Changing the Faces of STEM

by: V. Faye Jones, Associate Vice President of Health Affairs / Diversity Initiatives, Professor and Vice-Chair of Pediatrics

Karen Udoh will be conducting research in Greece as part of the Fulbright Scholars Program for the next year. After her return, she will be entering medical school in 2019. Trekele Smith currently works as an Application Developer at UPS and will be pursuing a Master’s degree in Computer Engineering and Computer Science. Oby Igwe is pursuing a Master’s degree in Physiology. All plan to continue their educational aspirations at UofL. All are 2018 graduates of the University of Louisville and alumni of our Louis Stokes Alliance for Minority Participation (LSAMP) program.

The Kentucky-West Virginia Louis Stokes Alliance for Minority Participation (KY-WV LSAMP) consortium continues its efforts in increasing the number of underrepresented students completing degrees in the fields of science, technology, engineering and mathematics (STEM). The Alliance, led by the University of Kentucky, with collaboration from the alliance’s 10 institutions of higher learning from across the two states, including the University of Louisville, has received renewed funding for the next five years from the National Science Foundation (NSF) to continue its efforts in moving toward the goal of underrepresented students completing degrees in the fields of science, technology, engineering and mathematics (STEM).

Although the representation of groups, such as Black and Hispanic Americans, is increasing in society, these groups are still underrepresented in the STEM fields. National studies have shown that underrepresented students enroll as STEM majors at the same rate as their counterparts, but graduate at significantly lower rates. Programs such as LSAMP help to increase the numbers by recruiting and improving retention/thriving by supporting and preparing highly qualified students from these underrepresented and other underrepresented populations. LSAMP asserts that the key to retention is the provision of timely and effective individual support, based on real-time tracking and both faculty and peer mentoring.

The KY-WV Alliance began in 2006 (Phase I) and renewed in 2013 (Phase II). This new grant represents a third phase of the project, continuing through 2023. Over the last 12 years, the program has achieved and surpassed its goals of enrolling and graduating more
underrepresented students in STEM. Alliance-wide, the institutions granted 1,177 degrees from 2013 to 2018 — exceeding the goal of 1,000 total. During that same time period, an average of 2,306 underrepresented students were in enrolled per year in STEM degree programs — topping the goal of 2,000. For UofL from 2013/14 to 2016/17, URM STEM bachelor degrees attainment was 198 (average of 49.5 per year), with a significant increase of 17% from 2015/16 to 2016/17. For Phase III, an additional goal for the Alliance is to increase degrees to an average of 380 per year across the Alliance, and have at least 50 percent of LSAMP graduates pursue graduate programs.

Administered through a collaboration between the Cultural Center and the Health Sciences Center Office of Diversity and Inclusion, UofL has developed a program consistent with LSAMP goals. Our program supports sustained and comprehensive approaches that facilitate achievement toward the goal of increasing the number of students who earn baccalaureate degrees in STEM fields, which could lead to the eventual achievement toward doctorates in STEM fields. Program activities and resources focus on outreach, academic support, peer connections, undergraduate research experiences, research presentation and conference attendance opportunities. We have been very fortunate to have partners throughout the university in multiple aspects of the program from mentorship to diverse research opportunities for our students and those partnerships are not taken for granted by our students. As one student stated, “Never be afraid to ask for new opportunities whether it be research, conferences or internships. Make a positive impact on your professors and mentors so they know you are putting in the work to achieve your goals.”

For more information on the LSAMP program click here.

Noela Botaka—Biology major
On Wednesday, September 12, 2018, the third- and fourth-year dental students of Team Delta visited Hotel Louisville, a fully functioning hotel that is owned and operated by Wayside Christian Mission, the largest homeless shelter in Kentucky. The hotel is open to the public and is staffed by screened and vetted Wayside resident clients. Our visit was due to the collaborative efforts of Dr. Edna Ross, Professor, Department of Psychological and Brain Sciences, Dr. Nina Mosely, Chief Operating Officer of Hotel Louisville, and Dr. Michael Blunk, Chaplain of Hotel Louisville.

