2023 BUILDING FUTURE FACULTY IN STEM PROGRAM

July 23-26, 2023
New Orleans, LA
LS-PAC
Louis Stokes Center for Promotion of Academic Careers

BUILDING FUTURE FACULTY IN STEM
2023 Program

NSF
The Building Future Faculty in STEM Program is designed to nurture and cultivate the next generation of diverse leaders in STEM academia. Throughout this program, you will engage in a dynamic and collaborative learning environment where you will interact with experienced educators and fellow participants who share your passion for STEM. Our curriculum is thoughtfully crafted to equip you with the necessary skills to excel in teaching, mentorship, research, and leadership. From instructional strategies and pitch development, to grant timing and effective communication, you will gain invaluable insights and expertise that will set you apart in your pursuit of a faculty position. At the end of this program, you will emerge as a well-rounded, confident, and capable faculty candidate ready to inspire the next generation of STEM learners. You will have the potential to transform lives, contribute to groundbreaking research, and make a lasting impact on society.
July 24
Stepping Out As An Academician

July 25
You Got the Job, Now What?

July 26
Road to Promotion

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PARTICIPANT WEBPAGES

Participant webpages with full research statements and biographical details can be accessed via QR code on their respective program booklet pages.

NETWORKING RECEPTION
Sun. July 23 | 6:00 - 8:00 PM | Royal Salon
## Sunday, July 23, 2023

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<tr>
<th>TIME</th>
<th>SESSION</th>
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<tbody>
<tr>
<td>5:00 - 6:00 PM</td>
<td><strong>Registration</strong></td>
<td>Royal Salon</td>
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<tr>
<td>6:00 - 8:00 PM</td>
<td><strong>Networking Reception</strong></td>
<td>Royal Salon</td>
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   Remarks by Dean James Nguyen H. Spencer, Louisiana State University

## Monday, July 24, 2023

### Stepping Out as an Academician

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<tr>
<td>8:30 - 9:30 AM</td>
<td><strong>Breakfast Buffet</strong></td>
<td>Riverview Room</td>
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<tr>
<td>9:30 - 9:45 AM</td>
<td><strong>Opening Remarks</strong></td>
<td>Iberville D</td>
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   Dr. Tyrslai Williams-Carter, Louisiana State University

   LS-PAC MODELS PI

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<th>TIME</th>
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<tbody>
<tr>
<td>9:45 - 10:45 AM</td>
<td><strong>Finding Your Institutional Fit: What Does It Mean to Be a Faculty Member at R1 vs R2 vs PUI?</strong></td>
<td>Iberville D</td>
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   Dr. Donathan Brown, Northeastern University

   Dr. Daniela Kohen, Carleton College

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<tr>
<td>10:45 - 11:45 AM</td>
<td><strong>Understanding the Process: The Application and Interview Progression</strong></td>
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   Facilitator: Dr. Rafael Luna, Novartis

   Panelists:

   Dr. Tiffany Lemon, Arizona State University

   Dr. Rashanique Quarels, Rowan University

   Dr. Don Zhang, Louisiana State University

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<tr>
<td>11:45 AM - 12:00 PM</td>
<td><strong>Break</strong></td>
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### Monday, July 24, 2023

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<tr>
<th>TIME</th>
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| 12:00 - 1:00 PM     | Lunch and Learn: Navigating the Process to Your Post Doc and Understanding the Faculty Search  
Dr. Rafael Luna, Novartis | Riverview Room       |
| 1:00 - 5:00 PM      | Teaching Strategies that Promote Student Success  
Dr. Saundra McGuire, Louisiana State University | Iberville D       |
| 5:00 - 6:00 PM      | Break                                                                  |                   |
| 6:00 - 8:00 PM      | Keynote Dinner  
*Pressing Forward in Academia: Embracing Unique Pathways*  
Dr. Florastina Payton-Stewart, Xavier University of Louisiana | Acme Oyster House* |

### Tuesday, July 25, 2023

You Got the Job, Now What?

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<td>8:00 - 9:00 AM</td>
<td>Breakfast Buffet</td>
<td>Riverview Room</td>
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| 9:00 - 10:00 AM     | The Power of Mentoring  
LS-PAC MODELS Center | Iberville D           |
| 10:00 - 10:15 AM    | Break                                                                   |                   |
| 10:15 - 12:15 PM    | The Academic Pitch: Creating Noteworthy Research, Teaching, Diversity Statements  
LS-PAC MODELS Center | Iberville D           |

*Acme Oyster House: 724 Iberville St, New Orleans 70130*
## Conference Schedule

**Tuesday, July 25, 2023**

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<tr>
<th>TIME</th>
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<tr>
<td>12:15 - 1:15 PM</td>
<td>Lunch</td>
<td>Riverview Room</td>
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<tr>
<td>1:15 - 3:15 PM</td>
<td>Research Talks</td>
<td>Orleans A, B, C, D</td>
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<tr>
<td>3:15 - 3:30 PM</td>
<td>Break</td>
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<tr>
<td>3:30 - 4:30 PM</td>
<td><strong>How to Recruit and Build a Successful Research Group and Laboratory</strong></td>
<td>Iberville D</td>
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<td>Panelists: Dr. Tiffany Lemon, Arizona State University</td>
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<td>Dr. Rashanique Quarels, Rowan University</td>
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<td>Dr. Clifton Wagner, Louisiana State University</td>
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<td>Dr. Don Zhang, Louisiana State University</td>
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<tr>
<td>4:30 - 5:30 PM</td>
<td><strong>Understanding the Grant Process: When to Career Grant?</strong></td>
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<td>Dr. Don Zhang, Louisiana State University</td>
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<td>5:30 - 6:30 PM</td>
<td>Break</td>
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<td>6:30 - 8:00 PM</td>
<td><strong>Keynote Dinner</strong></td>
<td>Royal Salon</td>
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<td><em>Chasing Lions – Living the STEM Life</em></td>
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<td></td>
<td>Dr. Zakiya Wilson-Kennedy, Louisiana State University</td>
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## Wednesday, July 26, 2023

