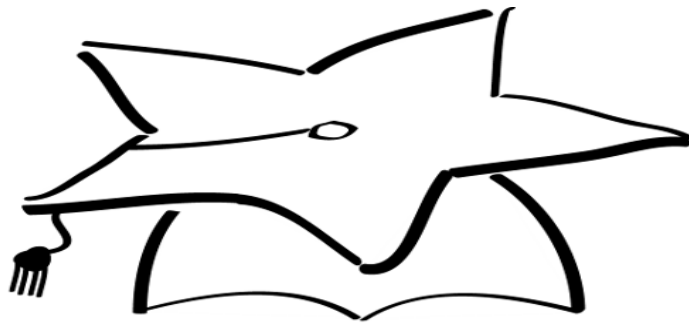


McNAIR SCHOLARS PROGRAM



MENTOR HANDBOOK 2009-2010

CMU

**CENTRAL MICHIGAN
UNIVERSITY**

MCNAIR OFFICE LOCATION & HOURS

The McNair office is located in 148 Foust Hall and will be open Monday through Friday, 8:30 a.m. to 4:30 p.m. McNair staff will also be available for individual appointments and telephone contact during normal business hours.

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MCNAIR SCHOLARS PROGRAM OVERVIEW

The McNair Scholars Program aims to successfully prepare scholars for entrance into graduate school. The ultimate goal of the program is for scholars to earn a Ph.D. within ten years of graduating from Central Michigan University.

The program is federally funded through the Department of Education and named after the late Ronald E. McNair who perished on the space shuttle Challenger in 1986. Dr. McNair stands as a strong inspiration to all of our scholars, being an individual who achieved great heights, both personally and professionally. Dr. McNair earned a Ph.D. from the Massachusetts Institute of Technology (MIT) in Physics in 1976.

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 school, Dr. McNair was inspired by a teacher who recognized his science potential and believed in him. He graduated as valedictorian from Carver High School in 1967. In 1971, he received his bachelor's degree magna cum laude in Physics from North Carolina A&T State University (Greensboro). Five years later, he earned a Ph.D. from MIT.

Dr. McNair's career as a scholar and mission specialist astronaut was abruptly ended with his untimely death aboard the U.S. Challenger. His achievements, however, were not limited to academia. He was a sixth degree black belt in Karate and an accomplished saxophonist as well. Married to Cheryl Moore, Dr. McNair was a devoted husband and a loving father to their two children, Reginald Ervin and Joy Cheray.

His lifelong commitment to scholarship lives on in the McNair scholars who are selected each year to participate in the many McNair programs across the United States. The McNair Scholars Program at Central Michigan University is dedicated to preserving his legacy of personal excellence and accomplishment.

***"True courage comes in enduring, persevering the preparation and believing in oneself."
—Ronald E. McNair, Ph.D.***

MENTOR-SCHOLAR RELATIONSHIP

Thank you for agreeing to serve as a faculty mentor to a CMU McNair scholar this year. An important aspect of the McNair Program is the relationship between the faculty mentor and the scholar. For the scholar, successful participation in the program depends to a large extent on this relationship.

Because the goal of the McNair Program is to send motivated and talented, but educationally and economically disadvantaged students to graduate school, much of its success will depend on finding creative remedies to their educational obstacles. In this endeavor you, as a faculty mentor, can play an essential role. The faculty mentor relationship provides the support necessary for the student to prepare for entry into and completion of a doctoral program.

Supporting an economically and/or educationally disadvantaged student's academic and career pursuits can be a very fulfilling experience for a faculty member. Most people have had individuals in their lives that have made a difference. The mentor relationship is an opportunity to be such a person to a McNair scholar. We encourage you to make the most of this opportunity and hope you will find that it is mutually rewarding and beneficial. We thank and commend you for mentoring the next generation of faculty and professionals.

MENTOR GUIDELINES

As researchers on the rise, most scholars have the passion and commitment to complete their summer research project with some valuable assistance from you. While you supportively challenge your scholar on the grander parts of their project, please keep in mind that the smaller details may be just as challenging to them. Clarify each segment of the research project as much as possible. Working with your scholar to develop a research timeline can decrease anxiety about the project and provide structure to the research process. For many scholars this will be the first time they work on a project of this caliber and they may need assistance in processing information. Your commitment to their growth and development is invaluable and appreciated.

