RONALD E. MCNAIR POST-BACCALAUREATE ACHIEVEMENT PROGRAM

McNair Program Guide



COLLEGE OF EDUCATION + HUMAN DEVELOPMENT

UNIVERSITY OF MINNESOTA

McNair Scholars:

Powering the Next Generation of Scholars and Industry Leaders

- First generation, low income and underrepresented students left behind
- Increasing demand for jobs requiring advanced degrees
- Nationally recognized program design
- <u>28 years of proven results at the U of M</u>
- Faculty mentors from all disciplines, connecting research to solve global and industry challenges
- Exponential return on investment





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TRIO

Welcome from the McNair Director

Thank you for your interest in the federally funded TRIO McNair Program at the University of Minnesota (U of M). Whether you're an interested student, a new faculty mentor, a community partner, looking to donate, or, just happened across this page, this guide provides an overview of the U of M program model, tips for faculty mentors, highlights program outcomes, and outlines external challenges that significantly impact McNair's work. Importantly, this guide shares how the McNair Team is addressing these challenges through multi-faceted, collaborative and innovative approaches.

The U of M's TRIO McNair program is in its 29th year, making us one of the oldest McNair programs in the country. We support students who are the most marginalized and least likely to get a college degree to not only graduate college, but also advance to graduate and doctorate programs. This work is high stakes. McNair scholars are contributing to research that is finding cures to diseases and generating innovation in a wide range of industries including biotechnology, healthcare, agriculture, etc.

McNair scholars are also in faculty positions, helping develop the next generation of experts and innovators who will allow the United States to continue to lead and quickly adapt to emerging challenges. The return on investment of the McNair program is exponential. Our program success is a testament to the many outstanding faculty mentors and University partners who volunteer their services and expertise. Thank you! For those looking to get involved, please complete this <u>brief questionnaire</u>.

Thank you for your interest and taking time to learn more about how the U of M McNair program benefits students, scholars, and communities across the state, the nation, and the world.

Anthony Albecker, Director U of M TRIO McNair Scholars Program







Ronald E. McNair Program Background

Ronald E. McNair was an American astronaut and physicist. His recognitions include a Ph.D. from MIT, two honorary doctorates of science, being a Presidential Scholar, and the second African American in space. He served as a mission specialist on the Challenger in 1984 and again in 1986, where he passed away in the explosion. That year, congress created this program in his honor, the goal to encourage underrepresented students to obtain graduate degrees and academic careers.

U.S. Department of Education: TRIO



Ronald E. McNair PostBaccalaureate Achievement Program

National McNair Website

University of Minnesota:



TRIO Programs Website McNair Website **Research Profiles**



Key links

TRIO History Module



TR (O

Story of Dr. Ronald E. McNair and his Legacy





Scholar Stories



Dr. Ronald E. McNair



First Generation, Low Income and Underrepresented Students Left Behind





Need For McNair





Students whose parents have graduate degrees enroll in doctoral study at rates 5 times (3.0% vs. 0.6%) that of students who's parents have only a high school diploma

High income students complete undergraduate degrees at rates 7 times (79% vs. 11%) that of low income students



Only 10% of our adult population has a post-BA degree 35% of doctorates had parents within that 10%



Underrepresented students account for just 10% of US Ph.D.'s

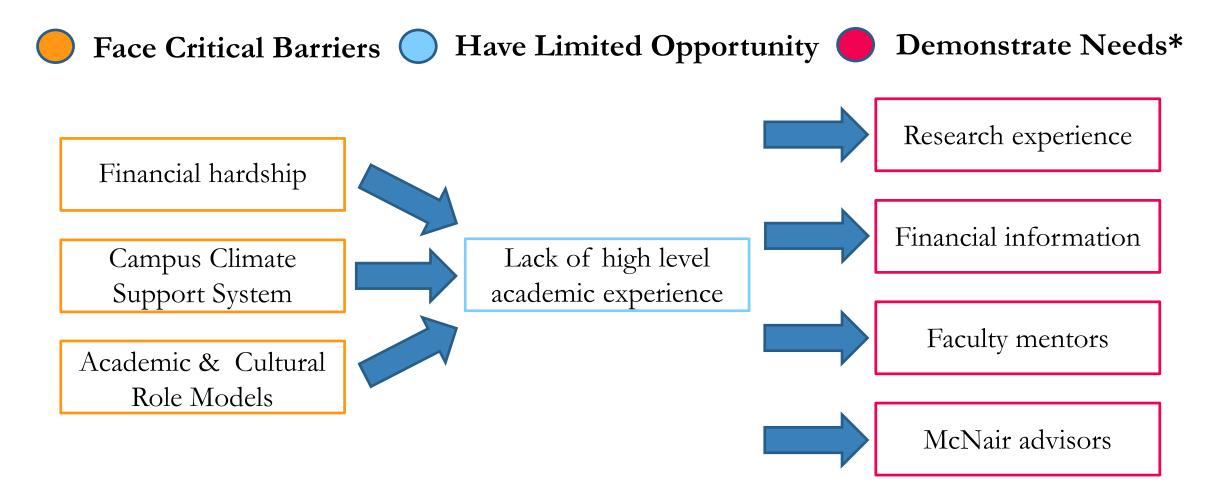
Underrepresented students were less than 5% of the doctorates awarded at UMN in 2010.



At rank of full professor, the most powerful group on US campuses, whites outnumber underrepresented faculty by 13 to 1



McNair Directly Supports Students Who...



*Identified by Ph.D. Graduate Employers & PhD Completers Study



Projected Worker Shortages Create an Increased Need for Advanced Degrees*



MARY BROPHY MARCUS / CBS NEWS / March 20, 2017, 4:24 PM

New report predicts "troubling" shortage of doctors in the U.S.

The US has a shortage of tech workers. Here's how kids and schools can solve the problem

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Ruth Umoh | @ruthumohnews | 12:09 PM ET Wed, 23 Aug 2017
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CNN

American businesses can't find workers

by Patrick Gillespie @CNNMoney (L) January 17, 2018; 4:28 PM ET

USNews

The U.S. News/Raytheon STEM Index Shows America Will Have to Depend on Foreign Workers to Fill STEM Jobs

Despite gains in education and hiring, gender and racial gaps remain.

May 17, 2016, at 12:01 a.m.

The New Hork Times

Lack of Workers, Not Work, Weighs on the Nation's Economy

By BINYAMIN APPELBAUM MAY 21, 2017



America's worker shortage: One million and counting

By Stephen Moore · Published August 15, 2014 · Fox News



By AIMEE PICCHI / MONEYWATCH / April 19, 2016, 3:06 PM

Desperately seeking workers: The looming job crunch

Bloomberg Opinion Politics

July 7, 2017, 12:23 PM CDT

Five Signs Point to Skill Shortages in the United States

A new report says deficits are most severe in health "and they'll only get worse."

By Peter Cov

™Atlantic

The U.S. Is Running Out of Nurses

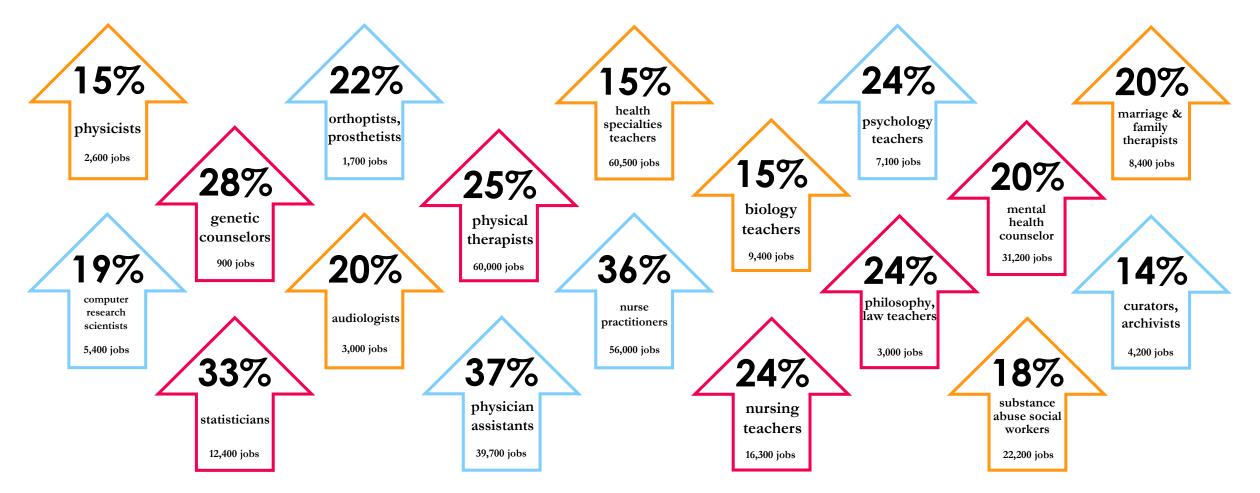
The country has experienced nursing shortages for decades, but an aging population means the problem is about to get much worse.

