

2.4 RECRUITMENT AND RETENTION PLAN TO ENHANCE DIVERSITY

We as a program faculty, and likewise UAB as an institution, strongly support the NIH mission to promote and enhance diversity in the biomedical research workforce, as exemplified by aggressive and successful recruitment and retention efforts. As shown in **Data Table 10**, over the past five years 127 burgeoning scientists from diverse backgrounds have been trained (or continue to train) in predoctoral and postdoctoral programs clearly associated with the training program. Among the predoctoral trainees, 84 underrepresented minorities (URM), 14 with a disability, and four from disadvantaged backgrounds were recruited into closely related predoctoral programs including the larger of our two entry programs, GBS, the two predecessors to GBS (Integrative Biomedical Sciences; Cell and Molecular Biology), the Howard Hughes Med-into-Grad program, the MSTP, the Neuroscience program, and several departmental predoctoral programs in which many of our program faculty hold membership (Epidemiology, Nutrition Sciences, Pathology, Psychology). Over the same five years, 25 URM postdoctoral trainees have been or are being trained in programs strongly associated with the planned training program including the Depts. of Cell, Developmental, and Integrative Biology; Medicine; and Pathology; and the UAB Obesity Training Program (T32 DK062710).

Institutional commitment. As one of the major research institutions and urban universities in the southeast, UAB has a fundamental and long-standing commitment to equity and diversity including identification, recruitment, retention, and career advancement of undergraduate and graduate trainees, and faculty from URM groups. URM students account for 30% of undergraduates and 21% of graduate and professional students. With 23% of our undergraduate freshman class represented by African Americans, UAB is well on its way to achieving status as a “Minority Serving Institution.” Retention of minority students in UAB graduate biomedical and biological sciences over the past five years is 89.5%, equaling the national graduate retention rate. Based on these data, UAB has been ranked by *The Princeton Review*, **among the top 10 for diversity for four consecutive years (2009-2012)**, and was 5th in the “lots of race/class interaction” category in the 2012 *Review*. At UAB, we are fortunate that recruitment and training of predoctoral and postdoctoral trainees from diverse backgrounds is fostered by several offices, programs, and centers, and these efforts are coordinated centrally by the UAB Office of Equity and Diversity. It is also noteworthy that Dr. Rimmer, a primary mentor in this training program, is a member of the CDC’s Health Disparities Advisory Committee to the Director and directs two federal centers focused on improving health of individuals with disabilities. We are very pleased that he will bring his knowledge and experience to this training program.

(i) Office of Equity and Diversity (OED). As part of the UAB Strategic Plan on Diversity, President Garrison named Dr. Louis Dale, an African American Professor of Mathematics at UAB, as Vice President for Equity and Diversity and Director of the OED in 2007. Dr. Dale and the OED lead an array of programs to promote diversity at UAB. These include a) mandatory employee diversity training, b) Disability Support Services, c) Commission on the Status of Women, d) Manos Juntas mentoring program, and e) the CMFSDP (described next). **(ii) Comprehensive Minority Faculty and Student Development Program (CMFSDP)** is an extensive project with the ultimate goal of increasing the numbers of minority individuals holding doctoral degrees. The CMFSDP annually funds eight new graduate minority fellowships, pre-college summer internships, summer research internships for students and faculty of Historically Black Colleges and Universities (HBCUs), undergraduate scholarships, and visiting faculty fellowships. The CMFSDP, together with two NSF-funded programs, the Louis Stokes Alabama Alliance for Minority Participation (LSAAMP), and the Alabama Alliance for Graduate Education and the Professoriate (AAGEP), sponsor extensive pre-college minority student efforts that bring 200-300 students to UAB each year from regional HBCUs for summer research apprenticeships and workshops. **(iii) Minority Health and Health Disparities Research Center (MHRC).** Supported by NIH (e.g., 5P60MD000502) and other entities, the MHRC is a comprehensive educational, research and community outreach center focused on eliminating the health disparities of racial/ethnic minorities. The MHRC sponsors annual summer education and research programs in minority health for undergraduates at regional HBCU partner institutions. **(iv) UAB Center for Community Outreach Development (CORD).** Funded primarily by NIH, CORD engages UAB faculty and graduate students in Birmingham area K-12 student and teacher science training, where minorities represent ~90% of the student population. UAB also hosts a DoED-funded McNair Postbaccalaureate Achievement Program (\$225,000 per year) to support 25 minority and disadvantaged first-generation college students annually. Recently UAB was awarded an NIH Institutional Research and Career Development Award (K12 IRACDA) that provides for postdoctoral research and teaching training in collaboration with neighboring HBCU institutions.