Each mentor is expected to meet with his/her scholar on a frequent basis during the spring semester (**most mentors establish a weekly meeting time outside of their office hours so that the scholar receives adequate attention**) to develop the student's research project in preparation for the summer. You will continue to meet with the student on a regular basis during the summer. If a mentor perceives that a scholar is having difficulties, he/she should be willing to spend additional time with the student and contact the McNair Program staff for additional assistance. Scholars are expected to commit a *minimum* of 20 hours weekly to their research projects during the Summer Research Institute.

As a mentor, you can also guide your scholar by giving them inspiration and providing relevant insights about the graduate school process. Mentors teach what textbooks and journals cannot. We hope that you will follow these guidelines to establish and maintain a connection to your McNair scholar. The role of the McNair mentor can generally be viewed in the following three categories:

Scholar Development

- Meet with your scholar regularly.
- Take the time to get to know one another. Talk about yourself: your interests, hobbies, travel experiences, family background, as befits your comfort level. Discuss what influenced your decision to obtain a graduate degree, for instance, increased opportunities, the ability to do research that is interesting to you, teaching and so on.
- Introduce your student to faculty members, graduate students and community contacts in his/her field of interest.
- Serve as a positive role model in research, scholarship and academia as a whole.
- Alert the McNair office of any difficulties of an academic and/or personal nature that the scholar may be encountering.

Directing Research

- Meet early and frequently in the spring semester to select a topic and develop a research proposal.
- Clearly define research goals.
- Assist your scholar with conducting and completing the research project as part of the Summer Research Institute.
- Help your scholar complete the Institutional Review Board (IRB) process, if necessary.
- Develop a timeline with your scholar to keep them on track with the research and hold them accountable for meeting deadlines. **The final research paper is due August 7.**
- Always ask your scholar if they fully understand what you are talking about and if they need further explanation. Many of them are intimidated and forget to ask the most basic questions or feel embarrassed about asking for clarification.
- Inform the McNair Associate Director (Lynn Curry, lynn.curry@cmich.edu) of any major changes in the topic, orientation or structure of the research project.
- Invite your scholar to department colloquia, conferences and other occasions to hear others discuss their work.
- Read, edit and provide comments on the proposal, final research paper, PowerPoint and poster presentations.
- Ensure the final paper adheres to the requirements of the McNair Scholar Research Paper Guidelines.
- Assist your scholar in researching potential professional conferences within their discipline where they can present their research project.

Graduate School Preparation

- Clarify the realities of graduate school based upon your own experiences.
- Enhance your scholar's awareness of the opportunities and demands of graduate education.
- Help your scholar evaluate graduate schools and programs and introduce scholars to pertinent sources of information.
- Encourage him/her to think about and discuss their goals and career objectives.

RESEARCH PROJECT TIMELINE

In conjunction with the McNair Research Writing and Communication class and their faculty research mentor, each scholar will design a project that conforms to the requirements of the program during the spring semester. Scholars then carry out the research and complete their projects during the Summer Research Institute (SRI) – spending 200 hours over ten weeks on average. It is very important that faculty research mentors understand that while the research experience is a central component of the McNair Program, there are additional aspects that are equally critical to the overall McNair experience. This means that while the program strives to accommodate special needs and/or requirements of individual projects, research projects should be designed to fit within the following timeframe. Note that some McNair scholars do receive the opportunity to continue to work with their mentors, expanding their project and potentially publishing it.

In addition to the research experience, McNair scholars participate in a variety of activities designed to prepare them for graduate school. This includes scholar workshops and seminars, GRE prep course, symposia, conferences and visits to prospective graduate institutions. While the scholars conduct their research during the summer, an equal amount of time is spent preparing to apply to graduate school. These activities are not intended to compete with their research, but rather, complement that experience and further prepare scholars to be successful at the doctoral level.

Faculty research mentors should note the following dates and deadlines for the 2009 cohort:

March 27	Scholar progress report due
April 10	Draft proposal due
April 15	PowerPoint presentation due
April 16	Presentation practice session
April 23	Presentation practice session
April 30	McNair Spring Research Symposium (scholars present proposals)
May 1	Final proposal due

Scholars are expected to devote 20 hours/week on their research projects, 10 hours/week on GRE prep and 10 hours/week on graduate school prep during the SRI

Week of May 18	SRI begins (scholar activities run from 9 – 4 p.m. daily this week)
Week of May 25	Scholars attend Grad School Training Camp at Indiana University
June 1 – June 26	Scholar weekly activities run from 8:15 – 12 p.m. (Monday-Thursday)
June 27	Scholar progress report due
Week of June 30	No scheduled activities
July 6 – July 24	Scholar weekly activities run from 8:15 – 12 p.m. (Mon. & Wed.)
July 14	Presentation practice session
July 17	Draft final paper due
August 7	Final paper and draft poster/PowerPoint due
September 11	Final poster and PowerPoint due
September 11 and 18	Presentation practice sessions
September 25	McNair Fall Research Symposium (scholars orally present)
October 2	CMU Fall Research Symposium (scholars present posters)

MCNAIR PROGRAM COMPONENTS

The McNair Program offers a wide range of workshops, seminars, trips, visitations and presentation opportunities all designed to prepare its scholars for applying to and becoming familiar with the rigors of graduate school. The following are the major components of the McNair Program.