REBECCA GRANT | FEB 3, 2016 HEALTH





Projected Worker Shortages Create an Increased Need for Advanced Degrees*





Powering the Next Generation





The McNair Program Strives to...

Increase the rate of doctoral program application, matriculation, and degree attainment by first-generation college students who are underrepresented in graduate programs

 Generate in our students the higherlevel academic and research skills necessary to gain admission to and successfully complete graduate study





2016 McNair Scholars

Nationally Recognized Program Design





UMN MCNAIR PROGRAMMING

To meet year-round academic program grant objectives:

Fall

- Scholar Recruitment
- Direct Advising
- Graduate School Application Support
- Seminars (Research/Graduate School Preparation/Leadership and Resiliency)
- Campus Outreach (Present to Departments and Program Partners)
- Assist Scholars Navigate Additional Research Opportunities
- Federally Mandated Annual Performance Reporting/Scholar Matriculation Data
- Contributions to college, U of M Community Partners
- National McNair Research Conference

Spring

- Applicant Selection
- Curriculum Development/Planning/Logistics
- Direct Advising
- Mentor Pairing
- Participant Eligibility/Data Verification Process
- Scholar Retreat

Summer

- McNair Scholar Orientation
- Weekly Seminars (Research/Graduate School Preparation/Leadership & Resiliency)
- Direct Research Under Faculty Mentor
- Ten-week Intensive Research
- Enrichment Activities/Cohort Development

McNair staffing consists of flex positions based on program phases and needs.

| Quality Staff World Class Labs/Facilities Student Travel | Faculty Mentors State of Art Technology U of M Financial Support | US ED Financial Grant Stipends Strategic Operations |
|---|--|--|
| | Inputs/Program Activities | |
| Identify & Select Assessment Need/Strengths Research Writing Workshop McNair Seminars GRE Preparation Writing for publication Graduate School Visits Graduate Selection Advising | Mentor Matching Research Internship Presentation preparation Research Grad schools Research Poster Prep Network Development Grad Admission Advocacy Resilience/Leadership Development | McNair Advising Scholarly Activities Academic Support Research Grad Financing Graduate Fairs Mentor Advising Student Community Building |
| Strengths Quest | Team Work Experience | Graduate Portfolio Prep |
| | Output/What Students Gain | |
| Apply to Graduate Programs Individual Support Plan Quality Research Exposure Strong Support Network Strong Academic Identity Focus Graduate Selection Conference Presentations | Secure Graduate Funding Qualified Students Quality Research Poster Teaching Internships Achieving Peer Group Inoculation to Grad Stress Ability to Collaborate | Completed Grad Portfolio Quality Mentor Relationship Post McNair Research Enhanced Confidence Increased Motivation Advanced Coursework Identifying Academic Allier |
| Οι | utcomes/Results: Short, Medium & Long Te | rm |
| Quality Research Projects Good Institution Match Grasp of Grad Expectations PhD Attainment | Grad Admission Strong PhD Advisor Match Use academic/Peer network Career Requiring PhD | Grad Matriculation Adequate Grad Funding Grad Persistence Future Faculty |
| Data Sou | rces/Documentation for Tracking and Acco | untability |
| U of M Institutional Research McNair Student Files Propensity Match | National Clearing House College Transcripts Social Media | CEHD Research Evaluation Alumni Outreach Progress Records |

Resources/Funding, Faculty & Staff



Year-round Programming is Designed to Holistically Advance Student Development

Summer and academic year advising services focus on:

- 1. Careers requiring graduate education
- 2. Successful selection of schools
- 3. Applications to graduate school
- 4. Introduction to discipline-specific research
- 5. Research writing skills
- 6. Graduate level research papers and posters
- 7. Leadership Development
- 8. Active engagement and focus
- 9. Financing graduate studies

Twenty 10-week apprenticeships available with a University faculty mentor whose research interests match those of the McNair student and includes a **stipend** of



Weekly seminars on enhancing research skills, graduate school preparation and leadership and resiliency.



Comprehensive Curriculum RESEARCH | GRADUATE SCHOOL PREPARATION | LEADERSHIP

EDHD 3XXX Demystifying and Engaging the Research Process 3 credits

Course Instructor:Anthony AlbeckerOffice:40 Education Sciences (East Bank), 56 East River RoadOffice Hours:T 1:00 to 4:00, Th 12:00 to 3:00E-mail:albecker@umn.eduPhone Number:612-625-0772

Course Pre-requisites: Admission to the University of Minnesota's (U of M) TRIO McNair Scholars Program **AND** 60-semester credits and/or minimum of two courses in declared major and minimum one writing intensive course.

Course Texts/Materials: No single book is absolutely required for this course. The best texts, or combination of texts, is dependent on the type of research you will be conducting. Canvas is the official McNair online course management system. Mindful of monetary and environmental considerations, McNair program material is primarily digital and incorporates the most current open source materials. Required readings and multimedia resources will be posted on the course Canvas site. Scholars are responsible for readings as assigned by their faculty mentor.

Required Reading: Assigned weekly reading listed by lecture date and as assigned by faculty mentor.

Additional Readings: A wide range of resources can be found on the TRIO McNair Website

Course Website(s): https://canvas.umn.edu/courses/119606

Course Description:

Have you ever considered participating in academic research but felt intimidated or uncertain on what the process includes? If so, this course is for you. The University of Minnesota is one of the largest research universities in the world and provides ample opportunity to get involved with world class faculty and cutting edge research. The primary goal of the class is to simultaneously *introduce* and *engage* students in demystifying the research process. Course includes guest lecturers and draws upon the expertise of nationally recognized faculty and professional staff from across campus representing a broad range of disciplines. This course also strives to maximize the benefits of diversity within the cohort, which will help scholars maximize their work in diverse teams and in a multidisciplinary way.

This course is a credit bearing component of a broader McNair academic experience which includes three strands: Demystifying and Engaging the Research Process, Graduate School Preparation, and development of scholarly leadership skills. This credit bearing component focuses on the research component.

