Front Matter Volume 1, 2004-2005

McNair Scholars Program

Portland State University

Follow this and additional works at: https://pdxscholar.library.pdx.edu/mcnair

Let us know how access to this document benefits you.

Recommended Citation


This open access Front Matter is distributed under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International License (CC BY-NC-SA 4.0). All documents in PDXScholar should meet accessibility standards. If we can make this document more accessible to you, contact our team.
The Ronald E. McNair Scholars Program at Portland State University (PSU) works with motivated and talented undergraduates who want to pursue PhDs. It introduces juniors and seniors who are first-generation and low-income, and/or members of under-represented groups to academic research and to effective strategies for getting into and graduating from PhD programs.

The McNair Scholars Program has academic-year activities and a full-time summer research internship. Scholars take academic and skills-building seminars and workshops during the year, and each scholar works closely with a faculty mentor on original research in the summer. Scholars present their research findings at the McNair Summer Symposium and at other conferences, and are encouraged to publish their papers in the McNair Journal and other scholarly publications.

The Ronald E. McNair Post-baccalaureate Achievement Program was established in 1986 by the U.S. Department of Education and named in honor of Challenger Space Shuttle astronaut Dr. Ronald E. McNair. The program, which is in its seventh year on campus, is funded by a $924,000 grant from the U.S. Department of Education and institutional cost-share funds.

The McNair Scholars Program’s student-centered approach relies heavily on faculty and university commitment. Activities and opportunities provided by the program focus on building a positive academic community for the scholars while they are undergraduates at PSU.
**Table of Contents**

Ronald E. McNair  
Terrel L. Rhodes, Principal Investigator  
2004-2005 McNair Program Staff  
Editorial Board  
The 2004 Portland State Scholars  
The 2005 Portland State Scholars  

Comparative Colonialsims: Variations in Japanese Colonial Policy in Taiwan and Korea, 1895 - 1945  
by Gunnar Abramson  
Faculty Mentor : Linda Walter  

Automated Test Pattern Generation for Quantum Circuits  
by Jacob D. Biamonte  
Faculty Mentor : Marek A. Perkowski  

Not Quite Formal: Theorizing the Informal Labor Market Experience of “Documented” Immigrant Workers  
by Carrie Cobb  
Faculty Mentor : Leopoldo Rodriguez  

Another Visit to Red and Blue States  
Jason G. Damron  
Faculty Mentors: Marcia Klotz & Cherry Muhanji  

Gene Flow in an Invasive Species of Grass, Brachypodium Sylvaticum  
Trieste Dobberstein  
Faculty Mentors: Mitchell Cruzan  

Women Writing War and Peace in Post Vietnam Era  
Amy Driscoll  
Faculty Mentors: Barbara Guetti  

Racial Hegemony in America: The Struggle for identity Among the Black Indians of the Five Civilized Tribes of the Southern United States  
Natasha Hartsfield  
Faculty Mentors: Pedro Ferbel-Azcarate
Examining Differences in Student Achievements in Differential Equations
Erin Horst
Faculty Mentors: Karen Marrongelle
165

The Clerical Wife: Medieval Perceptions of Women During the Eleventh- and Twelfth-Century Church Reforms
Cara Kaser
Faculty Mentors: Caroline Lizenberger & John Ott
180

Constructs of Freedom and Identity: The Ethnogenesis of the Jamaican Maroons and the Treaties of 1739
Jessica Krug
Faculty Mentors: John Ott
213

Performance and Application of an Inexpensive Method for Measurement of Nitrogen Dioxide
Jeremy Para
Faculty Mentor: Linda George
278
Ronald Erwin McNair was born October 21, 1950 in Lake City, South Carolina. While in junior high school, Dr. McNair was inspired to work hard and persevere in his studies by his family and by a teacher who recognized his scientific potential and believed in him. Dr. McNair graduated as valedictorian from Carver High School in 1967. In 1971, he graduated magna cum laude and received a bachelor of science degree in Physics from North Carolina A&T State University (Greensboro). Dr. McNair then enrolled in the prestigious Massachusetts Institute of Technology. In 1976, at the age of 26, he earned his Ph.D. in laser physics. His dissertation was titled, “Energy Absorption and Vibrational Heating in Molecules Following Intense Laser Excitation.” Dr. McNair was presented an honorary doctorate of Laws from North Carolina A&T State University in 1978, an honorary doctorate of Science from Morris College in 1980, and an honorary doctorate of science from the University of South Carolina in 1984.