(v) UAB Graduate School PREP Scholars Program (5R25GM086256). As one major initiative by the UAB Graduate School to improve and encourage minority recruitment into postgraduate biomedical research, PREP annually recruits 10 promising post-baccalaureate URM students or students from disadvantaged

backgrounds to provide them a one-year high quality research experience in the laboratories of NIH-funded mentors and academic enrichment opportunities to equip them to be competitive for entry into biomedical graduate programs at top NIH-funded institutions. Over the past three years, three mentors in the planned trained program (Drs. Ballinger, Bamman, and McMahon) mentored PREP Scholars. **(vi) Office of Postdoctoral Education (OPE)**. Dr. Schwiebert, Associate Dean (and mentor in P&RMP), implemented new procedures three years ago to improve documentation and recruitment of applicants from diverse backgrounds. Further, to enhance recruitment of URM postdoctoral trainees, the OPE advertises via *FASEB Minority Access to Research Careers* and OPE representatives attend postdoctoral recruitment fairs, such as the *Annual Biomedical Research Conference for Minority Students* and the *National Conference of the Society for Advancement of Chicanos and Native Americans in Science*. **(vii) UAB Summer Program for Diversity in Neuroscience (SPDN)**. Committed to providing summer research experiences for five URM undergraduate students each summer, SPDN is funded by the Comprehensive Neuroscience Center (CNC). Dr. McMahon, a primary mentor in our training program, is Director of the CNC. We will certainly work closely with Dr. McMahon to identify URM students (via SPDN or other programs) with an interest in neurological disease rehabilitation, as they may be competitive predoctoral applicants to our program. **(viii) Deep South Resource Center for Minority Aging Research (RCMAR)** (5P30AG031054) serves as a major research and mentoring investment in the process of closing the health disparities gap between URM and non-minority older adults. In addition, the center is successfully increasing the number of researchers with the capacity to conduct independent, peer-reviewed research related to minority aging and health disparities. Key partnering institutions include Morehouse School of Medicine and Tuskegee University, both well-established HBCUs.

Plan for Recruitment of Trainees from Underrepresented Groups

For successful recruitment of URM postdoctoral trainees into this program, we will take full advantage of the OPE's proactive recruiting efforts (described above). On an ongoing basis, and particularly during recruitment season, the PD and Executive Committee will work closely with the OPE to target advertisements and support recruiting fair activities highlighting this training program. Likewise, for postdoctoral recruiting the PD will communicate regularly with the directors of the MHRC (Dr. Mona Fouad) and RCMAR (Dr. Richard Allman). Recruitment of predoctoral trainees into the training program will be somewhat dependent on successful recruitment of first year URM students by the entry programs (GBS, Rehabilitation Science, MSTP). Minority recruitment by UAB and the entry programs is based on three major efforts: 1) Fostering long-term relationships with HBCUs in the southeast; 2) Participation of our entry program directors, training faculty, and trainees at national, regional and local meetings/fairs for URMs; and 3) Summer research programs for URMs. These efforts have been highly successful in recruitment and matriculation of students from URM groups. Note that ample opportunities for funding exist for minority students as described above. Additional details follow.

1) A highly successful endeavor in minority recruitment has been fostering long-term relationships between UAB and HBCUs, predominantly in the southeast. These schools include Spelman College, Oakwood College, Alabama A&M, Alabama State, Tougaloo College, Miles College, Stillman College, Talledega College, Tuskegee University, and Morehouse College. The Graduate School interacts regularly with faculty and administrators at these institutions and visits students to introduce them to graduate and research opportunities at UAB. Undergraduates from HBCUs are invited to UAB-sponsored graduate recruitment Career Days and summer research experiences (including McNair Program). For example, more than 90 undergraduates from minority institutions throughout Alabama were hosted by GBS in Summer 2010. The entry GBS, Rehabilitation Science, and MSTP programs send letters and an information packet describing their graduate programs to all program directors of Minority Biomedical Research Support (MBRS) and Minority Access to Research Careers (MARC) undergraduate institutional grants, with a request to inform their trainees. 2) The Graduate School and GBS programs send representatives every year to participate in the *ABRCMS*, the major national minority biomedical research event with ~2100 minority student participants (1800 undergraduates and 300 graduate students) with research experience. The entry programs will also send representatives to the upcoming meeting of SACNAS to encourage Chicano/Latino and Native American students to pursue graduate education in science. Regionally, UAB also participates in the Alabama Minority Graduate Education (MGE) Program which is supported in part by an NSF grant awarded to UAB, and enables UAB to help sponsor a series of Graduate Fairs at institutions throughout Alabama. UAB will also participate in the upcoming Minority Trainee Research Forum (MTRF) sponsored by the national Distance Learning Center. This meeting showcases URM trainees engaged in biomedical research to assist them in developing the strong networks needed for success in the biomedical discovery arena. 3) UAB summer programs (described above) provide mentored research opportunities for URM students and result in the application of participating URM students to UAB, and strengthen applications to other graduate and professional schools.