### Road to Promotion

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<tr>
<td>8:00 - 9:30 AM</td>
<td><strong>Hotel Check-out/Breakfast</strong></td>
<td>Riverview Room</td>
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<tr>
<td>9:30 - 10:30 AM</td>
<td><strong>Securing Tenure</strong></td>
<td>Riverview Room</td>
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<td>Dr. Murrell Godfrey, University of Mississippi</td>
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<tr>
<td>10:30 - 11:30 AM</td>
<td><strong>Research Collaboration and Its Importance!</strong></td>
<td>Riverview Room</td>
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<td>Panelists: Dr. Tiffany Lemon, Arizona State University</td>
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<td>Dr. Don Zhang, Louisiana State University</td>
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<tr>
<td>11:30 AM - 1:00 PM</td>
<td><strong>Lunch &amp; Learn: Harmonizing Work and Life Priorities</strong></td>
<td>Riverview Room</td>
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<td>Dr. Don Zhang, Louisiana State University</td>
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<tr>
<td>1:00 PM</td>
<td><strong>Departure to Airport</strong></td>
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Pressing Forward in Academia: Embracing Unique Pathways

Academia is constantly evolving. There are various pathways one can take to be successful. It is very important never to forget where you come from and those who have assisted you along the way. In my keynote address entitled "Pressing Forward in Academia: Embracing Unique Pathways," I will briefly take you on my academic journey and discuss the importance of believing in yourself, identifying strong mentors, never giving up, and the importance of broadening participation in STEM and Higher Ed.
Dr. Zakiya S. Wilson-Kennedy is the Ron and Dr. Mary Neal Distinguished Associate Professor of Chemistry Education and the Associate Dean for Diversity and Inclusion within the College of Science at Louisiana State University (LSU). Her research investigates the persistence of individuals from all backgrounds in STEM higher education and careers, focusing on faculty and student recruitment, retention, and success. This work has been supported through extramural support from the National Science Foundation, the National Institutes of Health, the US Department of Education, the Louisiana Board of Regents, and other agencies. Her education research has been published in peer-reviewed journals, such as the Journal of Science Education and Technology and the Journal of Chemical Education. She is a co-guest editor of a special issue of the Journal of Chemical Education, titled Diversity, Equity, Inclusion, and Respect in Chemistry Education Research and Practice (2022). Dr. Wilson-Kennedy was elected as an AAAS Fellow in 2021 and served as the principal investigator for the 2014 Presidential Award for Excellence in Science, Mathematics, and Engineering Mentoring (PAESMEM) organizational recognition for the LSU Office of Strategic Initiatives and has received additional honors for her work in broadening participation, diversity, and STEM education. She received her bachelor’s degree in chemistry from Jackson State University and her doctorate in inorganic chemistry from Louisiana State University.

Knowing who you are is the difference maker in persisting into success. All of us meet challenges and opposition. How we process the struggle either makes us stronger or can debilitate us. Through this talk, we will explore what this means in STEM and a career in higher education.
Dr. Donathan Brown serves as Vice Provost for Faculty Diversity and Associate Professor at Northeastern University. In this role, Dr. Brown works collaboratively with the Office of Academic Affairs and academic deans to lead, envision, and implement proactive diversity, equity, and inclusion initiatives in support of Northeastern University’s strategic diversity action plans. Among other responsibilities, he leads outreach efforts to develop talented and diverse applicant pools to ensure that Northeastern can accelerate its progress towards recruiting and retaining faculty members who identify as Black, Indigenous, and People of Color (BIPOC). Prior to Northeastern, Dr. Brown served as the Assistant Provost and Assistant Vice President for Faculty Diversity and Recruitment at the Rochester Institute of Technology. In addition, Dr. Brown is a former U.S. Fulbright Professor, current Fulbright Alumni Scholar Ambassador, and is the author and editor of numerous books and articles pertaining to race and public policy.

Murrell Godfrey is the Assistant Graduate Dean for Diversity, Equity, and Inclusion and Associate Professor of Chemistry and Biochemistry at The University of Mississippi. Dr. Godfrey earned his bachelor's degree in chemistry in 1994 from Dillard University and his doctoral degree in 2003 from the University of Mississippi. He has served as a faculty member in the Department of Chemistry and Biochemistry since 2003 where he directed the Forensic Chemistry Program through the FEPAC accreditation process and mentored undergraduate, master's, and doctoral students. His primary research includes method development and analysis of prescription and illicit drugs in wastewater and other matrixes, development of computational approaches to predicting new psychoactive substances, and development of methodologies to determine the biogeographic origin and genealogy of cannabis.

Dr. Godfrey currently serves the University community as one of two campus representatives of the Southeastern Conference (SEC) Emerging Scholar’s Program, a member of the Climate Study Working Group (CSWG), and the director and site coordinator for the Ronald E. McNair and Louis Stokes Mississippi Alliance for Minority Participation (LSMAMP) programs, respectively. He also represents the University of Mississippi by serving external constituencies of the University as the immediate past president of The National Organization for the Professional Advancement of Black Chemist and Chemical Engineers (NOBCChE) and a commissioner for the Forensic Science Education Programs Accreditation Commission (FEPAC). Dr. Godfrey also serves as a Co-PI on an NIH grant designed to help address health disparities and underrepresentation in STEM and the health professions in Black and other underrepresented communities. Dr. Godfrey has an impressive record in mentoring and educating Ph.D. candidates and postdoctoral scholars interested in academic careers in STEM.
Daniela Kohen is a Professor of Chemistry at Carleton College, a predominant undergraduate institution in Northfield, MN. where she teaches, does research, mentor students and is heavily involved in the life of the college. Dr. Kohen received her B.A. in chemistry from the Facultad de Ciencias Exactas y Naturales, Universidad de Buenos Aires, Argentina in 1990 and her Ph. D. in chemical physics from the University of Notre Dame in 1995. She did postdoctoral work at Bell Laboratories, Lucent Technologies and the University of California at Irvine. She then took a temporary teaching position in 1999 at Smith College and in 2002 started her current appointment at Carleton. In collaboration with her undergraduate researchers, Dr. Kohen, a physical and computational chemist, uses atomistic simulations to understand the behavior and characterize zeolites (a material with many industrial applications) at the molecular level. Their work has been supported by the Camille and Henry Dreyfus Foundation, the Petroleum Research Fund, National Science Foundation and the Department of Energy, and has resulted in many publications and conference presentations.

