

Ursidae: The Undergraduate Research Journal at the University of Northern Colorado

Volume 7
Number 2 *McNair Special Issue*

Article 1

May 2019

Introduction: McNair Scholars Program

Hunter Montoya
mont9146@bears.unco.edu

Follow this and additional works at: <https://digscholarship.unco.edu/urj>

Recommended Citation

Montoya, Hunter (2019) "Introduction: McNair Scholars Program," *Ursidae: The Undergraduate Research Journal at the University of Northern Colorado*: Vol. 7 : No. 2 , Article 1.
Available at: <https://digscholarship.unco.edu/urj/vol7/iss2/1>

This Table of Contents is brought to you for free and open access by Scholarship & Creative Works @ Digital UNC. It has been accepted for inclusion in *Ursidae: The Undergraduate Research Journal at the University of Northern Colorado* by an authorized editor of Scholarship & Creative Works @ Digital UNC. For more information, please contact Jane.Monson@unco.edu.

INTRODUCTION

Ronald Erwin McNair



“Whether or not you reach your goals in life depends entirely on how well you prepare for them and how badly you want them. You’re eagles! Stretch your wings and fly to the sky.”

- Ronald McNair

Ronald E. McNair, the second African American to fly in space, was born on October 12, 1950, in Lake City, South Carolina. While in junior high, McNair was inspired by a teacher who recognized his potential and encouraged him to pursue his dreams. In 1971, he received his bachelor’s degree magna cum laude in physics. Five years later, he earned a Ph.D. from the Massachusetts Institute of Technology (MIT).

After graduating from MIT, McNair joined the Hughes Research Laboratories in California, where he worked on a variety of projects related to laser technology. In 1978, he was selected by NASA as an astronaut candidate and, after completing a yearlong training and evaluation program, became eligible to join future space shuttle flight crews.

On January 28, 1986, the space shuttle Challenger exploded and crashed into the ocean, tragically ending McNair’s life and the lives of six other astronauts. After his death, Congress approved funding for the Ronald E. McNair Post-Baccalaureate Achievement Program, which supports and promotes the high standards of achievement exemplified by Ronald E. McNair.



McNair Scholars Program at UNC

The University of Northern Colorado McNair Scholars Program is a federally funded TRIO program designed to prepare high-achieving students from first-generation/low-income and/or underrepresented populations for graduate studies. The ultimate goal is to provide students the experience and support necessary to complete doctoral degrees in their chosen disciplines. Components of the program include a one-year research seminar, during which students partner with faculty mentors and complete independent research projects for presentation and publication, and a semester-long senior seminar, designed to assist students in applying to graduate programs. By linking academic excellence and social diversity, the UNC McNair Scholars Program seeks to transform personal and academic goals into a successful future.

2016-2017 Program Staff

Krista Caufman, Director
Karen Krob, Assistant Director
Keith Post, Graduate Assistant
Ashley Bautista, Graduate Assistant

2016-2017 Scholars and Faculty Mentors

Guadalupe Andrea Solis, Biology
Corina Brown, Ph.D. & Richard Hyslop, Ph.D., Chemistry & Biochemistry

Ashley Bautista, Audiology and Speech Language Sciences
Deanna Meinke, Ph.D., & Donald Finan, Ph.D., Audiology and Speech Language Sciences

Kaitlin Harris, English & Psychology
Sarah Cornish, Ph.D. & Tracey Sedinger, Ph.D., English

Darian Martinez, French & International Affairs
Jacob Melish, Ph.D., History & Christine Moritz, Ph.D., Modern Languages

Jazmyn Mosqueda, Biology & Spanish
Nicholas Pullen, Ph.D., Biological Sciences

Genesis Orellana, Psychology
Rena Kirkland, Ph.D., Psychological Sciences

Sebastian Ramos, Biology
Gregory DeKrey, Ph.D., Biological Sciences

The UNC McNair Scholars Program is funded through a TRIO grant from the U.S. Department of Education.