Research Writing and Communication Course

During the spring semester, scholars participate in a three-credit course designed to prepare them for the Summer Research Institute (SRI) project. The seminar covers the research process, how to construct a research proposal, as well as effective presentation techniques. The course is facilitated by Dr. Bill Spruiell (sprui1wc@cmich.edu; 774-3680) and will include presentations from CMU faculty from various disciplines.

This course will also help scholars identify and select a faculty mentor with whom they will work to conceptualize the research project they will conduct during the SRI. Their faculty mentor will assist in assessing the feasibility of the project, as well as directing the development of a research proposal. Scholars are expected to submit a final research proposal (as approved by their mentor and research writing course instructor) to the McNair office by **May 1**.

The class meets weekly and culminates with the formal presentation of the research proposal at the **Spring McNair Research Symposium on Thursday, April 30 from 1:00 p.m. – 4:00 p.m.** in the Strosacker room at Park Library.

Program Seminars/Scholar Meetings

Throughout the year scholars participate in a series of seminars on various graduate school topics facilitated by CMU faculty and McNair staff. The seminars are designed to aid scholars in the graduate school application process including identifying graduate programs that “fit” their needs and interests, preparing for the Graduate Record Examination (GRE) and developing a plan for their graduate school career. Seminars will also address aspects of the research process, academic presentations and career planning.

Research Presentations

McNair Research Symposiums—All scholars are required to present their research at McNair research symposiums held in the fall and spring. The first will be held in April for presentation of the research proposal and another in September for the final research paper. Symposiums are formal events attended by mentors (**it is important for mentors to make it a priority to attend**) as well as university faculty and administration. Both of these presentations will be in an oral and PowerPoint format.

CMU Sponsored Presentations—Scholars are also required to present their research at the CMU “Undergraduate Research and Creative Endeavors Symposium” in the fall and “Student Research and Creative Endeavors Exhibition” (SRCEE) in the spring following the SRI.

External Presentations—Scholars are also strongly encouraged to present their research at one additional external conference, either a national McNair conference or one within their respective discipline. Faculty mentors should provide guidance on upcoming conferences and presentation opportunities within their respective disciplines. McNair staff will assist with necessary travel arrangements.

Spring Reception

Each spring the McNair Program hosts a reception in honor of the scholar cohort and recognition of their academic achievements. Faculty mentors, family and friends are encouraged to attend.

Summer Research Institute (SRI)

The Summer Research Institute (SRI) is an experience during which scholars engage in research under the guidance of their faculty mentor and prepare to apply to graduate school. Mentor collaboration is intended to introduce students to the nature of graduate study, scholarly activity and research careers. The SRI also focuses on preparing scholars for graduate school including investigating graduate programs of interest, preparing for the Graduate Record Examination (GRE) and assembling all materials needed to apply to schools in the fall.

The SRI will be spent completing the planned research project under the supervision of the faculty mentor. Along with conducting research, scholars will attend McNair seminars and a GRE review course and complete an action plan outlining their graduate school goals.

Outcomes from the SRI include:

- 1) Final Research Report**
- 2) Graduate School Action Plan**
- 3) Completion of the GRE**

Scholar Responsibilities—Scholars are expected to spend a minimum of **twenty hours per week** working on their research. In some cases, faculty mentors may require students to commit additional time. Scholars must also spend at least **ten hours per week** studying for the GRE and at least **ten hours per week** creating their Graduate School Action Plan. In turn, scholars are strongly advised NOT to take classes or work more than ten hours per week at an outside job during the entire summer. Scholars submit weekly time reports and reflections so that McNair staff may monitor and assess their progress.

Graduate School Training Camp—Each summer, the scholars travel out of the state to attend a graduate school training camp, more affectionately known as “boot camp.” The camp is sponsored by various institutions hosting McNair programs and will be attended by McNair scholars from around the country. In addition to learning everything a person would possibly want to know about graduate school, scholars are able to network with their peers and gain valuable insight and knowledge about becoming a successful graduate student. The camp generally occurs during the first week in June and lasts five days.