Dr. Tiffany L. Lemon is an HIV epidemiologist and a Research Fellow at Massachusetts General Hospital and Harvard Medical School and an incoming Assistant Professor of Health Services Research at the Arizona State University College of Health Solutions and Center for Health Information and Research. Her research identifies and quantifies the impacts of sociopolitical factors that influence healthcare access and produce health inequities among marginalized populations. Dr. Lemon’s current work leverages longitudinal data and causal inference methodologies to estimate the effects of health insurance coverage on patient outcomes including health care utilization, HIV disease progression, and health-related quality of life. Using the target trial framework, Dr. Lemon emulates hypothetical randomized trials to reduce the impact of biases and to assess the comparative effectiveness of health access strategies when resources or support for research in real-world settings are lacking. Prior to her current role, Dr. Lemon earned a B.S. in biochemistry at Louisiana State University as a LA-STEM Research Scholar, an MSPH in global epidemiology from Emory University’s Rollins School of Public Health, and a Ph.D. in population health sciences from the Harvard T.H. Chan School of Public Health.
Dr. Rafael Luna currently serves as the Head of Biomedical Education and Innovation at the Novartis Institutes for BioMedical Research. Previously, he served as an Associate Dean in the College of Arts & Sciences at Boston College and the Director of two programs (Gateway Program for Scholars in STEM and the Pre-Health Program). He found innovative ways to increase the efficacy and efficiency of both STEM-based programs. During his tenure, year over year the students in the Gateway cohort increased their cumulative GPAs and graduated with a higher rate of success in STEM than non-Gateway students.

Dr. Luna earned his Ph.D. in biological sciences at Louisiana State University. He performed his postdoctorate research at Harvard Medical School, which centered on elucidating the sequence of protein-protein interactions leading to the decoding of the initial start codons of messenger RNAs. He held the position of Instructor in the Department of Biological Chemistry and Molecular Pharmacology at Harvard Medical School. He also held the role as Program Director for Senior Faculty Promotions in the Office for Faculty Affairs at Harvard Medical School. As the previous Executive Director of the National Research Mentoring Network (NRMN) and the former Principal Investigator of the Administrative Core of NRMN located at Boston College, he oversaw this 24 million-dollar NIH-funded award. Dr. Luna utilized data analytics to strategically grow and approximately double the size of the biomedical research mentoring network as the biomedical mentoring network effectively reached all 50 states & Puerto Rico.

Dr. Luna brings his experience as a leader in diversifying the biomedical and STEM workforce with a national reach through his current Board/External Advisory Council roles: 1) Chair of the External Advisory Board of the Louis Stokes Center for Promotion of Academic Careers through Motivational Opportunities to Develop Emerging Leaders in STEM (LS-PAC MODELS; funded by NSF); 2) Member of the Board of Directors of the Biomedical Science Careers Program (BSCP; nonprofit associated with Harvard Medical School); and 3) Member of the External Advisory Council for the Louisiana Biomedical Research Network (LBRN; funded by NIH).

MAKE A DIFFERENCE

The LS-PAC MODELS Center is seeking mentors to provide academic, social, and career guidance to underrepresented minority students at various levels, who are interested in STEM academic careers. Become a mentor in our nationwide network and help us cultivate the next generation of STEM leaders. Visit our website for more information.

lspacmodels.org
SAUNDRA MCGUIRE, PH.D.
Professor Emerita of Chemistry
Director Emerita of The Center for Academic Success
Louisiana State University

Dr. Saundra Yancy McGuire is Professor Emerita of Chemistry and Director Emerita of the Center for Academic Success at Louisiana State University. Prior to joining LSU, she spent eleven years at Cornell University, where she received the coveted Clark Distinguished Teaching Award. Her best-selling books *Teach Students How to Learn* and *Teach Yourself How to Learn* were published by Stylus Publishing. *The Parents’ Guide to Studying and Learning* was released in January 2022 by Wise Action. She has delivered keynote addresses or presented workshops at over 500 institutions in 47 states and fourteen countries.

McGuire’s most recent accolades include being listed in 2023 as one of the Top 100 Learning Influencers by Eduflow, being named a 2022 Louisiana Legend by Louisiana Public Broadcasting, being listed in the 2020 edition of Marquis Who’s Who in America, receiving the 2019 Commitment to Excellence in Academic Support Award from the Commission for Academic Support in Higher Education, and induction in 2017 into the LSU College of Science Hall of Distinction. She is an elected Fellow of the American Chemical Society, the American Association for the Advancement of Science, and the Council of Learning Assistance and Developmental Education Associations. She received the Presidential Award for Excellence in Science, Mathematics, and Engineering Mentoring in a White House Oval Office Ceremony.

McGuire’s interest has been in improving student learning by teaching students metacognitive learning strategies. She works actively with university faculty and students to increase their understanding of the application of cognitive science and learning theory to increase student academic performance. She has been most recently focused on achieving metacognitive equity as a means to increase the number of underrepresented minority and women students who are interested in and prepared to pursue careers in STEM (science, technology, engineering, and mathematics).

McGuire received her B.S. degree, magna cum laude, from Southern University in Baton Rouge, LA, her master’s degree from Cornell University, and her Ph.D. from the University of Tennessee at Knoxville, where she received the Chancellors Citation for Extraordinary Professional Promise.

She is married to Dr. Stephen C. McGuire, the James and Ruth Smith Professor of Physics Emeritus at Southern University. They are the parents of Dr. Carla McGuire Davis and Dr. Stephanie McGuire, and the doting grandparents of Joshua, Ruth, Daniel, and Joseph Davis.
Great Teachers Inspire.
Dr. Clifton Wagner, originally from Glen Burnie, Maryland, received his Bachelor of Science in chemistry from the Massachusetts Institute of Technology. Following undergraduate studies, Wagner held various teaching positions focusing on the academic development of middle and high school students. As a tutor for C2 Education and teaching assistant for the MIT-Wellesley Upward Bound Program, Wagner taught standardized test preparation and abbreviated high school level math courses to prepare students for the school year.

Wagner then pursued his graduate studies, completing his Ph.D. with Distinguished Professor Philip Power at the University of California at Davis. His dissertation, which investigated the properties of low-coordinate transition metal and main group metal amides, was titled, “Investigation of Intramolecular London Dispersion Force based Ligand Design via the Synthesis and Characterization of Metal Amides.”

His collective scientific and teaching experiences inspired Wagner to pursue a career as a faculty member. "With the exception of the discovery of new inorganic molecules, the observation of a student’s intellectual growth over the years has been a singularly rewarding experience,” said Wagner.

In 2019, Wagner returned to the East Coast as a postdoctoral scholar for the lab of Associate Professor Tianning Diao at New York University. During his time there, he studied how redox-active ligand frameworks influence catalytic cross-coupling reactions. His research focused on addressing unanswered questions regarding the organometallic reactivity of pyridyl oxazoline and bioxazoline organonickel radical complexes.