Class lectures will provide broad and multidisciplinary introduction of the research process. High quality and direct work with a professor on the professor's research (NOT the student's research. This will come later), will provide discipline specific engagement to course topics. Scholars will



| UNIVERSITY OF MINNESOTA Driven to Discover | | One Stop MyU A Custom Search Q | |
|---|---|---|--|
| College of Education and Human Development | | | |
| TRIO McNair Scholars | | | |
| Mission | Information sessions | Apply | |
| The federally funded TRIO McNair Scholars program seeks to increase doctoral program application, matriculation, and degree attainment by underrepresented and first- generation college students. Read more about the program = | Events There are no upcoming events. | The McNair program is accepting applications for the summer 2019 cohort. Applications are being accepted on a rolling basis. Read more about hos to apply. Students pursuing STEM programs are strongly encouraged to apply. | |
| The U of M McNair program is open to all Twin Cities students in all colleges and majors. U of M coordinate campuses (Croakston, Duluth, Rochester), and Minnesota colleges and universities that do not have their own McNair proeram: Carleon Collese. Hemine | Powering the Next Generation of Scholars and Industry Leaders | How to apply | |
| Jogain Latenci Codeg Familia Minercia, Massa Carlos Carlos Minercia, Massa Carlos Carlos Minercia, S. Catherine University of University, and University of St. Thomas. Through this summer experience and academic year rorgamming. Michail Scholar evenion Tyber Neural Lademic and research skills necessary to gain admission to and successfully complete graduate study. | We support underspreamed students in obtaining schwards degrees. Find out more about the outstanding carker outstomes for U of M McGler schward. | McNair staff TBD Uklair do Bouzaton Sciences Building 55 Ears Hiver Road Minneapolis, MK 55655 Phone 612-625-0772 Fac: 612-625-07704 | |

Robust Online Resources

| 2019 University of Minnesota | | |
|------------------------------------|---|------------------------------------|
| | McNAIR SCHOLA | K2 |
| | f 🔅 🔟 🖵 | |
| RETREAT | | |
| Date/Time | Topic | Room |
| Friday, May 17 8:30am-4:00pm | Introductions/Overview of Summer Program/Background TRIO McNair/Review Syllabus & Expectations pre-program self-assessment/Community Building. This will be interactive, informative and fun. Lunch and snacks provided. Bring your own water bottle. | 325 Education Sciences Building |
| <u>Assignments</u> | Faculty Mentor Profile Research Timeline Facebook Spotlight SCARF Assessment | Due 06/02/19 11:59pm |
| WEEK OI | NE | |
| Date/Time | Торіс | Room |
| Monday, June 3 All Day | Connect with your faculty mentor, research team, and begin research | Faculty's Research Lab |
| Tuesday, June 4 9:00am-12:30pm | Literature Review & Library Orientation; Introduction/Hypothesis/Statement of Problem Presenters: Kim Clarke & Meghan Lafferty | 310 Walter Library |
| Wednesday, June 5 3:00pm-7:00pm | 3:00pm-4:30pm Summer Programs Orientation 5:00pm-7:00pm Bowling/Pizza at Goldy's Gameroom | 275 Nicholson Hal |
| <u>Assignments</u> | Introduction/Hypothesis/Statement of Problem Demonstrate progress on Literature Review | Due 06/09/19 11:59pm |
| NEEK TW | /0 | |
| Date/Time | Торіс | Room |
| Tuesday, June 11 | Good Writing for Good Scholarship Presenter: Dr. Wilbers | |
| 8:00am-3:00pm | Curriculum Vita/ Personal Statement Presenters: TBA | TBA |
| TRIO | © 2019 University of Minnesota TRIO MoNair Scholars Program z.umn.edu/mcnair | X |



Summer Research Syllabus

Program Objectives

80%

of program participants served will have completed appropriate research or scholarly activities during the McNair Program academic year



of bachelor's degree recipients will be enrolled in post-bac IMMEDIATELY following completion of the bachelors degree 90%

of first year graduate students will continue to be enrolled in graduate school at beginning of fall term of the next academic year. 10%

of McNair participants served will attain a doctorate degree within 10 years of the attainment of the bachelors degree, which is 10 times the national average



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Snapshot of Scholar Enrollment



Students are currently undergraduates



2014 McNair Scholars



Students have entered graduate school



Dr. Tammy A. Butterick, Nicole A. Lynn





Are currently enrolled in graduate school

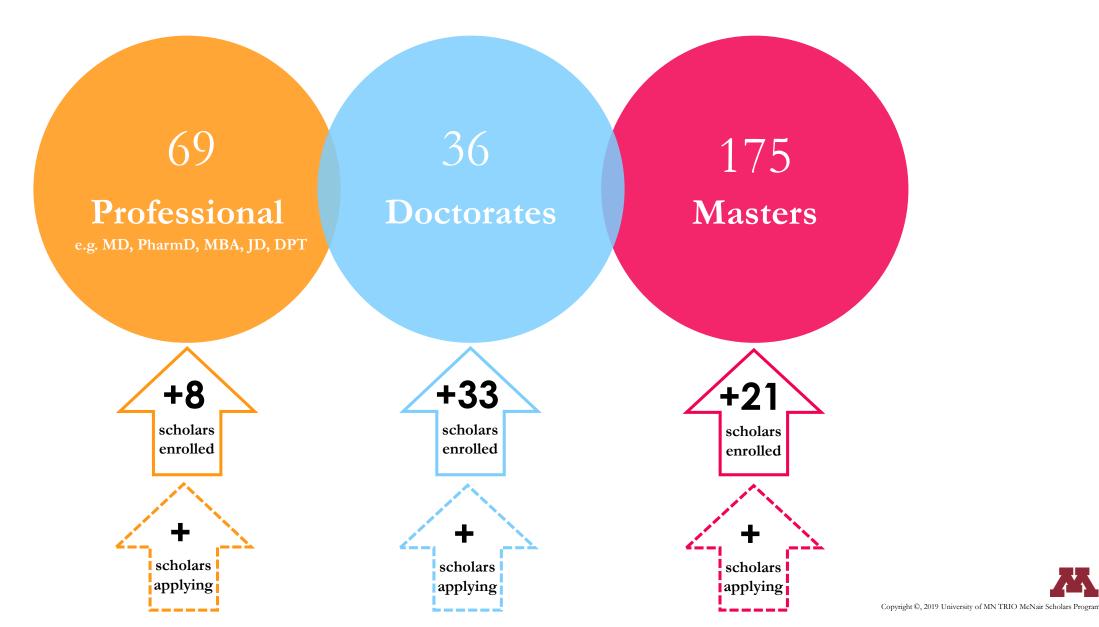


2016 McNair Scholars



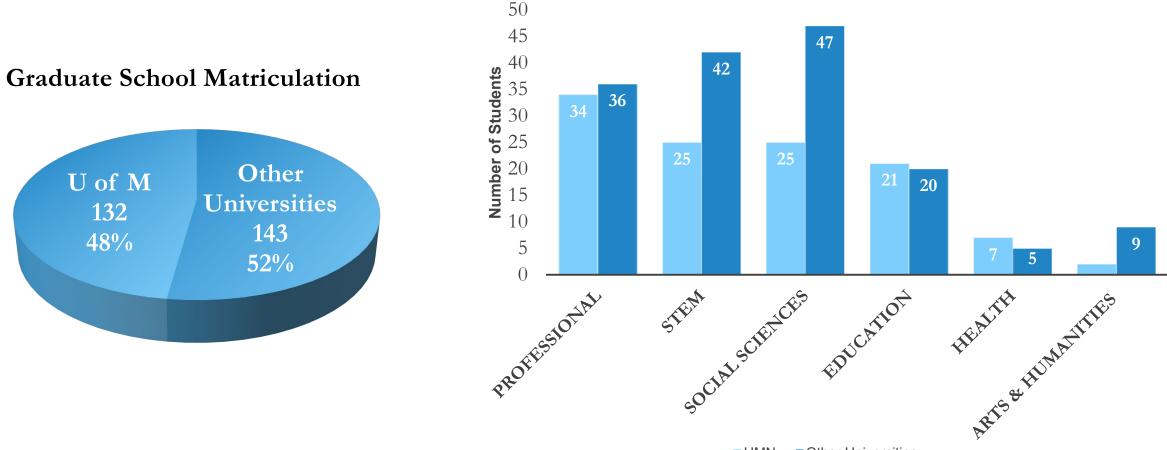
dissertation)