The purpose of our visit was to have an awareness of the need to imaginatively put oneself in the place of others to genuinely understand them, and to discuss barriers to dental care. Our goal was to be able to accurately reconstruct the viewpoints and reasoning of others and to reason from premises, assumptions, and ideas other than one’s own. (Intellectual Empathy based on the Paul Elder Model of Critical Thinking)

Prior to our visit, the students wrote about their assumptions of the homeless and the difficulty of dental treatment. They discussed their biases and what they perceived as barriers.

The day arrived to get out of our building and visit Hotel Louisville. After a mouth-watering buffet lunch, we engaged in a meaningful dialogue with clients at the Hotel Louisville. Often, we tend to not ask the deep questions because you will become more deeply involved with others, which can be uncomfortable. Our conversation was open and honest on all sides, we “took off our masks”.

The conversation centered on how people treat others, how we communicate with a dental pa-
School of Dentistry

by only going through the phone number at Wayside to contact her patient. As she recognized her own bias, she realized this is a barrier to care. The clients spoke on how it feels to be judged, to be looked at through the lens of a current situation. They openly shared their fears and struggles. It is one thing to write and discuss bias in a classroom and another to have direct conversation with those different from yourself.

As part of their post written critical thinking reflection, they shared that it is important to be a good listener, to understand the fears of others, and to be aware of facial expressions. They wrote how meaningful it is to have trust between a dentist and patient. One student reflected, “My thinking in dentistry with regards to the homeless and addicts has been enlightened to focus on what we can do to make our patients not feel judged for the condition of their mouth”.

The students are hoping to do more. They saw first hand the importance of a smile to breaking free of homelessness. Currently, Team Delta is searching for grant money to aid in dental care for the clients of Hotel Louisville. It is my hope that in the future I will be able to give a Part 2 to this experience of “walking in others shoes”. 

Events and Announcements

Cooperative Consortium for Transdisciplinary Social Justice Research’s 2nd Annual Social Justice Research Symposium
Crossing Borders: Translating Research Into Practice
Friday, November 2, at 9:00am to 7:00pm
Louisville Urban League & Brandeis School of Law
The Symposium will feature concurrent sessions on bridging scholarship and community, as well as lunch and a poster session. Our keynote speaker, Alvaro Huerta, Professor of Urban & Region Planning and Ethnic & Women’s Studies at California State Polytechnic University, Pomona, will present his speech, “(Im)migration in Context: History, Resistance, and Hope” that evening, followed by a reception. Please join us for a full day of collaboration, community, and scholarship! A full schedule is available by clicking here. Please click here to register for the Symposium by Thursday, October 25.

2018 Culturally Effective Care Symposium - Call for Facilitators
Wednesday, November 7, 9:00am to 4:00pm
Kentucky Center for African American Heritage
Since 2006, the University of Louisville Health Sciences Center Office of Diversity and Inclusion has provided a 1-day symposium centered on diversity, cultural competency, and equity in healthcare. The symposium includes approximately 700 student learners from the University of Louisville Schools of Dentistry, Medicine, Nursing, Public Health and Information Sciences and Social Work, and Sullivan University College of Pharmacy. The workshop provides students with the skills to recognize and assess health and health care disparities in specific populations. Students work in interprofessional teams to coordinate care and identify solutions to promote health equity. To register as a facilitator for this programming please click here. Be sure to take note of the session you are choosing by looking at the tabs at the bottom of the sheet.

2019 Call for Proposals from the Cooperative Consortium for Transdisciplinary Social Justice Research
The Cooperative Consortium for Transdisciplinary Social Justice Research is now accepting applications for funding for transdisciplinary, social justice research projects. Available grants are up to $7500 plus course release(s). Applications are due by November 19. Contact transdis@louisville.edu or call (502) 852-2371 with questions.
Tackling Opioid Misuse Among Older Adults

The majority of older adults take at least one prescription medication daily, and according to 2016 data from the Substance Abuse and Mental Health Services Administration, more than 500-thousand Medicare Part D beneficiaries take opioids, with the average dose far exceeding the recommended amount. This can lead to health risks such as breathing complications, confusion, drug interaction problems and increased risk of falls.

To help tackle the issue of opioid misuse in older adults, the Institute for Sustainable Health & Optimal Aging at the University of Louisville has been working with individuals in rural Kentucky who are involved in the institute’s Flourish Program, which is designed to deliver interdisciplinary care coordination to those with chronic conditions.