Don Zhang is an Associate Professor of Industrial and Organizational Psychology at Louisiana State University. He received his Ph.D. in industrial and organizational psychology from Bowling Green State University. His research interests are in employee selection, risk-taking, and decision-making. His work has been published in peer-reviewed journals in the areas of psychology, decision-making, management, and organizational behavior. He was the recipient of the NSF Career Award for his work on risk-taking in the workplace. He serves on the editorial board for the Journal of Behavioral Decision Making, the International Journal of Selection and Assessment, and the Journal of Business and Psychology.
Dr. Tyrslai M. Williams-Carter is the Assistant Dean of Mentoring, Research, & Education in the Pinkie Gordon Lane Graduate School and an Assistant Professor of Research in the Lutrill & Pearl Payne School of Education at Louisiana State University. Formerly, she served as the Director of the Office of Strategic Initiatives Programs, where she led a team dedicated to transforming the landscape of STEM education for students at the undergraduate and graduate levels. During her doctoral studies, Dr. Williams-Carter investigated the Design, Synthesis, and Evaluation of BODIPY-Peptidic Conjugates for Biological Applications.

Over the past 15 years, she has conducted science outreach and mentored K-12, undergraduate, and graduate students and continues to contribute to the professional development of students from high school to graduate levels in several capacities. Because of her outreach efforts and passion for supporting students over the years, Dr. Williams-Carter decided to focus her research efforts on areas that create pathways for all students to achieve their academic goals in the face of barriers. Her current research focuses on investigating the strategies and support structures necessary to support students through critical junctures on their academic journey while cultivating critical skills to be successful in the workforce.

Dr. Williams-Carter is dedicated to transforming the lens through which underserved students see higher education by broadening participation and increasing the matriculation of undergraduate and graduate students in STEM and MESH fields. Because of her background in Organic Chemistry and STEM Education, Dr. Williams-Carter has published scientific and educational publications and is an investigator of 5 ongoing education support projects totaling over five million dollars.

She is affiliated with many professional STEM organizations and currently serves as the Southwest Regional Director for the National Organization of Black Chemists and Chemical Engineers (NOBCChE). Her service extends far beyond the STEM community but also into the city she was born and raised. In addition, Dr. Williams-Carter is actively involved in the organizations such as the Junior League of Baton Rouge, and the National Coalition of 100 Black Women (NCBW) of Metropolitan Baton Rouge, where she has served as the Education Committee Chair. She is also a member of the LSU Black Faculty and Staff Caucus. Dr. Williams-Carter was recently honored for her leadership and dedication to mentorship work by the NOBCChE with the Winifred Burke-Houck Professional Leadership Award (2023), the Tyrone Mitchell Mentor on the Map Award (2022), and the Presidential Award (2022).
Dr. James Nguyen H. Spencer is Vice Provost and Dean of the Graduate School at Louisiana State University; dating to 1909, the Graduate School is one of the oldest academic units at LSU. Spencer also serves as an Adjunct Senior Fellow at the East West Center. His scholarship focuses on urban and environmental planning and policy, with a particular focus on land use and pandemics; community-based water supplies & infrastructure; globalization; and urban inequality. His research of over 60 scholarly articles, chapters, and technical reports has been published in *PLoS One*, *Journal of Ethnic and Migration Studies*, *Landscape and Urban Planning*, *Water Policy*, *Journal of Economic Policy Reform*, *EcoHealth*, *Applied Geography*, *Journal of the American Planning Association*, *Environment and Planning A*, the *Journal of Urban Health*, *Economic Development Quarterly*, and elsewhere. His (2014) book titled *Global Urbanization: The Global Urban Ecosystem* is a part of the Rowman & Littlefield series on Globalization. Spencer’s second sole-authored book *Planning for Water Security in Southeast Asia: Community-Based Infrastructure During the Urban Transition* (2022) is part of Anthem Press’ book series *Science Diplomacy: Managing Food, Energy and Water Sustainably*. His work has been financially supported by the Ford Foundation, the National Science Foundation, the National Institutes of Health and the Social Science Research Council, among others (~$6.6 million as PI; ~$11.2 million including role of Co-PI).

He has served as a Special Government Expert member of the U.S. Department of Transportation’s Federal Advisory Committee on Transportation Equity (FACTE), as well as a member of the State of Hawai‘i Legislative Task Force on Sustainable Development, and has been awarded national planning awards from the Prime Minister of Viet Nam. In prior roles, he has served as Professor of Urban & Regional Planning/Political Science at the University of Hawai‘i at Manoa, and as Department Chair/Associate Dean at Clemson University. In those positions, he also served as Director of the Globalization Research Center and the Pennell Center for Research in Design and Building. Spencer has chaired 9 Ph.D. graduates, 3 of whom are in tenure-stream positions (R1 Universities), one who serves as the U.S. Ambassador to Uzbekistan, and one who serves as a Vice Minister of the Cambodian Ministry of Land Management, Urban Planning and Construction. As a Department Chair and Dean he has secured about $3 million in philanthropic support in support of scholarships and faculty research.

Prior to his academic career, Spencer held staff positions at the Ford Foundation and non-profit organizations working on community development. He holds a B.A. from Amherst College, a master’s in environmental management from Yale University, and a Ph.D. from UCLA in urban planning. As a Field-Weighted Citation Impact top scholar, Spencer is regularly asked by Times Higher Education (THE), Clarivate/US News Global rankings, and others regarding institutional scholarly reputation surveys, and is regularly asked to perform blind peer reviews for tenure and promotion for Ivy League, Top-10 Public, and other research universities in Planning, Architectural Engineering, and Public Policy. Please see attached CV for further details.
Wynton A. Johnson is a program coordinator for the LS-PAC MODELS Center and the SMART Polymer Composite Materials and Structures REU housed at Louisiana State University. Additionally, he is the Education and Outreach Coordinator for the Louisiana Materials Design Alliance (LAMDA) which focuses on expanding research and education in Louisiana related to additive manufacturing. Johnson's background is concentrated in engineering and sustainability, with experience working in aviation, safety, and project management. He has spent the past decade mentoring students and promoting academic success through his efforts with the National Society of Black Engineers and Alpha Phi Alpha Fraternity, Incorporated. Johnson received his bachelor's degree in architectural engineering from North Carolina A&T State University and his master's degree in civil engineering from Purdue University.

Dr. Kristen S. Williams serves as Program Manager for the LS-PAC MODELS Regional Center of Excellence at Louisiana State University. In this role, she works to promote academic careers and contribute to broadening participation efforts in STEM. Previously, Dr. Williams was the statewide Outreach Coordinator focused on education, outreach, and workforce development for the Consortium for Innovation in Manufacturing and Materials (CIMM) and subsequently the Louisiana Materials Design Alliance (LAMDA), which are dedicated to transforming research and education in advanced manufacturing and materials throughout Louisiana. Additionally, she managed the Smart Polymer Composite Materials and Structures Research Experiences for Undergraduates (REU) program and supported LS-PAC MODELS as a program coordinator. Dr. Williams earned her bachelor's degree in biochemistry from Louisiana State University and her Ph.D. in materials and analytical chemistry from the University of New Orleans.
Le Shorn Benjamin, Ph.D.