Research Project and Competition

During their first year in the McNair program, students concentrate on completing independent research projects under the guidance of a faculty mentor. The project culminates in oral presentation at a national conference and submission for publication with the *Undergraduate Research Journal (URJ)* at UNC. Prior to publication, a blind review panel of non-McNair faculty and staff evaluates each project for excellence in scholarship and written presentation of the research. Additionally, faculty mentors assist students with revisions and ultimately must approve the project for publication.

During this process, eligible students' projects are also entered into the annual UNC McNair Scholars research competition. Members of the blind review panel independently rank eligible papers as they review them for publication. Writers of the top three papers are awarded scholarships from \$400-\$1,000. Scholarships may only be applied to undergraduate tuition costs at UNC. Therefore, only continuing students are eligible to compete; students whose graduation coincides with the completion of their projects are not eligible.

Thank you to the following faculty and staff for their generous assistance with the research competition and publication process!

2016-2017 Research Competition Reviewers and Judges

Loree Crow
Annie Epperson
Angela Vaughan
Stephanie Wiegand
Nicholas Pullen
Robyn Ziolkowski

James Kole
Andrea James
Patrick (Pat) Burns
James Monson
Stan Trembach
Melanie (Mel) Moore

Claudio Milstead
Andreas Mueller
Marc Santos
Cassandra Bergstrom
Steve Pulos
Emilie Brownwell

2016-2017 Research Competition Award Winners



First Place: Jazmyn
Mosqueda-Banuelos
\$1,000 scholarship



Second Place: Sebastian
Ramos
\$600 scholarship



Third Place (tie): Genesis Orellana &
Guadalupe Andrea Solis
\$300 scholarships

The Undergraduate Research Journal at the University of Northern Colorado

The Undergraduate Research Journal at the University of Northern Colorado (URJ) is a fully open access academic journal that strives to recognize the scholarly accomplishments of undergraduates at UNC and stimulate future scholarly activity. The URJ is published electronically three times per year: spring, summer, and fall. One issue each year is designated a special publication featuring the works of UNC's McNair Scholars. This print issue is representative of the original works available electronically. All URJ publications are available at <http://journals.sfu.ca/urjnc/index.php/urjnc/index>.

Undergraduate Research Journal at University of Northern Colorado Special McNair Scholars Edition

Editor: Hunter Montoya

Table of Contents

I: Research Competition Award Winners

First Place: Trefoil Factor 1 (TFF1) Expression in E3 and WED8 Breast Cancer Cell Lines
Jazmyn Mosqueda, Faculty Mentor: Nicholas Pullen, Ph.D.

Second Place: Does TCDD Exposure Alter β 7-Integrin Expression on Mouse B Cells?
Sebastian Ramos, Faculty Mentor: Gregory DeKrey, Ph.D.

Third Place (tie): Can Goal-Setting Improve Hospital Volunteers' Intrinsic Motivation?
Genesis Orellana, Faculty Mentor: Rena Kirkland, Ph.D.

Third Place (tie): Investigating the Antidiabetic Effect of Metformin on Pyruvate Carboxylase
Guadalupe Andrea Solis, Faculty Mentors: Corina Brown, Ph.D. & Richard Hyslop, Ph.D.

II: Graduating Seniors

Relationships Between Ambient Noise Levels and Vocal Effort when Working as a Restaurant Bartender
Ashley Bautista, Faculty Mentors: Deanna Meinke, Ph.D., & Donald Finan, Ph.D.

Frankenstein's Fixations: A Psychoanalytic Evolutionary Approach to Childhood, Sexuality, and Outsiders
Kaitlin Harris, Faculty Mentors: Tracey Sedinger, Ph.D. & Sarah Cornish, Ph.D.

Between Two Worlds: Memory and the French-Algerian (Pied-Noir) Experience
Darian Martinez, Faculty Mentors: Christine Moritz, Ph.D. & Jacob Melish, Ph.D.