Advanced Degree Completion



Overall Advanced Degree Enrollment

Graduate Degree Breakdown



UMN Other Universities





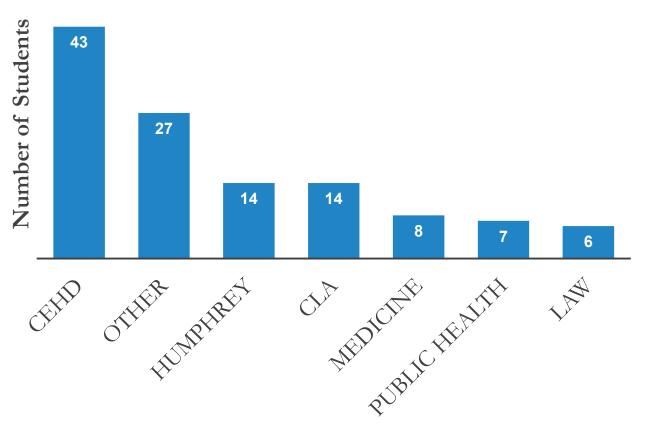
TRO

By The Numbers: Advanced Degree Enrollment

McNair Scholars Degree Completion at the UMN

| Type of degree | # of students | % of students |
|-------------------|------------------|---------------|
| Doctorate | 19 | 14% |
| Masters | 79 | 60% |
| Professional | 34 | 26% |

UMN Graduate School Matriculation





McNair Applications to UMn Graduate School (2014-Fall 2018)

(773 applications from 643 McNair Scholars) (2014-2019 Data Coming This November)

| # of Apps | Majors, Degree Objectives (6 or more) | # of Apps | Und more |
|-----------|--|-----------------|-------------|
| 73 | Psychology PhD | 79 | Univer |
| 34 | Sociology PhD | 31 | Univer |
| 34 | Social Work MSW | 27 | Univer |
| 32 | Chemistry PhD | 25 | Augsb |
| 23 | Public Policy MPP | 25 | Univer |
| 19 | Neuroscience PhD | 24 | St. Ola |
| 19 | Microbiology/Immun/Cancer Biology | 22 | Colleg |
| 19 | PhD | 20 | Univer |
| | Org Leadership Policy Dev MA | 20 | Univer |
| 18 | American Studies PhD | 18 | Univer |
| 14 | Feminist Studies PhD | 14 | Univer |
| 13 | History PhD | 12 | Univer |
| 13 | Political Science PhD | 11 | Univer |
| 12 | Biochem/MBiol/Biophysics PhD | 11 | Washi |
| 12 | Educational Psychology MA | 10 | Beloit |
| 12 | Math PhD | 10 | Northe |
| 11 | English PhD | 9 | Boise |
| 11 | Mol/Cell/Dev Biol/Gen PhD | 9 | Northe |
| 10 | Biomed Engineering PhD | 8 | Califor |
| 10 | Child Psychology PhD | 8 | Florida |
| 10 | Development Practice MDP | 8 | Indian |
| 9 | Educ Psychology PhD | 8 | lowa S |
| 8 | Family Social Science PhD | 8 | North |
| 8 | Org Leadership Policy Dev PhD | 8 | Penns |
| 7 | Anthropology PhD | 8 | Portla |
| 7 | Business Adm PhD | 8 | Univer |
| 7 | Creative Writing MSW | 7 | Califor |
| 6 | Chemical Engineering PhD | 7 | Lawre |
| 6 | Compar Stdy Discrse/Soc PhD | 7 | Univer |
| 6 | Education, Curric & Instr PhD | 7 | UW M |
| 6 | Plant Biological Sciences PhD | The Graduate So | chool re |
| 106 Gr | aduate School Programs received McNair | | |

106 Graduate School Programs received McNair

applications

TRO

| # of Apps | Undergraduate Institution with 7 or | |
|-----------|--|--|
| | more McNair applications to the U of M | |
| 79 | University of Minnesota – Twin Cities | |
| 31 | University of Wisconsin – Eau Claire | |
| 27 | University of Wisconsin - Superior | |
| 25 | Augsburg College | |
| 25 | University of Wisconsin - Stout | |
| 24 | St. Olaf College | |
| 22 | College of St. Scholastica | |
| 20 | University of Wisconsin - LaCrosse | |
| 20 | University of Wisconsin – River Falls | |
| 18 | University of Wisconsin - Madison | |
| 14 | University of North Dakota – Grand Forks | |
| 12 | University of St. Thomas | |
| 11 | University of Minnesota - Duluth | |
| 11 | Washington State University | |
| 10 | Beloit College, WI | |
| 10 | Northern Michigan University | |
| 9 | Boise State University | |
| 9 | Northeastern III University | |
| 8 | California St University Fresno | |
| 8 | Florida International University | |
| 8 | Indiana University Bloomington | |
| 8 | Iowa State University | |
| 8 | North Dakota State University | |
| 8 | Pennsylvania State University | |
| 8 | Portland State University | |
| 8 | University Missouri Columbia | |
| 7 | California State Poly Univ Pomona | |
| 7 | Lawrence University, WI | |
| 7 | University Nevada Reno | |
| 7 | UW Milwaukee | |

The Graduate School received McNair applications from 184 different institutions (*some McNair programs serve multiple institutions) The Federal <u>TRIO McNair Scholars</u> Program is funded at 151 institutions across the United States and Puerto Rico by the U.S. Department of Education. In all projects, at least two-thirds of participants must be <u>low-income</u> AND first generation college students. Remaining one-third may be from groups underrepresented in higher education.

Ethnicity of 643 applicants*

- 51 Am. Indian or Alaskan Native
- 72 Asian American
- 169 African American
- 200 White
- 7 Unspecified
- 157 Indicate mixed race*

321 Admitted

177 Matriculated

Data Courtesy Brad Bostrom and Derek Maness, U of Mn Graduate School.



U of Mn Graduate School Diversity Office

The U of Mn Graduate School Diversity Office is a vital TRIO McNair partner committed to recruiting and supporting underrepresented graduate and professional students. *Comprehensive services include:* prospective student advising; proactive approach to recruitment; host Annual Graduate School McNair Summer Visitation Program represent University at National McNair Conferences; pay application fee waivers; provide information on McNair DOVE fellowships, etc.

University of Minnesota



Graduate School

Graduate School Diversity Office

Services Offered:



Recruitment & National Outreach Application Fee Waiver

Additional Resources

Get Connected



333 Johnston Hall 101 Pleasant St. SE

Minneapolis, MN 55455 612.625.6858



Admission Process

McNair Scholar/DOVE Fellowship



Derek Maness Director of Outreach & Recruitment

Since 1996, Derek Maness has been the driving force recruiting McNair Scholars to the U of M.

Among his notable accomplishments:

- Created the U's Annual McNair Scholars Visitation Day
- Met with every <u>UMn McNair Scholar</u> since 1996 (600 plus meetings)
- Travels extensively to National McNair Conferences





From McNair Scholars to U of M faculty





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U of M McNair in the News

- <u>Taking Flight Through Research</u>
- <u>House Education Budget Bill Softens White House's</u> <u>Proposed Cuts</u>
- From serving in Iraq to working on PhD, U scholar is 'like a kid in a candy store'
- Evelyn Davies-Venn: From McNair Scholar to U Professor



More stories can be found via U of M TRIO McNair Facebook Page



Scholar Profiles

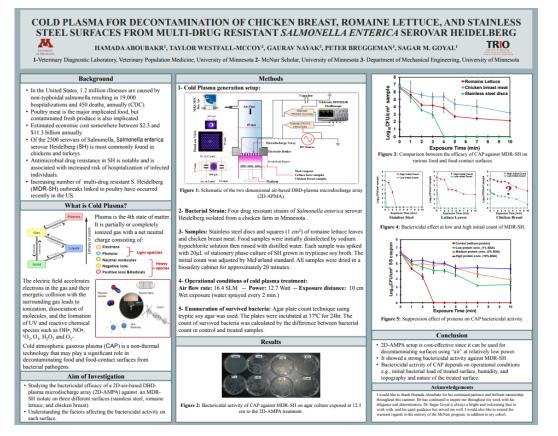
McNair profiles including dream statement, research posters and mentors available online: www.cehd.umn.edu/trio/mcnair/alumni/



McNair Scholar 2017 Taylor Westfall-McCoy

Taylor Westfall-McCoy is a rising junior at the University of Minnesota, Twin-Cities. She is majoring in Animal Science through the College of Food, Agricultural and Natural Resource Sciences, and is on the pre-veterinary medicine track. She also is working on a minor in the History of Science and Technology. Taylor's interests are mainly surrounding the study of performance animal care, specifically with equines and dogs. She plans to obtain her Doctorate of Veterinary Medicine in addition to her PhD in Animal Science.