Dr. Le Shorn Benjamin has amassed over a decade of experience in the field of education. Her career spans local and international borders and has included roles in educational research, program administration, higher education accreditation and K-12 teaching. She is the recipient of the Robert Newby Award for Diversity Efforts, the Central Michigan University College of Graduate Studies 2019 Outstanding Dissertation Award, a Central Michigan University Department of Educational Leadership Faculty Endowed Award and is consistently motivated by the distinction of her University of the West Indies Most All-Round Social Policy Student award. Dr. Benjamin is a previous New York City Teaching Fellow and a current member of the inaugural cohort of the American Society for Engineering Education (ASEE) Post-Doctoral E-Fellowship. Through her scholarship, she explores topics related to minoritized student experiences, doctoral education, and engineering education through an educational philosophy that equates quality with equity. Dr. Le Shorn Benjamin is committed to transforming educational systems into more inclusive, equitable and just spaces that adequately support learners – particularly, learners who have been historically and intentionally positioned at the fringes of educational programs.

While my research agenda explores a variety of conceptual issues, at the core is a commitment to promoting quality education for all students. Given this dedication to advancing educational equity and quality, I have directed my scholarly aim to studies that examine:

i) educational quality in Doctor of Philosophy (Ph.D.) programs

ii) broadening participation in engineering education

This research statement will discuss projects that I have completed in these areas and how they have provided a sturdy foundation for my future scholarship.
Passionate and driven growing up, I had a deep-rooted fascination for reptiles and amphibians. Hailing from Miami and nurtured in the vibrant landscape of South Florida, my early encounters with these captivating creatures ignited a lifelong pursuit of understanding their adaptations. Fueling my passion, I embarked on a transformative journey at Oregon State University, where I pursued a zoology degree. It was there that my curiosity took a turn, leading me to develop an interest in the intricate workings of animal physiology.

In 2021, my dedication and perseverance were rewarded as I proudly received my Ph.D. from the University of North Texas, specializing in the field of biology. Throughout my doctoral research, I dedicated my efforts to unraveling the mysteries of reptile physiology. This experience broadened my horizons, deepening my understanding of the diverse adaptations that enable animals to thrive in extreme environments.

To further expand my expertise, I was honored to be awarded the prestigious National Science Foundation Postdoctoral Fellowship. This recognition propelled me to the University of Nevada Las Vegas, where I now study hibernation and temperature regulation in mammals. Exploring the intricate interplay between these remarkable animals and their environments, I gained invaluable insights into their unique strategies for survival.

Through my encounters with a multitude of animal models, I discovered a profound truth—these adaptations not only hold evolutionary significance but also bear immense potential for understanding and addressing human pathological conditions. Inspired by Nobel Laureate August Krogh’s words, “For such a large number of problems there will be an animal of choice or a few such animals on which it can be most conveniently studied.” I resolved to push the boundaries of scientific understanding.

This fall I will embark on the next chapter of my journey as a postdoc at UC Berkeley. Guided by an unwavering commitment to scientific excellence, I aspire to shape my own research program, delving deep into the mechanisms by which unique mammals evade the consequences of ischemia/reperfusion injury. By unraveling nature’s solutions, I aim to shed light on innovative strategies that can pave the way for improved human health and well-being.
Meli’sa Crawford, Ph.D.

Dr. Meli’sa S. Crawford is a postdoctoral researcher at the University of California, Riverside in the Division of Biomedical Sciences. Her current research focuses on elucidating the communication between the lungs and the gut by understanding how exposure to environmental pollutants induce chronic airway inflammation and alter intestinal barrier function. Dr. Crawford received her B.S. in psychology with a minor in molecular and cellular biology at the University of Arizona in 2012. In 2014, she pursued her Ph.D. in biology with a focus in physiology from Arizona State University, where her dissertation work focused on the effects of poor dietary consumption on the development of obesity, metabolic syndrome and gut dysbiosis. In 2021, Dr. Crawford received a grant from the Western Center for Agricultural Health and Safety to continue her investigation of the effects of agricultural pollution on intestinal physiology. Dr. Crawford is an active member of the American Physiological Society (APS) and in 2022 was selected to be a postdoctoral trainee on the APS Animal Care and Experimentation committee. In March 2023, Dr. Crawford was awarded the University of California President’s Postdoctoral Fellowship to continue her work in gastrointestinal physiology. Following her postdoctoral research, she will continue her passion for teaching and metabolic and gastrointestinal work as a tenure-tracked professor. Dr. Crawford is a proud member of Alpha Kappa Alpha Sorority, Inc. and is committed to mentorship and increasing participation and access to opportunities for underrepresented minorities in STEM.

Agriculture-related dust exposures to antimicrobial-resistant pathogens can have significant health implications for animal agricultural industry workers. Therefore, we seek to identify how agricultural dust lipopolysaccharide (LPS) triggers gastrointestinal inflammation and barrier dysfunction.

The goal of this study is to characterize and identify mechanisms by which agricultural dust can disrupt interspecies interactions between resident gut microbes that lead to host inflammation. An unresolved question with respect to inhalation of pollutants and their effects on intestinal inflammation is whether pollutants initiate inflammation in the lung that then migrates to the gut to compromise the intestinal barrier, or whether inhaled pollutants directly access the intestinal lumen and initiate inflammation independent from lung exposure.
Leo Fontenot

My name is Leo Fontenot, Jr. and I am a native of Brusly, Louisiana, a small town just across the Mississippi River from Baton Rouge. After graduating high school in 2010, I started my undergraduate journey in chemistry at Southeastern Louisiana University in Hammond, Louisiana before transferring to Louisiana State University in Baton Rouge. I received my B.S. in chemistry in December 2014 and spent the next 2 ½ years working as a quality control chemist at Valero Energy and the Renewable Energy Group, both in South Louisiana.