GRE Review Course—McNair scholars attend a free training course for the Graduate Record Examination (GRE) during the SRI. The course typically runs for eight weeks and includes individual tutoring sessions in addition to the main class. Scholars are expected to attend all review sessions and complete the assigned homework. All scholars are required to take the GRE and report their scores to the McNair office by **August 14**.

Graduate School Action Plan—The Graduate School Action Plan consists of all necessary materials for the process of applying to graduate school. It is a compilation of all research conducted by the scholar on graduate programs of interest as well as specific application items including a *curriculum vitae* and *personal statement*. An important component includes devising a plan for contacting

individuals associated with programs of interest and arranging visitations. Scholars are encouraged to begin visiting prospective graduate schools during the summer and early fall. As a mentor, you can provide valuable direction in the scholar's search for the appropriate graduate program. The final version of the Graduate School Action Plan is due on **July 31**.

Research Proposal & Final Paper—The goal of the SRI is to prepare McNair scholars for the rigors of conducting research at the graduate level. As such, scholars are required to submit a well-developed research proposal outlining the research to be completed during the SRI due **May 1**. The proposal should include a description of the general questions that will be addressed by the research, a review of the relevant literature, research methods, a projected research schedule, budget (if applicable), bibliography and a signed faculty approval form.

The final research paper outlining the results of the scholar's SRI project is due **August 7** and should be of the highest possible caliber in both scholarly merit and academic rigor. A guideline for preparation of the final research paper and the components that it must include will be made available (see *Scholar Research Paper Guidelines* handout). Although not all papers will follow this exact format given the wide range of disciplines, the McNair Program is interested in achieving an appropriate level of consistency in formatting and quality among all projects. Scholars are instructed to defer to their mentor and discipline guidelines for bibliographies and general writing styles.

Progress Reports and Mentor Approvals

Faculty mentors will also be asked to provide assessments of the scholar's progress in the form of periodic progress reports. Similarly, scholars are required to obtain their mentor's approval before submitting the research proposal, final research report and oral/poster presentations. This process helps to ensure frequent contact between the scholar and mentor in developing and revising the research paper.

Attendance and Late Policy

Scholars are required to attend all McNair events and meetings. This includes all scheduled meetings with faculty mentors. You should alert the McNair office if a scholar is continually late to meetings and agreed upon deadlines.

Mentor/Scholar Grievances

In the event that there is a problem between the scholar and the faculty mentor that becomes difficult to resolve, a meeting with the Associate Director should be scheduled so that the issue(s) at hand can be fully discussed and explored. In the event that no resolution can be made, the Director will decide what actions can be taken in the best interests of all parties involved

Additional Research Funds

CMU's Office of Research and Sponsored Programs (www.orsp.cmich.edu) offers several grant opportunities to undergraduate students engaged in research. These funds can be used to cover the costs associated with conducting the summer research project. They include:

- 1) research grants to cover costs associated with conducting research (up to \$500, applications accepted during each fall/spring semester).
- 2) presentation grants to cover costs associated with presenting research at various conferences (up to \$400, applications accepted throughout the year).
- 3) summer scholar stipends to support additional research projects in subsequent years (\$3000, applications due in spring).

Institutional Review Board and Animal Care and Use Committee

For those scholars whose research projects involve working with human subjects, it may be necessary to get approval from the Institutional Review Board (IRB). The purpose of the IRB is to ensure that subjects are being treated in a humane and ethical way as well as to protect the researcher and the university from possible liability for potential harm. **Scholars may not begin collecting data on human subjects until they have received approval from the IRB.** The guidelines for the IRB process are located on-line at www.orsp.cmich.edu/IRBcom.htm. Mentors should work with their scholars in navigating the IRB process as well as ensuring that they have submitted a final copy of the IRB approval to the McNair office.

Mentors should also be aware that similar guidelines apply to research involving the use of animals as stipulated by the Institutional Animal Care & Use Committee (IACUC) at CMU. Access their website at www.orsp.cmich.edu/pdf/IACUCManual.pdf for further information.

MCNAIR RESOURCES

Scholars may access a variety of resources available to enhance their undergraduate education and graduate school preparation activities.

Summer Research Stipend

McNair scholars are awarded a generous research stipend and living allowance for the summer that enables them to devote full-time effort to their research. In general scholars are not allowed to take classes and only work minimal hours if they have a part-time job. They are expected to regard their summer research program as full-time employment.

The research stipend for the SRI is dispersed according to the following schedule:

- Completion/acceptance of research proposal—\$1200
 - Submission of progress report—\$500
 - Submission of progress report—\$500
 - Completion/acceptance of final research paper—\$800
 - Presentation of the research findings—\$400
- (each step requires mentor approval)*

Travel Allowances

McNair scholars in good standing are granted access to travel funds as a result of participating in the program.

