BUILDING THE PIPELINE

MHRC TRAINING AND CAREER DEVELOPMENT PROGRAMS
A Word from Dr. Mona Fouad

This issue of the MHRC Magazine is dedicated to our Training & Career Development Program. This robust program, which has enjoyed more than a decade of success, is designed to develop and nurture talented scholars, health care professionals, and researchers who will lead tomorrow’s advances in the field of health disparities.

Our training and career development initiatives are building a broad pipeline, which begins with undergraduate programs designed to attract and educate students, particularly members of underrepresented populations, about possible careers in the health professions. This broad-based education provides both exposure and the practical tools necessary to prepare for both career and graduate school.

2018 also marked the second celebration of the MHRC Young Professionals Board’s “Harlem in the ‘Ham,” a unique fundraising event that evokes the jazz and mystery of the 1920s. A revival of the previous Casino Royale fundraisers, Harlem in the ‘Ham brought together participants from across the greater Birmingham area to raise money for Healthy Happy Kids, a childhood obesity prevention program. This year, a portion of the funds raised were dedicated to the Summer Enrichment Program for undergraduate scholars at Historically Black Colleges and Universities (HBCUs). These dedicated young Birmingham leaders have my heartfelt thanks!

As we look toward our 17th year of operations, we celebrate the many milestones of the past and the accomplishments yet to come. Advancing the science of health disparities and expanding the scope and impact of our work has never been more important. Thank you for joining us on this journey.

Cover art: Kendra Royston, PhD. Below: Mona Fouad, MD, MPH with SEP scholars.
Building the Pipeline
“For me,” said Amanda Willig, PhD, “receiving the early career training provided by the Minority Health & Health Disparities Research Center (MHRC) was absolutely vital. Being a part of the health disparities research training, and receiving a pilot grant with the Mid-South TCC, really expanded my view as to how partnerships and collaborations have the potential to work.”

Dr. Willig is the proud recipient of a federal R01 grant to enable her to explore the possibility of successful lifestyle interventions for individuals living with HIV. A disease which disproportionately impacts those living at the margins of society, HIV confronts researchers with challenges that are not only related to medicine, but to social dynamics, class, race, and gender. These research challenges appealed to Willig as a new post-doctoral researcher, back in 2013 when she was launching her investigations — but she wasn’t fully equipped to begin.

That was where the MHRC came in.

In 2013, Willig applied for a grant for a pilot project. Pilot projects, which are small scale research studies, are usually conducted to examine the feasibility of a project, and provide a meaningful launchpad for further investigation. She believed her pilot project application had merit just as she’d written it. However, one of the unique features of the submission process for these pilot project grants, which were funded by the Mid-South Transdisciplinary Collaborative Center, was that the MHRC provided feedback on the
application process – even before the pilot project was awarded.

The feedback provided by the MHRC was eye-opening, Willig remembered. She’d believed she’d already assembled a diverse team with a breadth of perspectives and experiences. The MHRC, she said, “opened my eyes to the fact that we needed to broaden our lens, and take a more open approach.” This more open approach, and the research methods she learned as a result of the pilot program, led directly, she believes, to being awarded the five-year federal R01 grant.

As a 2011 graduate of the Health Disparities Research Education Program (HDREP), and the beneficiary of training on the grant application process, Willig received targeted, specialized training that has determined her career trajectory – and promises to make an impact on the lives of patients she may never even meet.

Training Programs: Growing Professionals

In the United States, students of color, particularly those from economically disadvantaged backgrounds, are less likely to be given the educational resources they need to pursue a career in the health professions. A parallel, and related, issue confronting health care is that patients of color are less likely to be given equitable treatment inside the traditional health care system. This means that members of minority populations are more likely to suffer from chronic disease, and more likely to die from preventable illness.

These two problems are connected, in that patients are more likely to visit health care providers who look like them, and health care professionals from underrepresented populations are more likely to engage with the communities in which they grew up. The UAB MHRC has spent more than a decade working to grow the pipeline of health care professionals – from undergraduate education through graduate school and into postdoctoral and junior faculty positions – through a series of specialized training programs. These training programs are conducted in the service of a broader effort to address health disparities – the different, and unequal, health outcomes experienced by marginalized groups.

With the understanding that no single training program can provide all the necessary tools to equip a new generation of
The MHRC works to expand the knowledge base of health disparities research, stimulate research activities and collaboration, and increase the critical mass of independent investigators.

Mona Fouad, M.D., MPH
She applied for the program and was accepted.

The Summer Enrichment Program (SEP), which was in operation for 11 years and provided opportunities to students from UAB and six historically black colleges and universities, gave students hands-on experience in health-related work and research. It was during the SEP, Davis recalled, that she first held a stethoscope.