25 Years of Proven Results





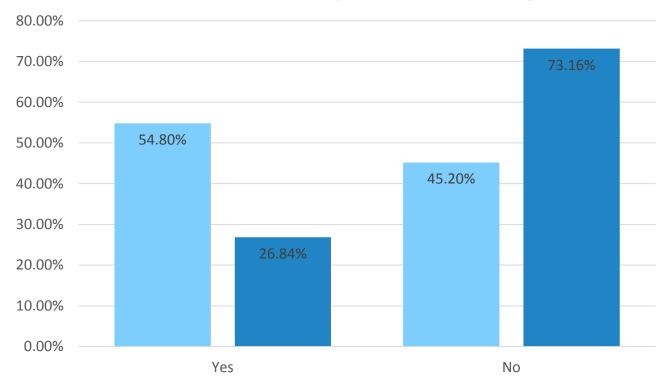
Quantitative Study on McNair Participation

- How does participating in the McNair Scholars Program influence, if at all, the educational attainment of students from underrepresented backgrounds?
- A quantitative research method known as a "<u>propensity score analysis</u>" was conducted to compare the educational attainment of UMN McNair Scholars Program participants against non-participants of similar attributes who enrolled at the UMN between 1991-2012.
 - -Attributes in this propensity score analysis: low income, first generation, race, sex, age when first enrolled, cumulative GPA, STEM degree, ACT score
- Data on students' academic trajectories was obtained from the National Student Clearinghouse for the purpose of this analysis.



Results: Beyond the Bachelor's Degree

• Students who participated in the McNair Scholars Program were twice as likely to pursue education beyond a bachelor's degree compared to UMN students who were equally qualified for McNair but did not participate in the program.



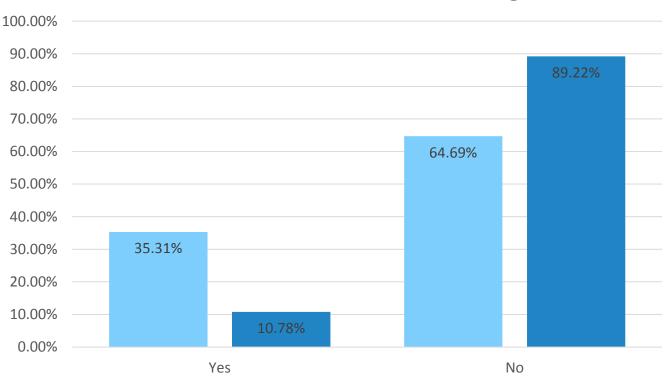
Students who went beyond bachelor's degree

Students who participated in the McNair Scholars Program (n=354)

Eligible students who did not participate in McNair Scholars Program (n=1,058)

Results: Advanced Degree Attainment

• Students who participated in the McNair Scholars Program were more than three times as likely to attain an advanced degree relative to their peers who were of similar attributes but did not participate in the program.



Students who attained an advanced degree

Students who participated in the McNair Scholars Program (n=354)

Eligible students who did not participate in McNair Scholars Program (n=1,058)

Key Takeaway from Study

- Participating in the McNair Scholars Program **doubled** the probability of underrepresented students of similar attributes continuing their academic studies past a bachelor's degree and **tripled** the likelihood of this underrepresented student population attaining an advanced degree.
- Conclusion: According to this study's results, the McNair Scholars Program **exponentially increases** the chances of students from underrepresented backgrounds pursuing and attaining advanced degrees.





World Class Faculty Mentors & Advisers





Diverse Faculty Essential to Higher Education

"A diverse faculty is essential to the success of higher education in our country. Our universities simply cannot achieve the excellence to which we aspire without honoring and incorporating the diversity of expertise, experience and perspectives that exist among our larger population. Initiatives like the TRIO McNair Scholars Program provide a vital way for us to expand the pipeline of well-prepared scholars who will be the leaders of both higher education and many other sectors in our future communities."



Dr. Rebecca Roepers,

Vice Provost for Faculty and Academic Affairs Office of the Executive Vice President and Provost University of Minnesota





Who are McNair Faculty Mentors?

Since 1991, more than 150 different faculty from all University of Minnesota colleges have mentored McNair Scholars. Some have mentored for more than 10 years





List of faculty mentors 1992-2017



UNIVERSITY OF MINNESOTA **McNair Scholar Faculty Mentors**

McNair faculty come from all disciplines, at rank of assistant professor or higher, and are interested in guiding summer research experiences of high potential, first-generation, and minority undergraduates.



Dr. Ann Masten

Institute of Child

Development

Dr. Chris Uggen

Sociology



Dr. Richard Lee

Psychology

Dr. Megan Gunnar

Institute of Child

Development

Dr. Chad Marsolek

Psychology



Dr. Douglas Hartmann Sociology































Dr. Laura Gammill

Dr. Suhasa Kodandaramaiah Dr. Ben Brubaker Mechanical Engineering Psychology







A very special thank you to the College of Education and Human Development (CEHD), Dean Jean Quam and leadership team for their generous financial and institutional support. Additional financial support provided by the U of M Provost for Undergraduate Education and the Office of Equity and Diversity.



Peggy M. Martin

Jennifer Bhalla

Ana Paula Ferreira

Demoz Debre-Egzlabhei Valerie Piere Katle Johnston-Goodstan William Jacono Beth Lewis David Potter LeAnn Snow David Wood Joanne Slavin William Pomerantz Michael L. Walker Chervi Olmar Marcia Hathaway Shaul Hanany Patrick Alford Scott McConnell Angela Panoskaltsis-Mortari Amy Myrbo Dan Maxbaue Michelle Phelps Maria Sera Na'lm Madvur Sagar Goval Liza Meredith Elleen Weber Ken Valentas Tabitha Grier-Reed Elizabeth Boyle Joseph Gaudier Rose Vukovic Lori Heiman Gabrielle Ferrales Sinisa Vidovid Rashne Jehangir Nimo Abdi Meri Firno Virolnia Zuike Michele Allen Veronica Deenanati Jon Schommer Benjamin Munson Susan Mason Tammy Butterick Nathan Kuncel Susan Rose Michael C Rodrigue Barbara McMorris Jarrett Gupton Yaniy Brandvain Sarah Axtell Rvan P Allen Carl Rosen Christopher Johnstone R. Lee Penn David Welss Joa Llang Le Jean L. Forster Steve Yussen Georglana May

Marco Pravetoni Matt Simclk Billy Weber Ross Roholt Eugene Borolda Zha Blong Xlong John Campbel Vinay Gldwani Jennifer Oliphant Michelle Mason M. Blanet Castellanos David Martinez Leonard Banaszal Bryan Shuman Darwin Hendel Thomas Luce Brenda Child Corliss W. Outley