Of the 154 patients who have received services, medication management issues related to opioid prescriptions and interactions with other medications were a factor with more than 90 patients. Medication safety also proved to be a problem, with family members or caregivers taking opioids from patients in at least 10-percent of cases.

The institute recently received supplemental federal funding to their Geriatrics Workforce Enhancement Program grant, specifically to expand work in Bullitt, Henry, Oldham, Shelby, Spencer and Trimble counties related to opioids and older adults. This effort also will be offered in Jefferson, Barren, Metcalfe and Hart counties.

“This additional funding will allow us to dramatically increase our ability to screen for potential opioid misuse and to educate patients, students and practitioners on best practices for pain management for older adults,” said Anna Faul, Ph.D., the institute’s executive director.

Joe D’Ambrosio, Ph.D., the institute’s director of health innovation & sustainability and assistant professor at the UofL School of Medicine will lead an interdisciplinary clinical team of faculty from nursing, social work and counseling psychology to serve as mental health clinicians for the project.

He said the institute is developing a new program to train students and clinicians on how to identify and treat opioid-related substance abuse among older adults. The programming also will be offered to community mental health partners including Centerstone, the region’s largest mental health care provider.
Brief cognitive behavioral therapy significantly improved the mental health of women overwhelmed by caring for children with severe chronic health conditions, researchers at the University of Louisville have found.

After five therapy sessions, study participants reported significantly decreased depressive symptoms, negative thinking and chronic stressors, and experienced improved sleep quality, according to Lynne Hall, Dr.P.H., R.N., associate dean of research and professor at the UofL School of Nursing.

Hall presented the findings Sept. 14 at the Council for the Advancement of Nursing Science State of the Science Congress on Nursing Research in Washington, D.C.

“Women caring for children with chronic conditions such as cerebral palsy and cystic fibrosis are at high risk for depressive symptoms,” Hall said. “They have many things to juggle, including caring for the child, administering medications and coordinating physician and therapy visits. They’re stressed and overwhelmed by the amount of care their children require and the number of hours a day it takes.”

About 15 million children in the United States have special health care needs and women constitute 72 percent of the caregivers of those children.

The study findings show that women caring for children with serious health conditions should be screened for depression and that cognitive behavioral therapy (CBT) is an essential treatment for this population, Hall said.

Brief CBT, a short-term, goal-oriented psychotherapy takes a hands-on, practical approach to problem solving and focuses on changing patterns of thinking or behavior to decrease negative thoughts and improve recognition of one’s ability to cope.

For the study, 94 female caregivers with high levels of depressive symptoms were randomly assigned to either a control group or an intervention group, which received five 45 to 60-minute sessions of CBT.

The women also were given homework that centered on examples of cognitive distortions with positive substitutions, a thoughts log and instructions for practicing relaxation.

“A lot of these women said they felt very isolated and there was no one who would listen to them,” said Catherine Batscha, D.N.P., a psychiatric-mental health nurse practitioner who provided CBT to the study participants. “Because of their child’s care requirements, the women had difficulty getting together with friends because they couldn’t hire a babysitter who knows about medical equipment or complex health conditions, so people were cut off from a lot of social support.”

The study was funded by a $75,000 grant from Passport Health Plan’s Improved Health Outcomes Program and a $50,000 grant from Kosair Charities.
Public Health and Information Sciences

Researchers Tackle Discrimination, Health Disparities, and Critical Reflexivity Practice

Considering Transgender and Gender Nonconforming People in Health Communication Campaigns

Transgender and gender nonconforming people (TGNC) experience extensive health and social disparities. A new article, published in Palgrave Communications, reviews a sample of existing health communication campaigns relating to breast, cervical, and testicular cancers and makes recommendations on how to develop and effectively deliver health communication campaigns to TGNC people. The article was written by Ryan Combs, PhD, MA, Health Promotion & Behavioral Sciences Assistant Professor, Monica Wendel, DrPH, MA, Health Promotion & Behavioral Sciences Associate Professor and Chair, and T. Gonzales, MSW, PMP, Center for Health Equity Interim Director. Click here to view article.