“The SEP empowered me to pursue a career in medicine,” said Davis, who just completed a fellowship at New York Presbyterian Hospital in psychiatry. “The mentorship I got because I was in the program was one of the most important things. I had no clue what it meant to be a doctor, or what the MCAT was. They told me what to study, helped me with my letters of recommendation, helped me with my personal statement, helped me find volunteer work.”

The SEP trained students over the course of three summers; by their final year, they were equipped to complete comprehensive research projects. The program boasted a high retention rate, and successfully moved scholars into medical school, optometry school, nursing school, and other programs.
Amber Dixon Abrams, MD, who recently completed her medical degree, noted that her three years in the SEP “really exposed me to a number of research fields.” Originally considering a career in optometry, Abrams realized through her experiences with the Summer Enrichment Program that she wanted to treat the whole person. “Before the program,” she remembered, “I had never seen any African American physicians. It seemed a far-fetched dream for me to be able to achieve that. After going through [SEP], and seeing many different physicians from many different backgrounds, it made it more realistic for me.”

Cancer Research Intensive Student Program (CRISP)

This three-year summer training program for undergraduate students at Tuskegee University is implemented under the Morehouse School of Medicine/Tuskegee University/UAB Cancer Partnership – NCI. Similar in many respects to the SEP, it specifically targets undergraduate students from this historically black university. In addition to the summer research, the students engage in cancer research studies during the academic year as well. While CRISP is only in its second year, it promises to echo the success of the SEP.

STEP-UP

In its second year, the Short-Term Research Experience for Underrepresented Persons, or STEP-UP, links undergraduate students throughout the U.S. with mentors at research intensive institutions. These mentor-mentee pairs work together for 8-10 weeks. Mentors guide students in in-depth scientific research and help them understand the underlying principles of sound and responsible research. This allows students an immersive, meaningful experience in their area of interest.

This program falls under the direction of multiple principal investigators: Mona Fouad, MD, MPH, and W. Timothy Garvey, MD; it is supported by the Office of Minority Health Research Coordination (OMHRC) in the National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK). The overarching intention of STEP-UP is to build and sustain a biomedical behavioral, clinical, and social science research pipeline.

Summer Cancer Research Education Program (SCREP)

Medical students and other graduate students enrolled in a master’s or doctoral programs are eligible for the Summer Cancer Research Education Program (SCREP), an eight-week cancer internship. The SCREP gives graduate students the opportunity to work closely with cancer researchers and scientists.

Students are exposed to fieldwork, site visits, and seminars, and are paid a stipend based on their work dedicated to this program. The SCREP is conducted under the auspices of the partnership between the UAB Comprehensive Cancer Center (CCC), Tuskegee University, and Morehouse School of Medicine. This partnership offers a unique opportunity for training the pipelines of future cancer research scientists, with an emphasis on minority investigators and health disparities research. The partnership has successfully developed and implemented cancer research training programs for undergraduate, graduate, post-doctoral, and junior faculty level trainees, and in the past 15 years has impacted the careers of more than 460 graduate students and junior scientists.

CRISP 2017-2018 Students, from left: LeKendric Castion, Jayla Caffey, Dazjane Nesbitt, Austin Spencer, Alexis Johnson, Micah Grey
Health Disparities Research Education Program

The year-long Health Disparities Research Education Program (HDREP) matches postdoctoral scholars and junior faculty with mentors who guide them in research, grant applications, and manuscript development. HDREP is in its 13th year.

A highlight of the program is the intensive grant writing retreat at which participants bring information about a potential funding opportunity, along with relevant research, and work on a final draft of a proposal and presentation. Scholars present this completed grant proposal to a panel of seasoned health disparities investigators who give direct and honest feedback. Following the retreat, most scholars are prepared to submit their proposal to an external funding agency.

Bertha Hidalgo, PhD, MPH, an alumna of both the SCREP and HDREP, credits MHRC training programs with valuable tools she utilized in the course of her career. Hidalgo is an assistant professor in the Department of Epidemiology in the School of Public Health at the University of Alabama at Birmingham, and was recently tapped to join the National Heart, Lung, and Blood Institute’s Board of External Experts. “The MHRC has a number of training opportunities, many of which I have participated in since my time as a graduate student,” she said, “The writing retreats have been especially useful to my academic productivity and progress. In fact, I wrote several pages of my R01 application at the last retreat offered. I’m grateful for the infrastructure and resources available to investigators like myself.”

Tiffany Carson, PhD, MPH, an assistant professor in the Division of Preventive Medicine at UAB School of Medicine, also completed the HDREP program, with tremendous benefit to her career. “My participation in the 2013 cohort of the HDREP gave me the opportunity to be connected with a number of resources and people that have directly contributed to my career growth. In addition to the training received through the lecture series, activities like retreats for manuscript writing and grant writing have resulted in me having a solid track record of peer-reviewed publications and successful grant funding.”

