

Acknowledgments

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Secretary of the U.S. Department of Education
Arne Duncan

Our colleagues at the U.S. Department of Education's
Office of Federal TRIO Programs

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Research Mentors

McNair Scholars and their Families

Members of the Office of Minority Student Affairs (OMSA)

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The TRiO McNair Scholars Undergraduate Research Journal is the official publication of the Ronald E. McNair Scholars Program at the University of Illinois at Urbana-Champaign. The journal includes abstracts of the students' final paper and represents combined efforts of students and their research mentors. The views expressed in the papers and abstracts are not intended to represent the views, beliefs, interests, values, or practices of the University of Illinois at Urbana-Champaign.

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2012 Summer Research Institute Faculty Mentors

Note: All Faculty Mentors are affiliated with the University of Illinois at Urbana-Champaign

Aaron Benjamin	Professor	Psychology
Issac Cann	Professor	Microbiology
Soon-Jo Chung	Assistant Professor	Aerospace Engineering
Ollie Watts Davis	Professor	School of Music
Jody Endres	Assistant Professor	Natural Resource and Environmental Science
Dorothy Espelage	Professor	Educational Psychology
Susan Farner	Lecturer	Kinesiology and Community Health
Christopher Freeburg	Assistant Professor	English
Rebecca Fuller	Associate Professor	Animal Biology
Peter Goldsmith	Associate Professor	Agriculture and Consumer Economics
Robin Jarrett	Professor	Human and Community Development/African American Studies
Michael Krassa	Associate Professor	Political Science
Philip Krein	Professor	Electrical and Computer Engineering
Reed Larson	Professor	Human and Community Development
Christy Lleras	Associate Professor	Human and Community Development
Hellen McDonald	Assistant Professor	School of Social Work
Marisell Melendez	Professor	Spanish, Italian, and Portuguese
Ruby Mendenhall	Assistant Professor	Sociology/African American Studies
Faranak Miraftab	Associate Professor	Urban and Regional Planning
Stephen Notaro	Lecturer	Kinesiology and Community Health
Alice Novak	Lecturer/Assistant Head	Urban and Regional Planning
Lissette Piedra	Assistant Professor	School of Social Work
William Qualls	Professor	Business Administration
Brian Quick	Associate Professor	Communication
Marcela Raffaelli	Professor	Human and Community Development
Brent Roberts	Professor	Psychology
Richard Rodriguez	Associate Professor	English/Latina/o Studies
Rebecca Sandefur	Assistant Professor	Sociology
Karen Sears	Assistant Professor	Animal Biology
Mirelsie Velazquez	Visiting Lecturer	Latino/Latina Studies
Cara Wong	Assistant Professor	Political Science/Asian American Studies

Message from the Associate Dean of Students and University TRiO Director

Dear Reader:

I am delighted to share with you this inaugural issue of the *TRiO McNair Scholars Undergraduate Research Journal at the University of Illinois at Urbana-Champaign*. The young scholars have worked with a faculty or research mentor to learn how to develop and implement quality and relevant research in their respective fields. The research they have produced represents the result of applying creative ideas to research questions using systematic and rigorous methods of established research protocols in the STEM fields, the social sciences, and the humanities.

The TRiO McNair Scholars Program is a federally-funded program geared to provide research opportunities for first-generation college, low-income, and underrepresented undergraduates as a means of preparing them for graduate school. By combining undergraduate research with faculty mentoring and academic support services, the program paves the way to graduate school for students who are underrepresented in higher education. For the past 22 years, the program has been an important asset and contribution to the research culture on this campus and in the University of Illinois system. Since 1990, more than 400 students have benefited from the program's services, opportunities, and research mentoring. More than 60 percent of our TRiO McNair Scholars have been accepted into graduate schools, and over 50 scholars have attained their Ph.D. or other doctoral degree.

We are very proud of the success of our TRiO McNair Scholars Program and the students who have completed it. We anticipate that they will ultimately be leaders in their respective fields. I congratulate the McNair scholars, applaud the faculty mentors, and extend my appreciation to the staff for their dedication and for helping the next generation of scholars, scientists, faculty, and leaders achieve success.

With warm regards,

A handwritten signature in black ink, appearing to read "W. S. III". The signature is fluid and cursive, with the letters "W", "S", and "III" being the most prominent.

Wallace Southerland III, Ph.D.