The Impact of Racial Discrimination on African American Fathers’ Intimate Relationships

A study led by Health Promotion & Behavioral Sciences Assistant Professor, Jelani Kerr, PhD, MSPH, found that racial discrimination damages intimate relationships of African Americans, specifically intimate relationship quality among African American fathers, which can be negatively impacted by stress associated with racial discrimination. The article explores how addressing interpersonal and institutional racism may impact relationship quality for African American men as well as examines how the stress associated with racial discrimination and financial strain impacts the intimate relationships of African American fathers. The results of the study were recently published in the journal of Race & Social Problems. Click here to view article.

Critical Reflexivity of Communities on Their Experience to Improve Population Health

Monica Wendel, DrPH, MA, Health Promotion & Behavioral Sciences Chair and Associate Professor, Billie Castle, PhD, MPH, Youth Violence Prevention Research Center Postdoctoral Research Associate and SPHIS alumna, and Monique Ingram, MPH, Office of Public Health Practice & Community Outreach Director, developed a process framework for critical reflexivity practice in community. The framework, published in the American Journal for Public Health, draws on ideas regarding cognition and agency, praxis, as well as the transformative learning model to conceptualize how reflexivity happens as an emergent community process. Click here to view article.
Meet the 2018-2019 Health Sciences Center Office of Diversity and Inclusion Health and Social Justice Scholars

Doctoral students from the four schools on the University of Louisville Health Sciences Center campus were encouraged to apply for the third cohort of the Health and Social Justice Scholars program. Applications were received from doctoral students in the Schools of Medicine, Nursing and Public Health and Information Sciences, and scholars were selected based on their commitment to social justice and health equity. These scholars are engaged in a three-year program designed to help them learn techniques for working interprofessionally and with community members to improve the overall health of local residents. Scholars will develop projects that include community-based research conducted along with a faculty mentor and a report prepared for scholarly publication. In addition, they participate in community service projects and attend monthly discussions.

Amanda Beering, School of Medicine

Ms. Beering is a medical student at the University of Louisville School of Medicine where she is one of four medical students in her class selected for the Distinction Track in Global Health and currently serves as a Student Director at the Family Community Clinic. Amanda has a BS in Neurobiology and Physiology from Purdue University, a BA in Spanish from Purdue University, and a MS in Cellular and Integrative Physiology from the Indiana University School of Medicine. Her undergraduate research focused on the behavior of zinc within the brain, examining the role of zinc dysregulation in the blood-brain barrier as a factor in Alzheimer’s Disease pathophysiology. Her Masters research focused on the efficacy of communications techniques and technologies for primiparous women involved in obstetrics research studies. Amanda has native fluency in Spanish and is a National Board Certified Medical Interpreter. Her focus is on working with underserved populations and patients with Limited English Proficiency, and she plans to research language discordance in healthcare encounters.

Tino Mkorombindo, School of Medicine

Tinomudaishe “Tino” Mkorombindo was born in Harare, Zimbabwe but relocated to the United States at a young age. The combination of exposure to various communities around the world and growing up in the diverse medical community of Loma Linda, California led Mkorombindo to decide to pursue a career in medicine. Mkorombindo is a 2017 graduate of Oakwood University, a Seventh-Day Adventist Historically Black University, where he graduated with a degree in Biology with honors. Throughout his undergraduate studies, Mkorombindo held various leadership positions in student government, service organizations, and various other extracurricular organizations. Since childhood, Mkorombindo has had a passion for improving his community which has undoubtedly continued into his medical studies. He recently founded an organization, Greater Influence, that works to address the declining numbers of minorities in medicine through mentorship and providing access to health-care related opportunities. As a physician, Mkorombindo plans to continue to serve as a motivational speaker, active mentor, and avid community leader.
Montray Smith  is a PhD student at the School of Nursing. She received an Associate Degree in Nursing from Florida Community College, a Bachelor of Science in Nursing from the University of North Florida, a Masters’ of Science in Nursing Education from the University of Central Florida, and a Masters’ in Public Health (MPH) in Public Health Practice with graduate certificates in Disaster Management and Humanitarian Assistance from the University of South Florida. She is a Registered Nurse with the US National Disaster Medical System (member of a federal Disaster Medical Assistance Team), most recently served in the disaster response to Hurricane Maria in Puerto Rico. Ms. Smith is a former General Electric National Medical Fellow Primary Care Leadership Program Scholar (2015,) and a member in the Tennessee Primary Care Association Community Health Educational Experiences for Residents and Students program (fall 2016), where she worked at the Matthew Walker Comprehensive Health Center, Nashville, Tennessee. She has worked with many local organizations related to community health and health disparities that includes the UL School of Medicine Global Health Initiative, American Red Cross, Redeemer Lutheran Church, and the Franciscan Healthcare initiative. Her research focus is on disaster management in vulnerable populations targeting families with special needs children, refugees, and low socioeconomic groups.

