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Made possible through a grant from the U.S. Department of Education to Saint Louis University, the Ronald E. McNair Post-Baccalaureate Achievement Program (McNair Scholars Program) is a TRIO program that prepares eligible high-achieving undergraduate students for the rigor of doctoral studies. These services are also extended to undergraduates from Harris-Stowe State University, Washington University in St. Louis, Webster University, University of Missouri St. Louis and Fontbonne University.
MESSAGE FROM THE DIRECTOR

Greetings,

It is with great pleasure that we present the second volume of our SLU McNair Research Journal, which showcases some of the outstanding work that took place during our 2019 McNair Summer Research Internship Program here at Saint Louis University. Among the talented scholars whose research is featured in this volume are students from SLU, Fontbonne, and Harris-Stowe State University. We are especially grateful to the McNair Faculty Mentors who dedicated their time and energy during the eight weeks of the summer program by supervising the research of the scholars, as well as to the summer workshop facilitators, who contributed greatly to their professional development.

Special thanks to Anthony D. Parker-Gills, Sunita Manu, Raymond Moylan, Kofi Oyirifi and Sadita Salihovic for the many ways in which they have contributed to SLU McNair. Their talents, skills, and dedication have played a paramount role in the continued success of the program. Last but certainly not least, we are eternally grateful to William Perkins, Director of Pre-College, Access & TRIO Programs, without whom none of this would have been possible.

Sincerely,

Jamie D. Motley, Ph.D.
McNair Scholars Program Director
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LIST OF 2019 MCNAIR SCHOLARS

- Wesley Agee
- Ciarra Anders
- Hope Conyers
- Janee Davis
- DelShawn Fowler
- Noah Gistover
- Dalia Harris
- Brandon T.M. Hughes
- Sequoyah Lopez
- Derek R. McFarland, Jr.
- Mya Robinson
- Rossana Sandoval
- Antonia Simpson
- Liza Sivriver
- Wendy Teal
- Jazmine Terrazas
- Brendan Underwood
- Carissa Villanueva
MCNAIR STAFF

Jamie D. Motley, Ph.D.
Program Director

Dr. Jamie D. Motley first began working in TRIO as a graduate student at the University of Illinois at Urbana-Champaign, where she earned her Master’s Degree in Higher Education Administration and Ph.D. in Educational Policy Studies. She has held leadership positions at multiple colleges and universities in Illinois, Georgia, Alabama and Missouri. Dr. Motley began her tenure at Saint Louis University in 2014 as a member of the TRIO Student Support Services staff and was promoted to McNair Scholars Program Director in the fall of 2017. In addition to her graduate degrees, she holds a Bachelor of Arts Degree in Journalism from Western Illinois University.

Anthony D. Parker-Gills, MSW
Academic Coordinator

Anthony Gills joined the McNair Scholars Program staff in November of 2017. Prior to that, he was a Relationship Manager, Post-Secondary Prep at Big Brothers Big Sisters of Eastern Missouri. He was also a practicum student with TRIO Student Support Services, as well as the TRIO Educational Talent Search Program at Saint Louis University. Anthony has a Bachelor of Arts in Criminology & Criminal Justice from Southern Illinois University-Carbondale and a Master of Social Work from Saint Louis University. He is currently pursuing a Ph.D. in Higher Education Administration. As the academic coordinator for McNair, Anthony provides academic and personal support to McNair Scholars, assisting with program-related projects and activities, coordinating workshops and monitoring each Scholar’s participation and success in the program.

Sunita Manu, MPH, CPH
Graduate Assistant

Sunita Manu became part of the McNair Scholars Program in September of 2018. She is a first-year PhD student at St. Louis University College for Public Health and Social Justice. Prior to McNair, Sunita was an assistant with L’Arche St. Louis where she worked with individual with intellectual disability. As the graduate assistant for the McNair Scholars program, Sunita oversees the Gateway to McNair Scholars Program, provides academic and personal support to scholars, assist scholars with completing their college application, and help with event planning.
**Janee Davis**

born in Naperville, IL is a graduating senior at Saint Louis University, completing her bachelor's degrees in Psychology and African American Studies. She has had the pleasure of working alongside her undergraduate mentor, Dr. Richard Harvey, for her summer research for the McNair internship. Her specialties of interest are leadership and group dynamics within I-O Psychology. In the midst of preparing for life after undergrad, Janee is determined to receive her Ph.D. in Organizational Psychology. Along with being a scholar, Janee also holds multiple leadership roles on campus such as president of the Black Student Alliance, and desk manager for the Housing and Residence Life department.