While working as a staff physicist with Hughes Research Laboratory, Dr. McNair soon became a recognized expert in laser physics. His many distinctions include being a Presidential Scholar (1971-74), a Ford Foundation Fellow (1971-74), a National Fellowship Fund Fellow (1974-75), and a NATO Fellow (1975). He was also a sixth degree black belt in karate and an accomplished saxophonist. Because of his many accomplishments, he was selected by NASA for the space shuttle program in 1978. His first space shuttle mission launched successfully from Kennedy Space Center on February 3, 1984. Dr. Ronald E. McNair was the second African American to fly in space. Two years later he was selected to serve as mission specialist aboard the ill-fated U.S. Challenger space shuttle. He was killed instantly when the Challenger exploded one minute, thirteen seconds after it was launched. Dr. McNair was posthumously awarded the Congressional Space Medal of Honor. After his death in the Challenger Space Shuttle accident on January 28, 1986, members of Congress provided funding for the Ronald E. McNair Post-Baccalaureate Achievement Program. Their goal was to encourage low-income and first-generation college students, and students from historically underrepresented ethnic groups to expand their educational opportunities by enrolling in a Ph.D. program and ultimately pursue an academic career. This program is dedicated to the high standards of achievement inspired by Dr. McNair’s life.

Source: mcnairscholars.com
Terrel L. Rhodes, Principal Investigator

Dr. Rhodes is the Vice Provost for Curriculum and Dean of Undergraduate Studies at Portland State University. As such, he acts as dean of general education, oversees the undergraduate curriculum process, serves as the institutional liaison for accreditation, chairs the Advisory Committee on Academic Information Technology, oversees the community college relations initiative, alignment of student learning expectations with high schools through the Oregon University System Proficiency-based Admissions Standards System, the undergraduate research program, and the faculty vitality and course redesign initiative, including the Pew Charitable Trust funded Course Redesign project in Spanish at PSU.

He is the author of three books, numerous articles, book chapters and grant proposals. He received his B.A. in Political Science, History and Spanish at Indiana University in Bloomington, and his M.A. and Ph.D. in Political Science at the University of North Carolina at Chapel Hill.
2004-2005 McNair Program Staff

Toeutu Faaleava

Director

Toeutu Faaleava specializes in community mobilization and capacity building. His research interests are in reclaiming indigenous voices, spaces, scholarship and resistance. He teaches in University Studies and works with Pacific Islander communities in Portland. He holds a Ph.D. in Ethnic Studies, JD, MA, and BA from the University of California, Berkeley, an MPA from Harvard University and a BS from SIU.

Jeffrey L. Smith

2004 Coordinator

I was born and raised in Dayton, Ohio. After high school, I attended the University of Minnesota in Minneapolis. While visiting a high school friend living in Portland Oregon, I became enamored with the ocean, mountains, and deserts of Oregon. I packed up my belongings and made the cross country trek to Portland. I received a BA in Applied Linguistics and TESOL Certification in 1997 and am currently finishing an MA in Conflict Resolution.

Jolina Kwong Caputo

2005 Program Coordinator

I am in the Post-Secondary Adult Education (PACE) Graduate Program in the Portland State University School of Education. My research interests include student experiences at large metropolitan universities, as well as student development and leadership. Outside of the office and the classroom, I enjoy jogging around my SE Portland neighborhood, watching TV and designing greeting cards.

Amrina Sugaipova

Graduate Student Assistant

I received my BA in Business and English from Lithuania College in Klaipeda, Lithuania. Currently, I am working on an MA in international Conflict Resolution at Portland State University. I enjoy studying languages, learning about other cultures and care a lot about human rights around the world.
Editorial Board

Toeutu Faaleava
Director, McNair Scholars Program

Grace Dillon
Assistant Professor

Antonia Levi
Assistant Professor

Alan MacCormack
Assistant Professor
The 2004 Portland State Scholars

Adam Carpinelli
Project Title: Musical Transformations of Resistance-based Cultures of the African Diaspora
Mentor: Kofi Agorsah

Amy Driscoll
Project Title: Women Writing War and Peace in the Post Vietnam Era
Mentor: Barbara Guetti

Bradley Fortier
Project Title: Film - Gay Marriage: Legitimizing the 'Alternative Family'
Mentor: Margaret Everett

Cara Kaser
Project Title: The Clerical Wife: Medieval Perceptions of Women during the 11th & 12th Century Church Reforms
Mentors: Caroline Litzenberger and John Ott

Carolyn Becker
Project Title: Unenrolled Native Americans in Metropolitan Portland, Oregon
Mentor: Thomas Biolsi

Carrie Cobb
Project Title: Networks and Employment: Mexican Restaurant Labor in Portland, Oregon
Mentor: Leopoldo Rodriguez

Chyerel Mayes
Project Title: I’m Sick and Tired of Being Sick: Racializing Black Womens’ Health Issues
Mentor: Cherry Muhanji

Debora Wilson
Project Title: Forecasting Costs and Benefits of Marker Assisted Breeding
Mentor: Jeff Gerwing

Erin Horst
Project Title: Examining Differences in Student Achievement in Differential Equations
Mentor: Karen Marrongelle

Felicia Wells-Thomas
Project Title: Oral History Interviews: Invisible Barriers for the African American
Mentor: Cherry Muhanji

Gabriel Flores
Project Title: Restaurant Workers’ role as Cultural Liaisons
Mentor: Randy Blazak

Gunwar Abramson
Project Title: Comparative Colonialism: Variations in Japanese Colonial Policy in Taiwan and Korea 1895-1945
Mentor: Linda Walton