Diane Zero is a second-year doctoral student in the School of Public Health and Information Sciences. Her research work focuses on the measures of quality substance use disorder treatment services and sustained recovery. In this work, Ms. Zero serves as a member of the Mayor’s Task Force on Quality Treatment Metrics. She is as a graduate research assistant for the Commonwealth Institute of Kentucky. Most recently, Ms. Zero was Project Director for a partnership project between the Council on Developmental Disabilities and Lee Specialty Clinic in Louisville, KY. Here, Ms. Zero was responsible for the activities of both organizations in offering Supported Decision Making in the health care setting, to adults with intellectual and developmental disabilities. Previously, Ms. Zero was the Executive Director of a local education nonprofit and the Administrator of a youth residential services program. In recognition for her work as an AmeriCorps member for the Salvation Army, Ms. Zero received the first Maryland Governor’s Award for Service. In the community, Ms. Zero sits on the board of the Windy Equine Education Center, an equine focused therapy program for children with special needs. She also sits on the board of the Kentucky Autism Training Center.

Objectives of the Health and Social Justice Scholars Program

- Examine the intersections of race, ethnicity, gender, socio-economic status, geography, sexual orientation and other social factors that contribute to health and healthcare disparities
- Work with diverse community partners in service learning projects
- Develop and complete a community-based participatory research project designed to promote social justice and health equity
- Engage in mentoring and professional development activities to support future career goals

To learn more about this program please click here.
2018 Research!Louisville Health Disparities Award

The HSC ODI Excellence in Health Disparities in Research Award is open to all faculty, staff, students, residents, and fellows at the university who present studies at Research!Louisville that investigate issues of disparities related to healthcare disparities and/or health status disparities. The award, sponsored by the Health Science Center Office of Diversity and Inclusion, is designed to recognize and reward investigators’ efforts to address gaps in knowledge and to encourage new investigation focused on “population-specific differences in the presence of disease, health outcomes, or access to healthcare.”

1st Place: Mehran Yusuf—“Survival Impact of Prolonged Postoperative Radiation Therapy for Patients with Glioblastoma treated with Combined –Modality Therapy”
$500 award

2nd Place: Mohsen Mohammadi—“A Novel Approach for Quantifying spatial Access and Evaluating Disparities in Healthcare Access Measurement under Uncertainty”
$300 award

3rd Place: Jade Montanez Chatman—“The Perceptions of Pre-Nursing High School Students about Success in Nursing Education”
$200 award

CONGRATULATIONS FROM THE HSC ODI TEAM!

Events and Announcements

Kin Killin' Kin Exhibition
The Kentucky Center for African American Heritage will be exhibiting James Pate’s KKK Series Kin Killin’ Kin Art Exhibition scheduled for September 14 - November 12, 2018. We invite the public to the opening reception and gallery talk by the artist James Pate on Friday, September 21, 2018, 6:00 - 9:00 pm. There will also be the Youth Voices Against Violence Forum held at KCAAH on Saturday, November 3, 2018, 1:00 - 3:00 p.m. During this forum, District 15 Councilwoman Cheri Bryant Hamilton will facilitate a panel of youth from our community who will discuss the themes of gun violence and other forms of violence occurring in our society today. This panel of youth will examine the themes of gun violence within the context of public health, bystander action, healing through arts, and mobilizing for change through community dialogues.

Light up Shawnee
Saturday, December 8 at 4:00—7:00pm
220 Amy Avenue—French Plaza
4:00—6:00 pm Choirs, Christmas Music, Food, and Fun
6:00—7:00 pm Pictures and Treats with Santa
7:00pm Lighting of the Christmas Tree
For general information please call Anne Peak at 502-778-0001