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**Noah Gistover**

is a senior from Columbus, OH. He is majoring in Investigative and Medical Sciences with minors in Biology and Health Care Ethics at Saint Louis University. His McNair Faculty Mentor is Dr. Enrico Di Cera, Professor and Chairman of Biochemistry and Molecular Biology at SLU. The two have co-authored a manuscript along with other student researchers. The manuscript is titled, “Residues W215, E217 and E192 control the allosteric E* -E equilibrium of thrombin” and was published in the Scientific Reports.
**Dalia Harris**

is a senior pursuing a Bachelor’s of Science degree in Biology at the illustrious Harris-Stowe State University. During the 2019 McNair Summer Research Internship Program, Dalia had the opportunity to conduct scientific research under the mentorship of Dr. Laurie Shornick. The project focused on comparing the expression of the PPAR-gamma receptor in adult and neonatal lungs in mice during a respiratory viral infection known as Sendai Virus. Recently, Dalia was able to present a poster presentation of her summer research at the 2019 Annual Biomedical Research Conference for Minority Students (ABRCMS), where she was also awarded a student travel award. Since then, she has been awarded another student travel award to present her summer research at the 2020 Emerging Research National conference (ERNs). After graduating with her Bachelor’s Degree, she hopes to enroll into a graduate school for a Ph.D program that focuses on either cancer research or biomedical science. Dalia wants to become a clinical geneticist someday. A student leader on her campus, she is currently the president of the HSSU MOLSAMP Biology Club and works in a research lab.

**Mya Robinson**

is a junior at Fontbonne University. She is currently pursuing a bachelor’s degree in cyber security. Mya has a strong interest in the IT auditing space. She believes the role of an IT auditor would allow her to leverage her communication skills and technical abilities. She is active on her campus. Mya is a Residential Assistant, a mentor and an executive board member of Fontbonne University’s Black Student Union.
Antonia Simpson

is a senior at Saint Louis University pursuing her Bachelor’s of Science in public health with minors in health care ethics and psychology. She was born and raised in Chicago. Over the Summer of 2019, she had the privilege of participating in the McNair Scholar’s summer research internship. During the summer she conducted her independent research under the mentorship of Dr. Enbal Shacham. Her research was a systematic review over the intersection of food insecurity and mental health. In addition to her interest in the public health professional world, Antonia has a passion for community service and advocacy. She serves in multiple roles on campus ranging from Executive Vice President of her campus’s chapter of Alpha Phi Omega-national service fraternity-, as well as being the co-chair from the Assembly for Sexual Assault Prevention, or ASAP. Antonia hopes to enter a MPH program during the Fall of 2020, and then move on to getting her PhD I shortly after.

Wendy Teal

is a senior at Saint Louis University graduating with a Bachelor’s of Science in Neuroscience with a Minor in Biology December 13, 2019. She is interested in neural circuitry and morphology, neuroendocrinology, and has recently discovered an interest in Artificial Intelligence. Wendy has completed two McNair Summer Internships in both 2018 and 2019, and has had the privilege of working under the mentorship of Dr. Alaina Baker-Nigh, and Dr. Ruth Warner, where she completed work on anti-transgender prejudice and established a dose response curve for neurite outgrowth in both Caffeine and Taurine. Currently, she is working with Dr. Judith Ogilvie’s Retina Lab to annotate a connectome of the macaque retina. Specifically, she is helping classify the abundance of the types of bipolar cells that synapse onto parasol and smooth monostratified ganglion cells that contribute to the neural circuit of motion detection. Last year, she ran the initiative to introduce Neuroscience to Saint Louis Youth including the Juvenile Detention Center, Flance Early Learning Center and Marian Middle School. Her passions involve communicating neuroscience findings to the communities they will best serve, as well as, engaging in personal development, oil painting, and singing. She will continue with her studies in the Fall of 2020.
Brendan Underwood

is a senior at Saint Louis University pursuing his Bachelor of Arts in Philosophy and in African American Studies. Brendan is a Saint Louis native who has been deeply involved in thinking about the importance of liberation from the practical to the abstract. Brendan hopes that he has found the first leg of research in a lifelong work that will continue through his future Ph.D. program in philosophy and his teaching once he becomes a professor. He hopes to specialize in the fields of Ethics and Epistemology while also creating the groundwork for a potential new field of study in the philosophy of liberation.