Jacob Biamonte
Project Title: Probabilistic Testing & Fault Localization
Mentor: Merek Perkowski

Jason Damron
Project Title: A Queer Visit to Red and Blue States
Mentors: Marcia Klotz and Cherry Muhanji

Jeremy Parra
Project Title: Optimization of Diffusion Tube Method for Passive Monitoring of NO2 in Urban Ambient Air
Mentor: Linda George

Jessica Krug
Project Title: Constructs of Freedom and Identity and the Jamaican Maroon Peace Treaties of 1739
Mentor: John Ott

Jessica Tyner
Project Title: Writing for Health in Portland
Mentor: Tracy Dillon

Jonathan Strong
Project Title: Gender, Race, and the Redefinition of Whiteness: The Wilmington Race Riot of 1898
Mentor: David Johnson
Kerrie Beach  
**Project Title:** Self Efficiency and Academic Achievement  
**Mentor:** Gabriela Martorell

Natasha Hartsfield  
**Project Title:** The Identity of Black Indians of the Five Civilized Tribes  
**Mentor:** Pedro Ferbel-Azcarate

Osasu Atoe  
**Project Title:** Women of Color, Community, and Feminism  
**Mentor:** Patti Duncan

Trieste Dobberstein  
**Project Title:** Gene Flow in Brachypodium Syluaticum  
**Mentor:** Mitchell Cruzan

Tu Tran  
**Project Title:** Vietnamese Automobile Industry Development: Localization  
**Mentor:** Charles Grant
The 2005 Portland State Scholars

Jane Anau
Project Title: Patient Demographics and Usage of Oregon School Based Health Centers
Mentor: Matthew Carlson

Joel Campos-Alvis
Project Title: The Impact of Low-Skilled Immigration on the Wages and Employment of African Americans
Mentor: Mary King

Ashley-Nicole Browning
Project Title: If You Build It, They Will Come and Stay: Strategies for Attaining Organizational Cultural Competence Through the Recruitment and Retention of a Diverse Workforce in Health and Human Services
Mentors: Siobhan Maty and James Mason

Carrie Cobb
Project Title: Finding a Job: Strategies to find Employment in the Semi-formal Labor Market
Mentors: Mary King and Leopoldo Rodriguez

Michelle DePass
Project Title: The Role of Churches in the African-American Community in Portland, Oregon
Mentor: Richard White

Brian Durdik
Project Title: Our Storybook Democracy: Cultural Politics and Aesthetic Ideologies in USA
Mentor: Thomas Fisher

Collin Fellows
Project Title: Measuring Student Role Mastery
Mentor: Peter Collier

Renee Honn
Project Title: The Locus of Redemption: Sexual Violence and the Mother/Daughter Relationship in Literature
Mentor: Jennifer Ruth

Larissa Hutchinson
Project Title: Relations among Somali Bantu Children at Play during the Resettlement Process
Mentor: Kimberly Brown

Sarah Stacy Iannarone
Project Title: The value of action: A case study of volunteer motivation in urban placemaking
Mentor: Sy Adler

Melissa Johnson
Project Title: Subordinate Saints: Gender and Church Membership in Seventeenth-Century (New England) Congregationalism
Mentor: David Johnson

Jessica Marsden
Project Title: Religious Conversion in the Greco-Roman Period: Comparing Jewish, Pagan and Christian Narratives
Mentor: John Ott

Lorena Martinez
Project Title: HIV in the Metropolitan Portland, Oregon and Seattle, Washington Areas: Latinos’ and Professional Service Providers’ Perspectives
Mentor: Shawn Smallman

Chyerel Mayes
Project Title: Cardiovascular Disease among African-Americans
Mentor: Gabriela Martorell

China Medel
Project Title: The Language of Food: Women’s Culinary Subversion of the Symbolic Order in Film
Mentor: Maude Hines

Angie Mejia
Project Title: Latina Consciousness through Organization: An Ethnographic Study
Mentor: José Padin
Holly Roose
Project Title: Science and Race: The transition from biblical to religious justifications of racism in the Western Hemisphere spanning the 18th and 19th centuries
Mentor: Darrell Millner

Jaye Sablan
Project Title: Collective Experience and Cultural Competence: Asian/Pacific Islander American Women’s Literature as a Window to Ethical Practices in the Mental Health Field
Mentors: Patricia Duncan and Jane Meinhold

Alana Smith
Project Title: The Day-Labor Market in Portland, Oregon
Mentor: Leopoldo Rodriguez

Khang Tran
Project Title: Cultural impacts on architectural designs and the way we live
Mentor: Grace Dillon

Jonathan Strong
Project Title: The Wilmington Race Riot
Mentor: David Johnson

Audrey Ward
Project Title: The Criminal Object: Classification and Study of the Criminal Body in the United States, 1900-1940
Mentor: Richard Beyler

Eric Webb
Project Title: Continuous Euler’s Method for First-Order Differential Equations
Mentor: Bin Jiang