Re: Celebrating the Winthrop McNair Summer 2023 Researchers



## Dear Winthrop,

I write with more evidence that Winthrop has earned its reputation for exceptional undergraduate research. As a member of the Winthrop community, you deserve to share bragging rights about the outstanding work of our McNair Summer Research Interns and the Faculty Mentors who support them. Until last month, I was convinced there was no way there would be more remarkable achievements to report than we had last summer, but I was wrong. Those of you who contributed to the impressive attendance during the <a href="Summer Research Symposium">Summer Research Symposium</a> on Juneteenth witnessed the high quality of each Scholar's presentation and likely won't be surprised by the numbers I share later in this letter.



Winthrop McNair Scholars after the awards ceremony at our national McNair research conference hosted by the Southeastern Association of Educational Opportunity Program Personnel (SAEOPP) June 22-25

McNair is proud to be a part of Winthrop's <u>Summer Undergraduate Research Experience (SURE)</u>. This is the first McNair summer research experience since our first year (2010) without any returning Scholars. That all were new participants who excelled under our shortest and most challenge-filled timeline makes the caliber of their work with their Mentors that much more impressive. Each new Scholar made good on their selection by the <u>Winthrop McNair Advisory Board</u>.

Summer 2023		SAEOPP	Pres.	
Scholar	Faculty Mentor	Category	Type	Summer 2022 Research Presentation Title
Michelle Aguilar- Gaspar	Dr. Daniel Stovall	Life Science	Oral	The Role of Promoter Methylation in Regulating RYBP Expression in Glioblastoma Cells
Skyler Allen	Dr. Michelle Aaron Livek Garner	Education	Oral	Art Therapy Minded Interventions as a Means for Restorative Classroom Management
Leliana Bohanan	Dr. Salvatore Blair	Life Science	Oral	Effects of Titanium Dioxide nanoparticles on Goldfish upper thermotolerance
Ryan Carr	Dr. Joanna Jackson	Business	Oral	The Use, Benefits and Satisfaction of Electronic Health Records for Healthcare Managers in Mental Health Facilities
Morgan Dukes	Dr. Nicholas Grossoehme	Life Science	Oral	Exploring the Impact of Cadmium (II) on the Function of the Troponin Protein Complex
Be Kuehn	Dr. Jason Hurlbert	Physical Science	Oral	Investigating the Function of DUF 3310 Containing Mycobacteriophage Gene CAIN55
Maryah Lance	Dr. Joni Boyd	Health	Oral	Exploring the Impact of Movement on Mood
Rachel Layens	Dr. Hope Lima	Life Science	Poster	Impact of Multiple Freeze/ Thaw Cycles on Nutritional Integrity of Human Milk
Abby Mervine	Dr. Zach Abernathy	Physical Science	Oral	Time Series Forecasting Models for Local Light Pollution

Morgan Moore	Dr. Joanna Jackson	Health	Oral	Effects of Structural Racism and Discrimination on Black College Students in Gynecological Health Decision-Making
Julianne Phu	Dr. Timea Fernandez	Physical Science	Oral	Fabrication of gold-nanoparticle-ampicillin conjugate as drug delivery vehicles against <i>E. coli</i>
Carrie Vaughn	Dr. Jennifer Disney	Social Science	Oral	The Implications of the Straight-Ticket Voter Option (STVO) on Residual Voting: A Comparative Study Using Gaston County, NC and York County, SC
Jamia White	Dr. Nicholas Grossoehme	Life Science	Oral	The Dimerization of RitR Under Stable Oxidation Conditions

As we have most years since 2010, Winthrop McNair tied our summer timeline to the <u>SAEOPP McNair/SSS Research</u> <u>Conference</u>. Here is a breakdown of our approach and outcomes.

- Winthrop started its McNair summer program May 10 and held our on-campus symposium June 19.
- Around the country, TRiO undergraduate researchers submitted an intent-to-present form through the conference website by June 9 and 10-minute recorded presentations by June 16. The recordings were judged and the students presented in-person in Atlanta June 23 & 24.
- Students came from all over the country, just a few of the schools are UCLA, U of FL, Illinois Urbana-Champaign, John Jay College of Criminal Justice - CUNY, Concord, and many other U.S. colleges/universities. The 27-minute roll call of universities is posted here https://m.facebook.com/SAEOPP/videos/roll-call/657826145736576/.
- First, second, and third place research presentations receive a cash prize (1st place prize = \$500).
- Seven of Winthrop's 13 presenters (54%) earned one of the top three slots in their category.

Here are the research presentations that were selected for SAEOPP awards. I know I'm biased in favor of Winthrop Scholars, but my evaluation of the quality of their presentations is that all 13 were worthy of a top spot. As I told the **Scholars, a win for one is a win for all** because of the constructive feedback and constant support they gave each other.