Realizing I wanted a more meaningful and rewarding career in chemistry, I returned to LSU Chemistry to pursue my Ph.D. in August 2017. I joined Professor Mario Rivera’s research group where I am currently a doctoral candidate. I am an analytical chemist with technical expertise in biological NMR spectroscopy and mass spectrometry. Our research is focused on understanding and validating iron metabolism as a target for antibiotic development, and my goal is to profile the metabolic response of *P. aeruginosa* to induced iron starvation by studying metabolomics and proteomics. To date, I have three co-authored publications, with one first-author publication in preparation. I am anticipating defending my dissertation this summer of 2023. I am also in the process of accepting a position as a postdoctoral research fellow in cancer metabolism and translational research.

Outside of the lab, I am a proud member of ACS and NOBCChE; I have served as the National Student Representative of NOBCChE since 2021. I have also volunteered as a mentor with BRDGE Alliance, a non-profit aimed at encouraging STEM students at HBCUs to pursue graduate degrees.

Over the years, research in the Rivera group has contributed to the current understanding of heme acquisition and iron metabolism in *Pseudomonas aeruginosa*. Now, we are using this fundamental knowledge to validate iron homeostasis as a viable target for antibiotic discovery.

Our lab has obtained promising results with the pathogen *Pseudomonas aeruginosa*, the leading cause of mortality in cystic fibrosis patients. We showed that iron mobilization from BfrB requires interaction with a ferredoxin (Bfd).

We also showed that blocking the BfrB:Bfd interaction in *P. aeruginosa* leads to irreversible iron accumulation in BfrB, which leads to dysregulated iron homeostasis and bacterial iron deficiency. We have also developed small molecule inhibitors of the BfrB:Bfd complex. More recently, we have observed that our small molecule inhibitors are bactericidal to cells embedded in mature biofilms. My work employed cutting-edge technique and experimental design in bioanalytical and microbiological chemistry.
Brandi James received her B.S. Degree in chemistry and mathematics from Wilmington College of Ohio in 2018 and performed research with Prof. Meinholtz in the allied health field with a hair science focus. She is pursuing a Ph.D. in chemistry at the University of Cincinnati under the tutelage of distinguished Prof. Anna Gudmundsdottir. During her first year in the program, Brandi focused on formulating gels in collaboration with the UC College of Pharmacy to understand the effects of cosmetic solvents on chemical sunscreen photoreactivity. Currently, her research is centered on elucidating the reaction mechanisms of organic azides upon exposure to light. Interestingly, crystalline organic azides jump, crawl, and explode. Thus, she is investigating why certain ortho-nitrophenyl azide crystals explode under visible light irradiation. This work explores the correlation between gas-releasing crystals and how the crystal lattice controls the motion of crystalline azides.

Brandi has spent the past four summers mentoring and managing the NSF-REU program and their departmental graduate student mentors and scholars. As part of this role, she moderates panels, plans engaging student activities (within constrained budgets), and maximizes the overall student experience over the ten-week program. Brandi has also served as a mentor for the ACS Project SEED program for three consecutive summers. She has also served on the executive board of the Consortium for Cultural Diversity in Chemistry (CCDC) as the mentoring/outreach chair and co-president. The summer before starting graduate school in 2018, Brandi had the opportunity to teach high school Pre-Calculus and Chemistry (with in-class experiments and in a laboratory setting) for six weeks as a TRIO Upward Bound instructor. She has also won departmental awards at the University of Cincinnati that exude her excellence in and passion for teaching. Brandi hopes to continue her career in education by becoming a future professor at a stellar research institution.

Brandi is a member of the American Chemical Society (ACS), the National Organization for the Professional Advancement of Black Chemists and Chemical Engineers (NOBCChE), and the Inter-American Photochemical Society (I-APS). For fun, she enjoys teaching music to the youth at her local church and learning new songs to sing and play on the piano for herself. Brandi yearns to cultivate young STEM minds and encourage everyone to believe in themselves and never give up on their dreams.
Dr. Kimiko L. Krieger is a Postdoctoral Associate in the Department of Molecular and Cellular Biology at Baylor College of Medicine in Houston, Texas.

Kimiko graduated with her Bachelor of Science Degree in cellular and molecular biology from Hampton University in 2014. She later moved to Omaha, Nebraska and obtained her Ph.D. in cancer research from the University of Nebraska Medical Center in 2019. Her graduate work was focused on studying BRCT domain-mediated protein-protein interactions in the DNA damage response. She began her postdoc at Baylor College of Medicine in 2020 studying metabolic alterations and prostate cancer disparities in African American men.

Kimiko has received awards, including the Early Investigator Research Award from the Department of Defense Prostate Cancer Research Program, the National Postdoctoral Association’s IMPACT Fellowship, and the Graduate School of Biomedical Sciences Dean’s Award. She is also a Scholar in the All of Us Evenings with Genetics Biomedical Researcher Scholars Program, in which she received a Seed Award to study genetic variants driving prostate cancer disparities in African American men. Kimiko is a member of the Black Scientist Collective at Baylor College of Medicine, American Association for Cancer Research, Minorities for Cancer Research, National Postdoctoral Association, and LS-PAC MODELS.

Kimiko’s research involves studying the intersectionality between DNA repair defects and nucleotide metabolism that drives prostate cancer disparities in African American men. In the future, she plans to pursue a career in academia as an independent investigator focused on the molecular underpinnings driving cancer health disparities, community-based participatory research, and the development of research and community outreach initiatives in her community.
Pierce Longmire is a 4th year Ph.D. candidate in the Graduate Program in molecular medicine at the University of Arizona in Tucson, AZ. A first-generation college student, he earned his B.S. in molecular and cellular biology from the University of Arizona in 2018. He then received his M.S. in molecular and cellular biology in 2019 under the supervision of Dr. Nathan Ellis at the University of Arizona Cancer Center. His thesis work investigated dysregulation of the DNA repair pathway, homologous recombination, in cancer and its impact on tumor resistance to platinum-based chemotherapeutics.

In 2019, Pierce joined the Arizona biological and biomedical sciences program to complete his doctoral studies. He joined Dr. Felicia Goodrum’s lab in March 2020 to study molecular mechanisms of human cytomegalovirus latency and reactivation. His current work seeks to understand how cytomegalovirus utilizes host DNA repair pathways to modulate virus replication as well as entry into and maintenance of latent infection.

Pierce has received various awards including the NSF LSAMP Bridge to the Doctorate Fellowship. He also received the Infection and Inflammation as Drivers of Aging Predoctoral T32 Training Grant and a scholarship from the Achievement Reward for College Scientists (ARCS) Foundation.