Dr. Amanda Willig, whose R01 grant dealing with interventions for people living with HIV was mentioned earlier, is a graduate of the HDREP program. “I was meeting with a colleague last week on a project,” she said, “and it occurred to me that without the HDREP, we might have been on the same campus this entire time and never have known about each other’s existence. Through HDREP, I formed connections I would never have formed otherwise.”

Resource Center for Minority Aging Research (RCMAR)

The Deep South Resource Center for Minority Aging Research (RCMAR) is a collaborative partnership of four unique, Southern institutions for.
with complementary strengths: Morehouse School of Medicine, Tuskegee University, University of Alabama, and the University of Alabama at Birmingham. The goal of RCMAR is to increase the diversity of the research workforce dedicated to aging by creating mentorship opportunities to promising scientists who are members of underrepresented groups.

The Deep South RCMAR focuses on health problems that are particularly prevalent among older African Americans in both rural and urban settings. Its multifaceted approach not only includes identifying and mentoring outstanding faculty who are members of underrepresented groups, and who are committed to academic careers in aging and health disparities research, but also providing high quality research education and individualized career development support. RCMAR also supports pilot projects deemed likely to be high-impact, provides expertise and resources for working collaboratively with communities, as well as in study design, and disseminates these research results to scientific, professional, and lay audiences.

During the five year funding cycle spanning 2012 through 2017, RCMAR provided career development support for more than 20 scholars through its multi-disciplinary Health Disparities Research Education Program, funded 15 pilot grant awards, and assisted four faculty members to obtain diversity supplements.

Graduates of the RCMAR training program include Tomi Akinyemiju, PhD, who currently serves as Assistant Dean of the College of Public Health, as well as an Associate Professor in the Department of Epidemiology, at the University of Kentucky. She is an alumna of the HDREP sponsored by the Cancer Partnership, and she received a RCMAR pilot grant award. “The RCMAR program provided me with opportunities to interact with experts and learn about current research, theoretical frameworks, and novel methods for studying health disparities,” she said. “The pilot grant also provided resources for me to conduct my own research in cancer health disparities, leading to preliminary data that I used in a successful R01 application.”

The Obesity Health Disparities Research Center Training Program

The Obesity Health Disparities Research Center (OHDRC), funded in 2017 by a grant from the National Institute on Minority Health and Health Disparities (NIMHD), has launched its own series of training initiatives in order to expand the pipeline of health disparity researchers. The OHDRC Career Enhancement Program supports early stage investigators or mid-level faculty who are new to research to transition to disparities research. Scholars are linked with a research mentor who helps them to transition to disparities research. Scholars are linked with a research mentor who helps them to transition to disparities research. Scholars are linked with a research mentor who helps them to transition to disparities research. Scholars are linked with a research mentor who helps them to transition to disparities research.

Below: 2016 SEP scholars with mentors
epidemiology, and minority aging. The first wave of applications garnered four OHDRC Career Enhancement Scholars and currently there are three new scholars.

The OHDRC is under the direction of principal investigators Mona Fouad, MD, MPH; W. Timothy Garvey, MD, and Isabel Scarinci, PhD, MPH.

Training for the Future

The training programs of the MHRC are created for scholars to take several of the offerings throughout their career. In fact, if a student were to begin training with one of the undergraduate programs, they could effectively find support, mentorship and training not only through their undergraduate years, but into and through their graduate school experience, into their postdoctoral work, and in identifying and launching a career trajectory. In conjunction, the training programs could span more than a decade for any given individual, offering comprehensive, multi-stage professional development to enable researchers to build a meaningful and successful professional life in health care.

Kendra Royston, PhD, a recent graduate of the doctoral program in biology at UAB (who is also featured on the cover), began as a student in the Summer Enrichment Program (SEP), and, as she continued her education, received additional training through the SCREP. She credits the training programs with her decision to pursue both her graduate degree and her area of research.

“I felt the research I worked on was important on a personal level because I saw how the things that we studied directly impacted my community and the area I grew up in,” Royston says. “It’s a very real, very necessary area of research. It’s great to be on the front lines and be able to say, ‘I’m a part of research that is going to eliminate health disparities with regard to low-income areas.’”

These training programs, which work together to recruit and educate the next generation of researchers, are essential to building a diverse pipeline of health care professionals. Administered by Training Program Director Ann Smith, MPH, and Program Manager Dawn Fizer, these programs have effectively trained and mentored hundreds of students into careers in health professions throughout the United States.
Mona Fouad, MD, MPH, Founding Director of the Minority Health & Health Disparities Research Center and Senior Associate Dean for Diversity and Inclusion at the UAB School of Medicine, was inducted into the National Academy of Medicine on October 13, 2018. Fouad’s husband, Fouad Fouad, their two daughters, and Selwyn Vickers, MD, FACS, senior vice president for Medicine and dean of the UAB School of Medicine, attended the induction ceremony.