Joseph E. Schwartzberg And A Knutson Panos Michalupoulos Wendy Rahn Robert Morrison Karen-Sue Taussig Molra A. Petit Dawn York R Lawrence Edwards Oliver J. Williams John Robert Warren Ann Meler David E. Wilkins Justin Revenaugi Gary Johnson Tracy L. Toomey Brian Southwell Tim Dunnigan Dorthy Hatsukami Colette Galter Margaret K. DIBlasio Joseph Nathan Caroline Haves Heldi Lasley Baralas Joanne B. Elcher Jon J. Hubbard Simon K. Shannon Wayland E. Noland John Sullvan Gordon Legge Jonathan C. Gewirt George A. O'Doherty Sherrl Turner Robert Schlauch David Ghere Evan Schofer Viralita Singh Julia Wilson Helen Kivnick David Havden Scott Sponheim Catherine Daly Terry Wyberg Wendy Leo Moore Joan Howland Patrick Bruch Frank Kulacki Willam Morrisi Dennis Jones Priscilla Gibson Kathleen Harder Carol Freeman Andrzej Piotrowski Cherrl Muhanil Peter Henner Angelita Reyes John E. Connet George Helmoe Martha Zurita John Wright Richard Hsund Philip Colgan Jim Mitchell Daniel Wackman Murray Jensen Rodney L. Johnson Willis Peterson Edward Martin August Nimtz Robert Kauffman Lorraine F. Francis Matha H. Gonzaler Francis A. Kulacki M. David Marks Joel P. Stemberger Gary Barnes Tom M. Skovholt Andreas Rosenberg David Anderson Louis Alice A. Larson Wilmer G. Miller Carolyn Tubbs James E. Holte Kyla Wahlstrom Chun Chao



Richa Nagar

Larry Wackett

Dr. Evelyn Davies-Venn



Kim Mansky

Luis Ramos-Garcia





















Dr. Vuk Mandic Physics McNair Program Partners Special thanks and appreciation to our institutional and community partners who have helped make University of Minnesota McNair

Dr. Craig Sheaffer Agronomy & Plant Genetics



Speech Language

Hearing Sciences





E. Calvin Alexander James Calkins Ramesh Harlan John Shutske Elain Richardson Eric Ganz Rory Remme Sandra K. Beeman Kay Thomas Jeffrey Edleson Douglas Wangensteer Ann Waltner Jean Allman Michael Hoey Lisa Disch Caroline Sotelloviernes Turner Laura Lederer Geraldine Kearse Brookins Wayne E. Potratz John A. Powell Earl Scot Michael Wootten Kevin Peterson Robert K. Herman Richard Kino Shella Ards Erlk Arthur Rina Tannenbaum Robert McMaster George Barany Candace Kruttschnil LaDora Thompson Laura Coultrip Gunumurthy Ramachandran Jane P.F. Bal John Romano Carla Phillips Jeylan T. Mortimer Dennis Valdes Todd Rhodes John Wallace Patricia Avery Willam M. Grove Peter A. Hancock Daniel Detzner Virgli A. Marple Danlei Kelliher J. Stephen Weeks Peter A. Hancock Lillian S. Bridwell-Bowles John M. Evler Marcla L. Shew John M. Taborn Michael J. Sadowski Garth C. Rockcastle Judith Martin Harry C. Boyt Ron R. Aminzade Allan H. Spear Marti Hope Gonzale Jennifer Bloom Arthur G. Erdman Brian A. Crooker John H. Fleming Raymond Newman Esther F. Wattenberr Margaret Kovera



Dr. Florence Sessoms

Horticultural Science

TRO





Kinesiology





Faculty Testimonial

"

"As an academic I value the McNair Program for its commitment to academic excellence and as an important and effective vehicle for recruiting low-income, first-generation and underrepresented students. The McNair Program does an excellent job preparing students to pursue and successfully obtain advanced degrees." -Dr. Samuel L. Myers

More Testimonials



Who are McNair Faculty Mentors?

- 1. Come from all disciplines, at rank of assistant professor or higher, and are interested in guiding summer research experiences of high-potential, first-generation, and minority undergraduates.
- 2. Are recognized by their peers and students as valued mentors and exceptional teachers. Several members of the faculty have leadership positions in their departments, such as associate dean, director, and department chair.
- 3. Are recognized leaders in their field and serve as members of professional associations and editors of professional journals.





McNair Program Faculty Mentor Framework

Some undergraduate research programs allow students to conduct their own research. This is **not the purpose** of the McNair Scholars Program.



The McNair Program assigns students to work with a professor on the professor's research, not the student's research.

3 The greatest academic and personal growth has come when students are engaged in 30-40 hours doing research or other academic pursuits.



Mentors determine the research engagement and activities that will enhance the student's ability to attend graduate school.

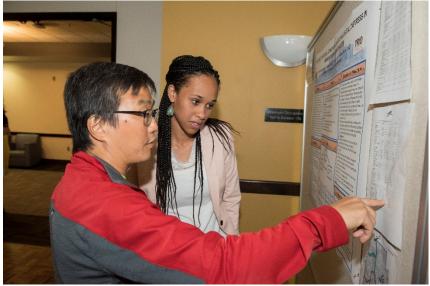




Kayne Lussier and Dr. Scott McConnell

Remember,

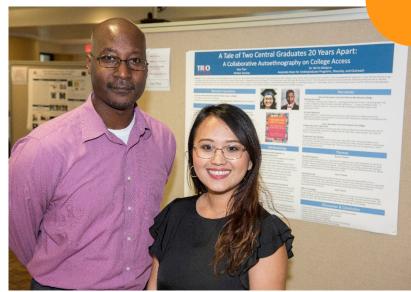
the majority of the McNair Scholars do not have the advantage of family members with graduate degrees and are uncertain about the path from Baccalaureate Degree, to Master's Degree, to Ph.D. attainment.



Mary K. Onchiri and Dr. Richard M. Lee

So,

- Guide the scholar on how to make presentations in his/her field.
- Allow the student to sit in on your course, if it is related to their research project.
- Supervise and accompany the McNair Scholar to professional conferences and association meetings.



Gao Thor and Dr. Na'im Madyun

Talk with your Scholar

about your own

- undergrad experiences
- grad school experiences
- career decisions
- research projects

Build rapport, open lines of communication between you and your Scholar and help build motivation for doctoral study.



Faculty Mentor Responsibilities



Point scholars in the right direction. Provide an outline of current research and point out ideas for your scholar's contribution to the project.



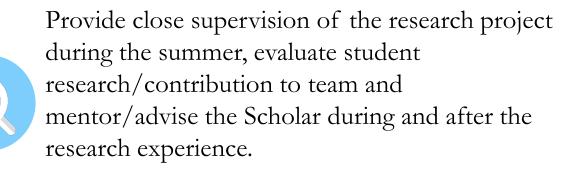
Establish the framework for a successful mentoring relationship. Lay out clear expectations early in your working relationship.



Guide scholar along the steps. Assist the Scholar with establishing realistic goals for the project, completing a research proposal and meeting the research benchmarks and deadlines.



Help your scholar feel comfortable in the research milieu. Acquaint them with the research tools of the discipline. Integrate them on the research team. Invite your scholar to attend seminars and meetings, if appropriate.





Set up regular, in person meetings with your Scholar. If you are away from campus for an extended period, make sure that the Scholar knows what to do in your absence and that you are accessible by phone and email.



Summer Time Commitment

June 3, 2019– August 10, 2019



Ideally,

Faculty Mentors will be on campus and available to meet with students several times during the week.



At a minimum,

Faculty Mentors and Scholars will meet in person two hours per week.

Preferably,

- One hour at the beginning of the week to set goals and activities
- One hour at the end of the week to evaluate progress

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We understand that the number

of contact hours between the Faculty Mentor and the Scholar may vary considerably depending upon the discipline and the nature of the research project.

If Faculty Mentors will not be on campus regularly during the week, they will be easily accessible by both phone and email in the event that Scholars need assistance or direction.





Summer Time Commitment

June 3, 2019– August 10, 2019







Scholars work 30-40 hours per week on their research projects for 10 weeks during the summer.

Scholars will plan their time by creating a research timeline during the first week of the program and complete weekly reflection and time log that faculty approves. Scholars are required to meet as a group every Tuesday morning until noon for a research methods or graduate school prep seminar led by McNair Staff and academic partners.

Scholars are required to meet with their McNair Advisor one hour per week. The mentor will set the appropriate expectations for the student.

Additional required meetings and seminars may be scheduled.

The Scholars' stipends are paid in biweekly installments of \$500 based on successful progress towards timely completion of the project.