Scholar	Mentor	SAEOPP Presentation Award
Michelle Aguilar-Gaspar	Dr. Daniel Stovall	2 <sup>nd</sup> Place in Life Science (tie with Jamia White)
Ryan Carr	Dr. Joanna Jackson	1 <sup>st</sup> Place in Business
Be Kuehn	Dr. Jason Hurlbert	1 <sup>st</sup> Place in Physical Science (tie with Abby Mervine)
Rachel Layens	Dr. Hope Lima	1 <sup>st</sup> Place in Posters (tie)
Abby Mervine	Dr. Zach Abernathy	1 <sup>st</sup> Place in Physical Science (tie with Be Kuehn)
Julianne Phu	Dr. Timea Fernandez	3 <sup>rd</sup> Place in Physical Science
Jamia White	Dr. Nicholas Grossoehme	2 <sup>nd</sup> Place in Life Science (tie with Michelle Aguilar-Gaspar)

Winthrop's record of top presentations often leads others to ask me "What is Winthrop's secret?" I always start with the incredible mentoring Winthrop faculty provide our undergraduate researchers. I also talk about how strong and pervasive support for McNair is on our campus. Of course, none of those resources matter without the students' effort. It is the students who step up and seize this intense and challenging opportunity.

In addition to our 11 Mentors, the Scholars and I have benefited from the research expertise and support of many talented folks this summer: Dr. Matt Hayes (Stats & Methods Coach, effective presentations), Stephanie Bartlett (Writing Specialist), Dr. Jason Hurlbert (reading and producing scientific writing, presenting), Dr. Gloria Jones (writing skills and approaching the work), Dr. Mike Sickels (qualitative research), our Summer GA Madison Bray (feedback), and our new Program Assistant Jennings Cavin (feedback). Several award winning Winthrop McNair alumni led sessions on effective presentations. They are Dr. Jordan Lewis, Maryssa Shanteau-Jackson, Lydia Rodriguez, and Amanda Cavin. Amanda (Winthrop's Eagle Stem Director), who helps coordinate the McNair summer program, helped prep the Scholars for the SAEOPP conference experience and giving and receiving feedback. Together, these four alumni earned top awards for their McNair research as BIOL, CHEM, PSYC, and EDUC majors.

**McNair Purpose**. Winthrop's program is funded to serve 30 undergraduates who are first-generation college students from low-income families (FG&LI) and/or who come from underrepresented racial and ethnic backgrounds. At least

2/3rds of each fall-through-summer cohort served must meet the FG&LI criteria. Most programs around the country are funded to serve 25 students. Winthrop University and Foundation investments in the program; the dedication of our faculty mentors; the widespread support of staff, faculty, administrators, and Trustees; Winthrop's extraordinary undergraduate research experiences; and the efforts of our staff and our <u>Advisory Board</u> help us make the most of our resources, so we can support the individual strengths and needs of each Scholar. Winthrop was successful in last year's grant competition which means we should be able to offer McNair supports at least through 2028.

**Program Objectives**. Winthrop earns prior experience points for serving 30+ participants each year, 2/3rds of which are FG&LI, and meeting our annual program objectives (below).

- 1. 96% of participants complete high quality research projects (97% in last annual performance report, APR)
- 2. 50% of graduates immediately enroll in graduate programs (33% in last APR)
- 3. 75% of enrollees continue graduate study their second year (82% in last APR)
- 4. 14% of graduates will earn a PhD within 10 years (25% in last APR)

Including this year's 13 new participants, our program has served 199 outstanding students. **28 alumni hold doctorates** (see our growing list <a href="here">here</a>). **100 Winthrop McNair alumni have at least one graduate degree.** 

In addition to the great faculty and staff who work in McNair, there are many Winthrop people who stepped up to remove barriers for Scholars and top the program's success. A sampling of those people are: Provost Judge, Dean Poole, Deborah Broome, Michelle Hare, JC Cunningham, Dawn Sayer, Victoria Balberde, the experts in Printing Services, our friends in IT, the good folks in HR and Payroll, Michelle Smith, Dr. Jeremy Lopuch, Cody Walters, Dr. Joni Boyd, Connie, Vlad Markarov, Lars Larsen, Anna Triester, Tracy Hildreth, Melissa Mims, and Logan Pender. Drs. Jason Hurlbert, Nick Grossoehme, and Sal Blair: I cannot thank you enough for your efforts to create opportunities and support all Scholars year round. There are many more folks who have my unwavering gratitude.

**Please brag with us.** The support our McNair program receives from the entire Winthrop community means all of Winthrop has earned the right to brag about Winthrop McNair Scholars' research and graduate degree accomplishments. We appreciate that Winthrop faculty, staff, Directors, Chairs, Deans, and senior leaders step up throughout the year to directly or indirectly support Winthrop's McNair Scholars. In particular, the Psychology Department and College of Arts & Sciences allow me to do this wonderful work throughout the year.

**Please help us recruit** the next cohort of new McNair Scholars by encouraging strong undergraduates at Winthrop and other SC universities to learn about the program at <a href="https://www.winthrop.edu/mcnair">https://www.winthrop.edu/mcnair</a> and determine if it is a good fit for their doctoral goals. Priority consideration is given to applications received by the end of advising. After Labor Day, students can find out if they are eligible by completing the online survey at: <a href="https://tinyurl.com/lsMcNair4me">https://tinyurl.com/lsMcNair4me</a>.

Sincerely,

Cheryl A. Fortner, Ph.D.
Proud Director, McNair Scholars Program
Professor of Psychology
Winthrop University



Winthrop's program is funded through September 2028 by a five-year renewable TRiO grant from the <u>U.S. Department of Education</u>. This year, \$261,888 in federal funding is provided each year for programming and materials that will help 30 eligible students prepare for graduate study. This represents 75% of program costs. Winthrop contributes the remaining 25% of the budget with approximately \$87,900 in cash and in-kind funds.