Plan for Retention of Trainees from Underrepresented Groups

Retention activities start with participation in UAB graduate entry program (GBS, Rehabilitation Science, MSTP) orientation activities, including presentations on policies and services that benefit diverse populations, followed by personal meetings with the Graduate School Recruitment/Retention Officer, who also provides regular interaction and counsel with enrolled URM graduate students and follow-up after graduation, and advises the Black Graduate Student Association. Further, the Program Directors of the entry programs have frequent meetings with enrolled URM students and the PD of P&RMP will be informed of all test results from core and advanced courses, so we can provide tutoring support as needed. Finally, the OED Director of Academic Programs meets regularly with minority students and assigns student mentors as needed. Minority trainee retention in the biomedical and biological sciences over the past five years has been 85%. We expect the **Trainee Pairing** system in this training program to be a significant means of fostering development and promoting retention. Finally, because of the racial and ethnic disparities in incidence of many chronic diseases, it is highly likely that some trainees in this program will carry out research that tests race/ethnicity questions on rehabilitation effectiveness for a particular chronic condition. In fact, such questions are regularly studied in the laboratories of P&RMP faculty Drs. Bray, Garvey, Gower, and Hunter.

Ongoing Minority Outreach Efforts. Alabama has a relatively large minority population (30%) but only a modest number of minority high school students qualified to enter competitive colleges and universities. Designed to augment and enhance science teaching in Alabama high schools since 1992, the BioTeach training program has trained approximately 16 teachers per year (210 total). ~40% of the teachers are from URM groups, and 75% of the schools represented have predominately minority students. BioTeach teachers are now passing on a new enthusiasm for biomedical research to many minority high school students across Alabama. For middle and high school, UAB established the Center for Community Outreach Development (CORD) to advance UAB's outreach efforts to the greater Birmingham community in 1999. CORD has teaching laboratories at the McWane Science Center for high school science classes taught by UAB graduate students. CORD also developed four portable experimental modules for BioTeach graduates to use at their high schools. A \$1.5 million NSF grant started this program, which exposes ~1500 children in grades K-12 each year (at least 60% minority) to these labs. A highly successful new initiative is our middle school program supported by a \$1.25M NIH NCRR specialized education program award. This summer program enrolls middle school students from Birmingham city schools (~98% are minorities). Students spend two weeks in a science camp at the McWane science museum, run by UAB graduate students. This program is reaching 3,500 kids per year. Students who have completed middle and high school science summer camps are eligible to apply for a research internship at UAB that pays \$2,000/ 8 weeks. Program highlights can be found at www.uab.edu/cord.

UAB Disability Support Services (DSS). DSS exists to make programs, activities, and the UAB campus accessible to all students, including students with disabilities. DSS provides academic accommodations to qualified students with disabilities. DSS also works to ensure that students with disabilities are protected from discrimination based on their disability, as guaranteed by the Americans with Disabilities Act and Section 504 of the Rehabilitation Act of 1973. Over 300 students at UAB are registered with DSS during any given semester. Most of these students have invisible disabilities, such as learning disabilities, attention deficit disorders or psychiatric disabilities. Students with disabilities at UAB are highly successful and are enrolled in nearly every program across campus. A variety of support services are available including assistive technology, individualized accommodation plans, and academic coaching support. DSS works collaboratively with students and faculty to make sure that eligible students are receiving the services they need. Students with disabilities must self-identify and be registered with Disability Support Services and provide an accommodation request letter before receiving academic adjustments. DSS is advertised on University and Student Affairs websites, and on all individual biomedical sciences program websites.