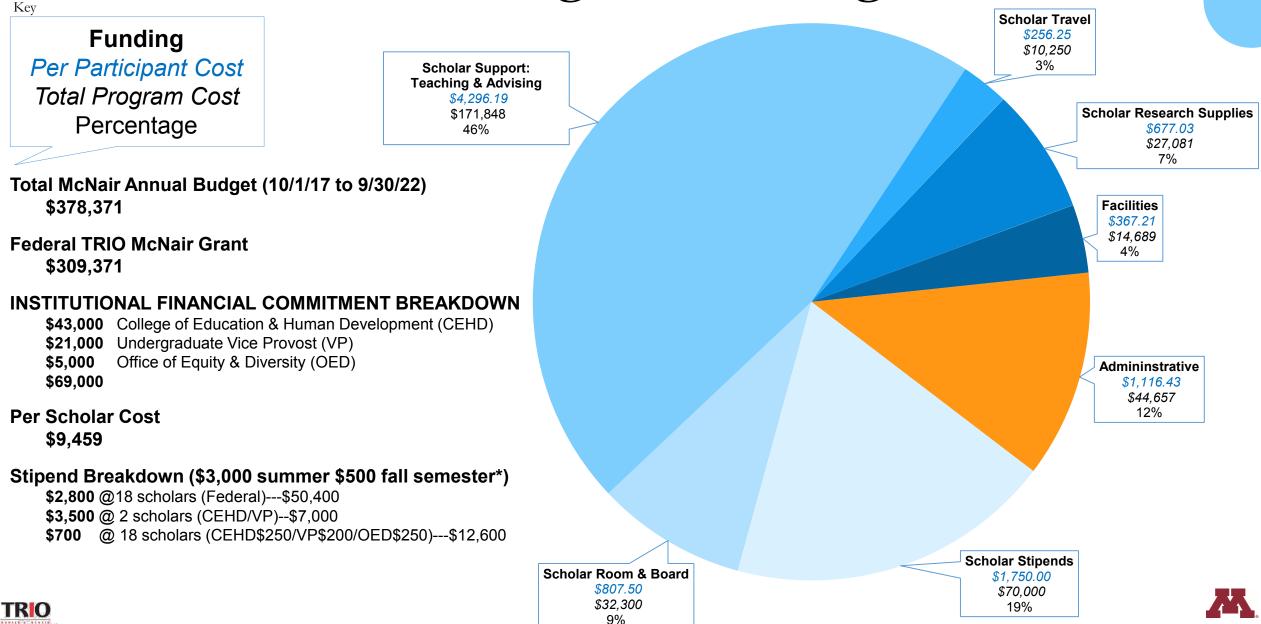


Exponential Return on Investment





U of M McNair Program Funding Breakdown



U of M McNair Direct Service Hours to Scholars

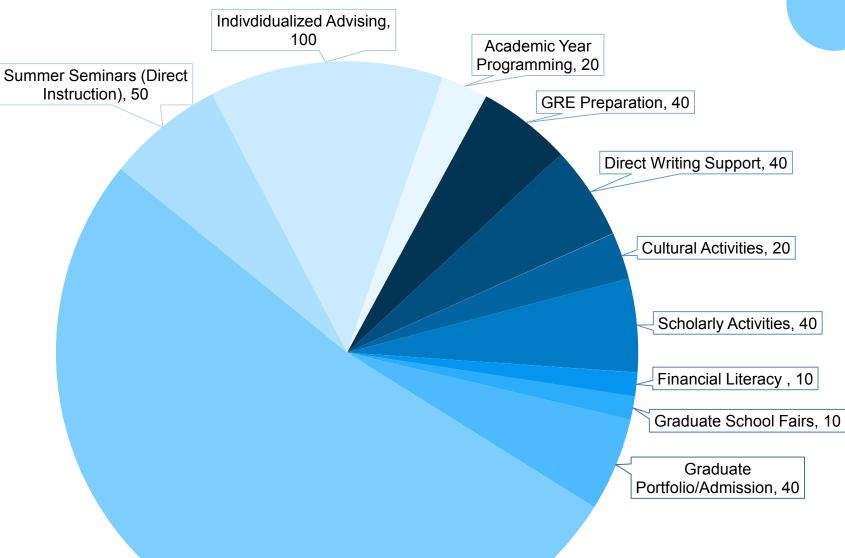
U of M McNair is a summer & academic year program. Each scholar engages in approximately 770* effort hours of research and graduate school preparation.

\$3,500 stipend equates to ~\$5/hr.

*hours tracked through advising CRM, signed attendance and weekly timesheets.



Aarinola Esther Okelola





Summer Research, 400

Challenges...

- Stagnant grant funding compounded by inflation
 - \$3,500 stipend significantly lower than comparable programs (equating to \$5-\$6/hr)
 - Direct impact on program recruitment as students w/highest financial and academic need least able to participate
- Significant political uncertainty
 - o Threats to defund significant swaths of Department of Education
 - PROSPER ACT
- Authorizing legislation is outdated (from 1998)
 - o stipend amount
 - o loss of subsidized grad school loans
 - o gap years now encouraged
 - o scholars recruited into key STEM industries*
 - o University does not allow credit bearing status
- Program regulations do not account for graduate advising services being provided

and Opportunities

- Raise stipend by \$1,000 per student
- Leverage program model and expertise to serve more students to proportionately lower cost per participant

- Provide funding consistency to counter political uncertainty
- Diversify funding sources to counter outdated regulations that hinder McNair from increasing effectiveness
- Broaden mandate to include program services & outcomes
 - o recognize Southeast Asian as underrepresented
 - account for "gap" years
 - o acknowledge professional degree attainment
 - o approve McNair experience as U of M credit bearing

Formalize graduate advising services to McNair alums

- o recognize and support service to McNair alums
- o supporting and engaging new McNair graduate student
- recognize role recruiting students and creating social support outside of grad school department



McNair: Surfing the Chaos

The federally funded TRIO McNair Programs face challenges: legislative, political, graduate education system and collegiate dynamics that significantly impact McNair's work on individual student and academic development. These existential threats left unaddressed will adversely impact the time to matriculation and graduate school completion for first generation, income eligible and underrepresented students. The McNair team is addressing these challenges through multi-faceted, collaborative and innovative approaches

Changing Graduate Education

Challenges

 Graduate Education model is not responsive to 21st Century societal and industry needs and particularly detrimental to TRIO eligible students: Discipline approaches that don't foster interdisciplinary work Limited support systems to help students develop/hone/identify transferability of their advanced degrees Departmental politics frequently create problematic and siloed environments Limited Tenure track jobs Significant debt is not commensurate to future wage earnings

Opportunities

 Support initiatives: · For student centered Graduate education approach Integrate a multiple mentor model that engages students in multi and inter disciplinary ways of learning, teaching, research and community engagement

·Personal, social and non-cognitive Development opportunities-transferable skills, interdisciplinary lenses Exposure to opportunities such as work in Veterans Administration: "from research bench to patient bedside" Provide student opportunities to develop and demonstrate emotional intelligence Increase students social capital through developing more robust higher education networks

Collegiate Dynamics

 Significant change in leadership throughout University Sustainability of volunteer mentor model · Possible reduction of institutional support: monetary and other resources

Challenges

Opportunities

Continue to inform community Robust social media engagement and online presence Service to community

- ·Keep community informed on key policy and program successes
- Intranet
- Committee service across campus
- Alignment across U-System Sharing of resources and practices
- Sharing of compelling stories, concise/accessible/visual data



How McNair Drives Change Develop a Community of Practice By building bridges with program partners, sharing ideas and advancing pedagogy, a **Build Robust Processes** coalition can be fostered that connects the systems and processes are responsive to McNair programs and outside community evolving need, data driven and enable staff to work smarter and not harder Set the tone Staff is committed to Innovation, being proactive. setting ambitions goals, rigor+ fun and modeling a growth mindset.

Outdated Legislation

Challenges

Legislation remains unchanged since 1990's.