Outside of his lab work, Pierce is passionate about advocating for diversity, equity, and inclusion in science. He serves on the leadership team for the University of Arizona’s Colors of STEM, a graduate student-led collective that aims to provide professional and personal development for students from underrepresented minority groups in STEM majors. In his free time, Pierce enjoys music, film, science fiction, and running.
Laura has just rounded her third year as a Ph.D. student in the Department of River Coastal Science and Engineering at Tulane University in New Orleans, LA. With a bachelor’s degree in civil engineering from the University of Louisiana at Lafayette, she is now focusing on the development and application of 1D, 2D, and 3D numerical models to river and coastal systems in the Gulf of Mexico region. The purpose of these models is to explore natural resource management alternatives in the Gulf region. Specifically, she is focusing on investigating the management of diversion structures along the Lower Mississippi River.

These diversions provide flood control protection during high flow events, sediment supply to the adjacent basins for land building, and protection from salinity intrusion from the Gulf of Mexico. Exploring system-wide or comprehensive operation strategies for both future and proposed diversion structures can provide valuable information to decision-makers about the tradeoffs associated with various operational approaches. Laura’s research aims to employ co-production methods to design decision support tools for the management of coastal ecosystems and develop these tools for both scenario-based and operational real-time forecasting analyses.

Laura is a Cajun native of South Louisiana, who is dedicated to pursuing a career to support and preserve the future of this beautiful state. She loves to cook, fish, and sketch, but her favorite way to spend time is with her family and enjoying her 5 nieces and nephews.
Alessandra Norris, Ph.D.

Alessandra Norris was born in Tampa, Florida as a first-generation American but from a young age, predominantly grew up in Buenos Aires, Argentina. She attended the Universidad de Belgrano and graduated with a Bachelor of Science in biology. She completed her undergraduate thesis in the laboratory of Dr. Carlos Luzzani in the FLENI Institute (Center for the Fight Against Infant Neurological Diseases), leading to co-authorship on two publications.

Following, she joined the University of Florida in 2017 to begin her doctoral degree in the biomedical science program at the College of Medicine. She initially joined Dr. Torres’ lab where she studied the effects of amphetamine on catecholamine release within the brain. However, at the end of 2018 the laboratory changed institutions upon which Alessandra joined the Kopinke Laboratory. Specifically, she was interested in studying the crosstalk between stem cells within skeletal muscle during regeneration. During her time in graduate school, she accrued numerous accomplishments including receiving a T32 training grant from UF’s Neuromuscular Plasticity training program, multiple poster awards and was also given an award in an international Nikon competition for one of her images. She also had the incredible opportunity to present in a conference in Padua, Italy in 2022.

Finally, her doctoral dissertation has been recently accepted for publication in Nature Communications. She received her Ph.D. from the University of Florida in the summer of 2023. Alessandra plans to finish completing multiple projects in the Kopinke lab and is still deciding what her next steps will be. Regardless, she is excited to be at the forefront of muscle regeneration and therapeutics.
Jazzmin Owens

Jazzmin Owens is a biology doctoral student at Clark Atlanta University. She is a native of Los Angeles, CA. She received her biology bachelor’s degree from the University of Southern California. She currently conducts research in Dr. Juana Mendenhall’s SMART lab at Morehouse College. Jazzmin’s research dissertation focuses on investigating Calcium (Ca2+) and Reactive Oxygen Species (ROS) crosstalk signaling in 3D cell culture to control inflammatory response at multiple length scales using an osteoarthritis model. Her project incorporates 3D printed therapeutic scaffolds that can potentially regenerate cartilage and decrease damage caused by osteoarthritis.

Her previous research included investigating the crosstalk between the YAP1 and RELA transcriptional regulators in Prostate Cancer and the mechanism of ID4 phosphorylation in prostate cancer. She enjoys mentoring undergraduate students in her lab, as well as working as an Adjunct Professor for the General Biology Lab at Clark Atlanta University.

Her future aspirations include working for NASA and becoming an astronaut. In her free time, Jazzmin also is a member of Toastmasters International. She enjoys traveling, doing missionary work with her church, and running her motivational social media platforms.

Calcium (Ca2+), an intracellular second messenger, plays a significant role in various physiological functions including cell growth, development and signaling, autophagy and apoptosis. Reactive oxygen species (ROS) also serve as signaling molecules in apoptosis, cell signal transduction and gene expression. Dysregulation in these second messengers can cause cellular damage and death. An example of this can be seen in the degenerative joint disease osteoarthritis (OA). OA is characterized by the breakdown of the articular cartilage, synovial inflammation, and biochemical changes in chondrocyte extracellular matrix (ECM) production under oxidative stress. Under these conditions, the transcription factor protein, NF-κB involved in inflammatory responses and cell growth is upregulated. The NF-κB pathway can be activated by ROS, pro-inflammatory cytokines, ECM degradation, and Ca2+ signaling. Thus, it is important to further understand Ca2+ and ROS crosstalk in inflammatory response.

We propose that regulation of Ca2+ and ROS can reduce damage caused by inflammatory response in mammalian chondrocyte cell lines. This work aims to ascertain the mechanism that facilitates the crosstalk between the second messengers, Ca2+ and ROS, that can mitigate inflammatory response under oxidative stress at the cellular and nanoscale levels.
Participants

DeGrafth Palmore

My name is DeGrafth Palmore. I am from Akron, Ohio and I went to the University of Akron for high school and undergrad as I graduated in 2018 with a B.S. in electrical engineering. During my time in undergrad, I was on the board for several diversity student lead groups including NSBE. I also started my own organization called BOSS (Black Organization for Stem Students) which set a focus on gathering college-level STEM students to interact with younger students (elementary to high school) on a weekly to bi-weekly basis. The program involved not only introducing the younger scholars to most types of STEM fields through interactive learning such as dissecting fish, bridge and rollercoasting building, and electromagnetic experiments, but also having an emphasis on learning about diverse areas of history and, lastly, leadership development. I ended my undergraduate career with numerous awards, one of which includes the Top Ten Senior Award, which is the highest undergrad honor at the university.

In 2018 I started my Ph.D. program at The Ohio State University (tOSU) as a student in the Electroscience Lab. Since then, I have had two conference papers and currently working on two journal papers. I played Defensive Back for tOSU Club Football for two seasons where we went to the championship twice and won once. While working on the final stages of my Ph.D., I work as a signal processing engineer at Leidos.

Electromagnetic (EM) signals traveling in the lower atmosphere are drastically affected by the propagation environment. The environment can cause events called ducting to occur which causes trapping of the transmitted wave instead of spherical spreading. Developing ways to characterize, estimate and predict when these events occur will not only help understand when and to what extent these incidents occur, but also, mitigate the error in systems that are dependent on the propagation environment.

