorney Alexander Shunnarah, Krystal Swann of Raycom Media, WBRC Fox 6 News, Lynneice



Washington, Bessemer District Attorney, Donald Watkins, Jr, State Farm, Hot 107.7's DJ Chocolate, DJ Sly King, and DJ Slim Robb Everett.

Proceeds from Harlem in the 'Ham will benefit Healthy Happy Kids, the MHRC's childhood obesity intervention. Since the first Casino Royale in 2009, more than 2,500 young professionals, business, and community leaders have raised more than \$210,000 to help children learn healthy living skills.

"In the United States, obesity occurs at higher rates in racial and ethnic minority populations. Also, cultural factors influence dietary and exercise behaviors, and research has shown these play a major role in the development of excess weight in minority groups," says Mona Fouad, MD, MPH, Director of the UAB Division of Preventive Medicine and Director of the MHRC. "We focus on these groups of children for this program to help them learn how to lead a healthy lifestyle."

"Without community support, we couldn't provide the resources needed to help children learn to live a healthy life," says Fouad. Over

1,100 students from 16 Birmingham City schools have learned healthy living lessons, and take these lessons home to share with those around them. "Each year we are moved by how much these children learn and are able to teach their families and community members," she adds.

YP Board president Rayna Dyck, MD is enthusiastic. "The outpouring of community support is phenomenal," she says. Primary sponsors include Wind Creek Casino and Hotel in Wetumpka, Hot 107.7, Brownstone Healthcare, UAB School of Medicine, Alabama Power, Deontee "Dr. Dee" Jimmeh, MD, Mineral District Medical Society, Southern Nuclear, and Renasant Bank, among many other businesses.

The event is open to the public. Roaring 20's costumes or cocktail attire is encouraged. Doors open at 7 pm. Tickets can be purchased at uab.edu/MHRC.

For more information, contact Susan Driggers at the MHRC at sdriggers@uabmc.edu.



Give to MHRC

“Because of the opportunities I’ve had in life, I feel I have an obligation to speak up about issues affecting our communities, and one of those issues is the health status of African-Americans and how to raise their level of health.”

- Charles Barkley

The UAB MHRC has a mighty mission - to reduce health differences resulting from social, economic or environmental disadvantage. But we need your help.

Your gift to the UAB MHRC will:

- Support researchers and physician scientists as they advance scientific knowledge about the root causes of health inequalities
- Cultivate a new generation of researchers and healthcare professionals trained in minority health and health disparities research
- Build healthy communities through partnerships and outreach programs which empower people to take charge of their own health

With your help, we can transform science into better health for all.

To make your tax-deductible gift to the UAB MHRC, visit uab.edu/MHRC/medicine/give. For more information, contact Christian Smith, Development Director, Department of Medicine, 205.934.1974, csmith@uab.edu.