 Research Stipend stuck at \$2,800 since 1998 and significantly lower than all other research programs ·Highest need students lowest paid

Dissuades TRIO eligible who can't "afford" to take advantage of McNair

Students are required to matriculate to graduate program immediately following undergraduate degree (Gap years are not recognized)

·Scholars participating in postbac enrichment opportunities shows grant as "not meeting objectives"

Southeast (SE) Asian Students are not considered Underrepresented in graduate school and do not qualify for McNair unless they are both low income and first generation

 Ten-year PhD completion window not representative of trends in most fields

Opportunities

 Advocates for change at department, college, institution, state, regional and national levels

 Active participants/leaders building and sustaining National McNair Network, TRIO professional associations and partnerships

 Presenters of effective practices. Approach work w/ innovative and open-mind-continually evolving and adapting/adopting effective practices.

Advocate to expand McNair mandate to serve Professional degrees and explicitly add language around programming and resources related to student mental health issues

 Broaden financial literacy mandate. Can increased funding provide designated funds to offset firstyear graduate costs for student who directly matriculate?

 Incorporate career services component discussing 'transferability of skills" versatility of advanced degrees

Challenges

 Sustained efforts to eliminate and or reduce TRIO McNair Funding, strategy to eliminate, then over mandate and underfund TRIO SSS Program

 State cuts directly impacting institutional support

 Political paralysis and Congressional gridlock Higher Education Reauthorization continues to be in limbo Impacts release of funds ·Year-to-year volatility on McNair funding

 Public distrust & skepticism of higher education

 Higher education affordability Student debt crisis (\$1.5 Trillion) Deters students from pursuing post bac

Political Threats

Opportunities

Diversify funding: focus on corporations and foundations · Eliminates funding volatility

Allow program to broaden services to diversify professional degree tracks

Opportunity to scale-up for limited cost

Create greater program efficiency not having to work through arcane Department of Education policies ·Latitude to create more responsive and sustainable

Design flexible staffing models that reduce administrative costs while maintaining continuity of care model.

· Engage staff in unique and multifaceted ways that current grant regulations don't allow

Foster unique partnerships and collaborations throughout

University System to expand program footprint

· More stability for staff to reduce volatility caused by continued calls for program elimination

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Financial Support Needed

- Increase Stipends
- Sponsor qualified student
- Room and Board support during summer
- Fund scholar participating at research conference or graduate school visit
- Fund GRE Moodle Prep or ETS Book
- Sponsor cultural activity to broaden perspective and develop community
- Sponsor the annual McNair Poster Presentation (Celebrating 27 Years)
- Sponsor a McNair specific fellowship

- Foundations
- Corporations
- University System
- MN Private Colleges and State Colleges
- MN Office of Higher Education
- University Colleges
- Coordinate campuses









Meet the McNair Team

McNair staffing consists of flex positions that fluctuate based on program phases



Sharyn Schelske, Director Emeritus



Anthony Albecker, Director



Bai Vue, Advisor



Amani Stumme-Berry, Advisor



Fran Stark, Program Manager



Kayla Cory, Graduate Assistant



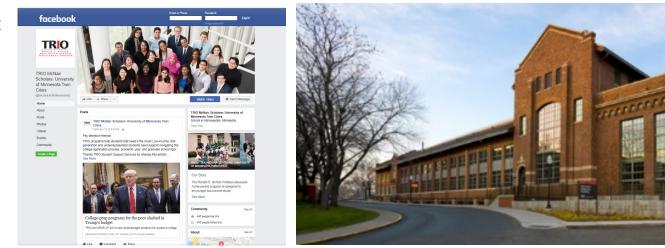
Thank You for your valuable collaboration with McNair Scholars!

Thank you and acknowledgements to the following contributors to this program guide: Sharyn Schelske, U of M McNair program founder, Rayla Allison for critical guidance, Amani Stumme for tireless design vision and evaluation support, the entire McNair Team for their respective contributions, and key program partners Amy Kampsen, Christina Clarkson and Kyle Blume. Thank you all!

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Odds & Ends





University of Minnesota EOAA & Title IX Statement & Resources

In accordance with the United States Higher Education Opportunity Act (2008) (HEA), The federally funded TRIO McNair Program is providing the following EOAA & Title IX Statement and Resources as provided by Kimberly D. Hewitt, Director, University of Minnesota Office of Equal Opportunity and Affirmative Action Title IX Coordinator.

The purpose of this message is to provide another reminder about our responsibilities to foster a positive campus climate that is responsive to and takes prompt and effective measures to address all forms of sexual misconduct including sexual harassment, sexual assault, relationship violence and stalking. University policy specifically prohibits sexual misconduct by employees towards students, and any other form of harassment on the basis of sex.

Students are encouraged to report all incidents of sexual misconduct. Employees have a duty to report all incidents or allegations of sexual harassment or assault. Specifically, employees who have supervisory responsibility or who advise students or who could be considered by a student to have the authority to take action must report sexual misconduct incidents to the Office of Equal Opportunity and Affirmative Action Office (EOAA). The University takes such reports seriously, and will promptly investigate them. The University prohibits retaliation against anyone for reporting or participating in an investigation of sexual harassment or assault. Students or employees found to have engaged in sexual harassment or assault, employees who fail to appropriately report observed or suspected harassment or assault, and students or employees found to have engaged in retaliation will be subject to discipline, which may include suspension, expulsion, or termination if circumstances warrant.

The University's Office of Equal Opportunity and Affirmative Action (EOAA) is available to all members of the University community to receive reports, help resolve issues, and address concerns regarding sexual harassment, sexual assault, or retaliation. Any individual may make a report to EOAA in a variety of ways as outlined in the following slide.



University of Minnesota EOAA & Title IX Statement & Resources, Continued

The University's Office of Equal Opportunity and Affirmative Action (EOAA) is available to all members of the University community to receive reports, help resolve issues, and address concerns regarding sexual harassment, sexual assault, or retaliation. Any individual may make a report to EOAA in a variety of ways:

- Directly to the EOAA office, <u>612-624-9547</u>, <u>eoaa@umn.edu</u>. See also <u>https://diversity.umn.edu/eoaa/reportingresources</u>
- Through the bias incident website----https://diversity.umn.edu/eoaa/reportingform
- Using the EthicsPoint anonymous online reporting system---- https://secure.ethicspoint.com/domain/media/en/gui/9167/index.html

If you are located on a campus other than the Twin Cities campus, you may contact either EOAA or the point people on your campus:

• Morris Campus: Sarah Mattson, Human Resources Director, <u>mattsosj@morris.umn.edu</u>, <u>320-589-6024</u>. For student sexual assault or harassment reports contact Henry Fulda, <u>fuldah@morris.umn.edu</u>, <u>320-589-6470</u>.

• Duluth Campus: Mary Cameron Interim Director of Human Resources and Equal Opportunity, <u>mcameron@d.umn.edu</u>, <u>218-726-7912</u>. For student sexual assault or harassment reports, contact Lisa Erwin, Vice Chancellor for Student Life, <u>laerwin@d.umn.edu</u>, <u>218-726-8501</u>.

• Rochester Campus: Andrea Wilson, Director of Human Resources, University of Minnesota Rochester, <u>wils1236@r.umn.edu</u>, <u>507-258-8010</u>. For student sexual assault or harassment reports, contact Parry Telander, <u>tela0009@r.umn.edu</u>, <u>507-258-8023</u>.

• Crookston Campus: Les Johnson, Director, Office of Human Resources, University of Minnesota Crookston, <u>ljumc@crk.umn.edu</u>, <u>218-281-8345</u>. For student sexual assault or harassment reports, contact Peter Phaiah, <u>phaiah@crk.umn.edu</u>, <u>218-281-8505</u>.

Inquiries regarding Title IX may be directed to the University's Title IX Coordinator (contact information below), or to the U.S. Department of Education's Office for Civil Rights (Chicago Office, <u>312-730-1560</u>).

Kimberly D. Hewitt, Director, Office of Equal Opportunity and Affirmative Action Title IX Coordinator, <u>612-624-9547</u> khewitt@umn.edu