This exceptional honor, which is considered one of the highest attainable in the fields of health and medicine, recognizes individuals who have demonstrated outstanding professional achievement and commitment to service. Only 70 national members and 10 international members are elected each year.

Fouad was the first person in two decades to be elected to the National Academy of Medicine while employed at the University of Alabama at Birmingham. Her wide-ranging and extensive career in medicine and research boasts local, regional, national, and international achievements. A nationally recognized expert in health disparities research, she was one of the scientists who helped establish health disparities as a valid field of scientific study. Not only did Fouad serve two terms as a member of the National Institutes of Health (NIH) Advisory Council on Minority Health and Health Disparities, she...
was among the experts tapped to assist in the establishment of the health disparities initiatives for the National Institute for Minority Health and Health Disparities. Her work as the founding director of the Minority Health & Health Disparities Research Center (MHRC) at UAB has given her the opportunity to impact the way health disparities research and interventions are conducted not only in the United States, but around the globe.

“I’m thrilled and humbled to be elected to the prestigious National Academy of Medicine,” said Fouad. “It is a tremendous honor to be recognized.”

In addition to her work as a researcher, professor, and the Director of the MHRC, Dr. Fouad serves as the Senior Associate Dean for Diversity & Inclusion at the School of Medicine. Under her leadership, the UAB School of Medicine saw a record number of minority students admitted for the 2016-2017 academic year. Dr. Fouad as led efforts to mentor and promote minority students, researchers, and leaders through joint programs with the historically black colleges and universities of Morehouse School of Medicine and Tuskegee University. Pipeline programs, which target students beginning in high school, and follow them through in academic journey through college and medical school, have reached more than 400 minority health practitioners and researchers. These efforts include mentorship of junior faculty, many of whom Dr. Fouad personally mentors in spite of shouldering crucial administrative responsibilities.

Fouad has received numerous awards, including the President’s Council on Fitness, Sports and Nutrition Leadership Award in 2016, along with the prestigious Saint George National Award from the American Cancer Society, an award presented to outstanding community volunteers in recognition of their distinguished service in achieving the Society’s strategic goals. That same year, she was named by Al.com as one of the “Women who Shape the State.” She received the MOMENTUM Women’s Leadership Award in 2014, and in 2012 was awarded the Albert LoBuglio Distinguished Faculty Award for Outstanding Contributions to the Research Mission of the UAB Comprehensive Cancer Center. In 2008, she was the recipient of the UAB President’s Diversity Faculty Award. In 2005, the American Medical Association’s Program on Health Disparities honored Dr. Fouad with the Excellence in Eliminating Health Disparities Award, and she received the Sullivan Best Practices Award in 2004.

“In her career, Dr. Fouad has had a huge impact in her interdisciplinary approach toward the elimination of health disparities,” said Selwyn Vickers, MD. “As both the dean and a frequent collaborator with Dr. Fouad’s research efforts, I’m pleased that Mona’s career is being honored in a way that truly highlights her accomplishments.”
A BANNER YEAR FOR HARLEM IN THE ‘HAM

On Saturday, September 29, 2018, The Harbert Center was transformed into a 1920’s casino with good food & cocktails, great entertainment, and gaming fun as the UAB Minority Health & Health Disparities Research Center (MHRC) Young Professionals Board presented Harlem in the ‘Ham.
A highlight this year was the Jack Daniel's Gentleman Jack VIP Lounge, where Jack Daniels flowed freely all night for very special guests. Everyone enjoyed games of chance and skill such as poker, Blackjack, roulette and craps.

Proceeds from Harlem in the ‘Ham benefitted Healthy Happy Kids, the MHRC’s childhood obesity intervention. Since the first Casino Royale in 2009, more than 3,000 young professionals, business and community leaders have raised more than $350,000 to help children learn healthy living skills.

"Without community support, we couldn’t provide the resources needed to help children learn to live a healthy life," said Fouad. Over 1,400 students from 21 Birmingham City afterschool programs and summer camps have learned healthy living lessons and taking them home. "Each year we are moved by how much these children learn and are able to teach their families and community members," she said.

Prince Cleveland, the president of the Young Professionals Board, added, “The outpouring of community support is phenomenal.”
The MHRC is translating science into better health for minority and underserved populations in the Alabama, the south, and beyond. Innovative discoveries begin with our investment in the next generation of scientists, physicians, and health professionals working to eliminate health disparities.

With your investment, even more discoveries can be made to improve the health of underserved people everywhere. For more information on how you can support the work of the MHRC, please contact Christian Smith, Development Director, Department of Medicine, 205.934.1974, cnsmith@uab.edu.