Duct sensing can be done by sounding launches or applying numerical methods from sensor data which are usually costly and/or non-real-time processing scenarios. Refractivity-From-Clutter (RFC) allows for real-time low tropospheric refractivity profiles to be estimated. Previous RFC work only used sea clutter using the hybrid sea surface model and a single launch angle radar. The motive behind this research is to improve the RFC method by exploring the advantages of multiple launch angles as well as including land clutter.
My name is Jose Robledo from San Benito, Texas located in the Valley of Texas. I am currently attending the University of North Texas (UNT) in Denton pursuing my Ph.D. in biology (genetics). My parents, both migrant farm workers, raised me in a hardworking loving home where we would harvest vegetables every summer as a family. Thankfully, my strong family values and the support of many programs (e.g. TRIO, UpwardBound Math and Science, C.A.M.P., McNair Scholars) led me to pursue a career in Academia. Attending West Texas A&M University for my B.S. in biology fueled my passion for scientific research, teaching, and mentoring. I have high hopes in inspiring young minds into pursuing careers in the STEM fields and to hopefully mentor future scientists.

At UNT, I found a great mentor in Dr. Pamela Padilla who studies various stress responses using Caenorhabditis elegans as a model system. My research in my Ph.D. involves understanding the genetic changes that result because of a hyperglycemic diet using Caenorhabditis elegans as a model system. Fortunately, with guidance from my mentor, I have been able to take a variety of approaches in my research (e.g. genetics, biochemistry, bioinformatics, R stats, and physiology). I hope to continue learning various molecular techniques to help me continue working on identifying Diet related gene expression and metabolic changes. I look forward to meeting everyone at the conference to feel inspired into looking for a postdoc as I enter my final year of my Ph.D.
Diandra Vaval Taylor received her B.S. in chemistry with biochemistry emphasis from Chicago State University, was a Post Baccalaureate Research Program (PREP) Scholar at the University of Chicago and received her doctorate in microbiology and immunology from the University of Illinois at Chicago. At the University of Illinois at Chicago she was awarded the prestigious National Science Foundation (NSF) Bridge to Doctorate Fellowship and under the mentorship of Dr. Nancy Freitag, Diandra investigated how *Listeria monocytogenes* (*Lm*) uses a peptide pheromone to escape host cells as well as play a critical role in the survival of *Lm*. Diandra is an active member of the American Society for Microbiology (ASM) and has served as the ASM Ambassador to Illinois, a Future Leader Mentoring Fellow, as well as a council member of the Illinois Society for Microbiology.

Diandra enjoys mentoring and teaching undergraduate, and graduate students. She serves as a professional affiliate with the I CAN PERSIST (ICP) STEM Initiative for girls and women of color, she’s involved with the Scientists That Elevate Me organization that aims to expose students of all ages and backgrounds to careers in STEM, and volunteers with the Boys and Girls Club of America. Additionally, she has taught a Biomedical Seminar Series at a medical preparatory high school in Chicago, and she has served as a guest lecturer at both the University of Illinois at Chicago and Chicago State University. Currently, Diandra is a K12 IRACDA Postdoctoral Research Scholar at the University of Illinois at Chicago.

My thesis work at the University of Illinois at Chicago under the mentorship of Dr. Nancy Freitag, focused on understanding how bacterial cells communicate and use small molecules to coordinate complex behaviors. I’ve identified a novel role involving an encoded peptide pheromone that enhances vacuolar escape of bacteria into infected host cells as well as plays a role in bacterial fitness of *Listeria monocytogenes*. Those findings suggest that there are thus far unidentified critical roles for peptide signals in processes central to bacterial survival.

My overarching goal has always included mentorship and teaching the next generation. I have the urge to foster diversity within the sciences, share knowledge, and connect with students in ways that others may not be able to. A goal of mine is to one day have my own research lab within an R1 institution so I can stay up to date on current research, train new scientists, and educate students effectively.
Jameka Wiggins

Originally from Prince George’s County, Jameka Wiggins is a Ph.D. student in engineering education at The Ohio State University. She started her Ph.D. in the Fall of 2021 after earning her Bachelor of Science in chemical engineering with a minor in entrepreneurship and innovation at the University of Maryland, Baltimore County (UMBC). Jameka has always had a passion for service and an interest in helping to support marginalized populations in STEM, specifically engineering. In addition to being a doctoral student, she loves to spend time with her bichon poodle mix Cairo, family, and friends!

The purpose of this research is to investigate how the three components of critical consciousness equip an engineering education community to explore and establish ways to support marginalized students. A core tenet in Ladson-Billings’s culturally relevant pedagogy, critical consciousness spans disciplines. Critical consciousness (CC) refers to an individual’s awareness of oppressive systemic forces in society, a sense of efficacy to work against oppression, and engagement in action against oppression. It has 3 components: critical reflection (awareness of both historical and systemic ways oppression and inequity exist), critical motivation (perceived capacity or moral commitment to addressing inequalities, and critical action (participation in individual or collective action to change, challenge, and contest perceived inequity).

It is imperative to develop a framework for critical consciousness that can also be applied to scrutinize the complicit role of these individuals in perpetuating oppression and inequities within higher education institutions and organizations.
Jabari Wilson

Mr. Jabari Wilson is a Ph.D. Student in Engineering Education at the University of Florida, hailing from Huntsville, AL. He received his bachelor’s degree in mechanical engineering from The University of Alabama in 2019. Afterwards, he completed his master’s degree in mechanical engineering with a minor in electrical engineering at the University of Florida in 2022. Over the course of his academic career, he has completed 6 semesters of internship experience in a variety of areas, including project management, quality assurance, and quality control. These experiences were gained across the construction, automotive, and research industries.

He has a passion for educational outreach and believes that the best work we can do is work that benefits the future of the world and those in it. So far, he has served as an assistant director for a Rockets and Robotics Summer Camp in his hometown and peer advisor in the Florida Board of Education Summer Fellowship Program. For the 2022-2023 academic year, Mr. Wilson has served as both a technical lead and mentor to high school juniors and seniors in Washington D.C. public schools as part of their Career Technical Education (CTE) Advanced Internship Placement (AIP) program through his position as an Air Force Research Lab (AFRL) Scholar with the Air Force Office of Scientific Research (AFOSR). He is currently continuing this work as the immediate supervisor for students in the CTE Career-Ready Internship (CRI) program intended to give students an experience similar to that of the AIP program but for the duration of the summer.

He aspires to attain a Ph.D. in engineering education, then enter the workforce. In his free time, Jabari enjoys billiards, automotive work, music, and documentaries.
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