Graduate School Visits—Scholars will be supported by the McNair Program to travel to various graduate schools throughout the country to examine institutions and departments. Senior scholars will be granted access to travel funds dependent upon adequate preparation for each visit and completion of program requirements to date.

Conferences & Presentations—Scholars have the option of receiving funding to present their research at national conferences within their discipline or at McNair conferences. Faculty mentors should encourage their scholars to pursue presentation opportunities within their specific discipline.

Resource Room & Equipment

The resource room in the McNair office has a variety of equipment available to the scholars for work related to academics, research or graduate school preparation. This includes computers, a high quality color printer, laptops (available for check-out), fax machine and access to a phone for long distance phone calls to potential graduate institutions. Other resources in the office include graduate school directories, financial aid resource books, books on writing papers and personal statements and internship opportunities.

Academic Tutoring

Personal academic tutoring is available to help scholars successfully maintain an outstanding grade point average. Mentors should contact the McNair Associate Director if they believe their scholar is having trouble with a class and needs tutoring.

Application Fee Waivers and Fellowships

Many institutions offer graduate application fee waivers and other incentives (such as fellowships) to McNair scholars. The list is available online at:

<http://www.rochester.edu/College/McNair-Program/applicationIncentives.html>

National McNair Directory

The Council on Opportunity in Education (COE) and the Council of Graduate Schools (CGS) publishes a national McNair directory of graduating seniors intended to help graduate schools from across the county specifically recruit McNair scholars to their programs. Information on CMU scholars are submitted to this directory every summer.

2009-2010 MCNAIR SCHOLAR TIMELINE

December 2008	New Scholar Orientation
January 2009	Scholars begin Research Writing and Communication course Scholars choose faculty mentors
April 2009	Research proposals due Proposals are presented at the Spring McNair Research Symposium
May 2009	Scholars begin Summer Research Institute Scholars attend Graduate School Training Camp Work begins on research projects GRE review course starts Scholars begin work on their Graduate School Action Plans
June 2009	Scholars continue working on research and grad prep
July 2009	Scholars continue working on research and grad prep Plans to visit potential graduate schools are formulated
August 2009	Final research papers due Finalized Graduate School Action Plans due Scholars take GRE
September 2009	Finalized research presentations due Projects are presented at the Fall McNair Research Symposium
October 2009	Scholars present at CMU Undergraduate Research Symposium Scholars consider national conferences to present research
November 2009	Graduate school applications are finalized & submitted Scholars apply for external fellowships
March 2010	Scholars present at a national McNair conference
April 2010	Scholars present at SRCEE Scholars choose graduate schools Program hosts a spring reception for 2009 scholars

THE VALUE OF MCNAIR

The McNair Program offers scholars access to significant resources that will help them become successful at the graduate level and ultimately achieve a Ph.D. As such, the program expects that participants take this opportunity seriously and make the most of each experience. Although it may not yet be entirely apparent for new scholars, being a part of McNair encompasses benefits ranging far beyond stipend monies received and seminars/trips attended during their undergraduate career.

A McNair scholar carries prestige and recognition at a national level and is a great honor upon successful completion of all program requirements. It is a chance for scholars to build a solid reputation for themselves, bolster their credentials and enjoy personal relationships and a support network that will hopefully last beyond their years at CMU.

Being a faculty mentor to a McNair scholar is a wonderful opportunity to make a real difference in terms of their long-term success and personal accomplishment. The McNair Scholars Program places exceptional responsibility upon its mentors as positive role models for scholars. The program relies upon its faculty to not only guide their mentees in research, but in their professional development as aspiring young scholars as well. The program sincerely appreciates mentors for their valued contribution and the considerable time and effort spent working with McNair scholars.

IMPORTANT MCNAIR DATES & DEADLINES 2009

Friday, April 10	Draft research proposal due
Wednesday, April 15	PowerPoint presentation due
Thursday, April 30	McNair Spring Research Symposium
Friday, May 1	Research proposal due
Monday, May 18	Summer Research Institute begins
May 25 – May 31	Scholars attend grad school training camp
Friday, July 31	Graduate School Action Plan due
Friday, August 7	Final research paper due
Friday, August 14	GRE scores turned into McNair office
Friday, September 25	McNair Fall Research Symposium
Friday, October 2	CMU Undergraduate Research Symposium

*Welcome new McNair faculty mentors!
We appreciate the important role you play in the success of the program.*