RONALD E. McNAIR POST BACCALAUREATE ACHIEVEMENT PROGRAM

Mentor Handbook

Academic Year 2013 - 2014

SAM HOUSTON STATE UNIVERSITY

Huntsville, Texas 77341



McNAIR SCHOLARS PROGRAM

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MCNAIR SCHOLARS PROGRAM CONTACT INFORMATION

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ABOUT DR. RONALD E. McNAIR

Ronald E. McNair was born on October 21, 1950 in Lake City, South Carolina. He was the second son of Carl and Pearl McNair. He had two brothers, Carl and Eric. Ronald McNair's academic successes are laudable. After graduation from Carver High School in 1967, McNair attended North Carolina A&T State University, where he received a Bachelor of Science in Physics in 1971. Ronald's education did not end there; he was awarded a doctoral degree in physics from the Massachusetts Institute of Technology (MIT) in 1976. In addition, McNair received three honorary doctorates: one in law from North Carolina A&T in 1978, one in science from Morris College in 1980, and another in science from the University of South Carolina in 1984. It is apparent that education was of extreme importance to him.

Ronald McNair was a member of several national organizations in science, including the American Association for the Advancement of Science, the American Physical Society (APS), the APS Committee on Minorities in Physics, the North Carolina School of Science and Mathematics Board of Trustees, the MIT Corporation Visiting Committee, and Omega Psi Phi. He was also a visiting lecturer in physics at Texas Southern University. McNair received many honors and awards throughout his academic and professional career. He graduated *magna cum laude* from North Carolina A&T University; he was named a Presidential Scholar, a Ford Foundation Fellow, a National Fellowship Fund Fellow, and a NATO Fellow. He won the Distinguished National Scientist Award from the National Society of Black Professional Engineers and was named a Who's Who Among Black Americans. McNair also won several championships and medals in Karate, for which he held a 5th degree black belt, Karate's highest rank.

Ronald E. McNair was nationally recognized for his work in the field of laser physics. In 1978, he was one of 35 applicants selected from a pool of ten thousand for NASA's space shuttle program. After a one-year training and evaluation period, he was assigned as a mission specialist aboard the 1984 flight of the *Challenger*. He became the second African-American to fly in space. On Tuesday, January 28, 1986, Ronald McNair was killed along with his six fellow crew members aboard the *Challenger* when it exploded after launching from the Kennedy Space Center in Florida. The crew members were F. R. Scobee, the pilot: Commander M. J. Smith, mission specialists: Lieutenant E.S. Onizuka and Dr. J.A. Resnik, and two civilian payload specialists: G. B. Jarvis, and S. C. McAuliffe. Ronald McNair was survived by his wife, Cheryl Moore and their two children, Reginald Ervin and Joy Cheray.

The Ronald E. McNair Postbaccalaureate Achievement Program was established by the U.S. Department of Education in 1989 in honor of his life, accomplishments, and contributions.

McNAIR PROGRAM OBJECTIVES

The primary goal of the Sam Houston State University McNair Scholars Program is to increase the number of low-income, first generation college students, and others from groups traditionally underrepresented in graduate education, that enroll in doctoral programs. All objectives listed below are designed to accomplish the primary goal of the McNair Program.

- 1. 85 % of McNair participants will complete research and scholarly activities that will directly impact their educational progression each McNair Program academic year.
- 2. 95% of new participants served in each McNair Program academic year will attain a baccalaureate degree within three (3) years.
- 3. 60% of bachelor's degree recipients will enroll in a postbaccalaureate program by the fall term of the academic year immediately following completion of that degree.
- 4. 15% of McNair program participants will attain a doctoral degree within ten (10) years of the attainment of the bachelor's degree.

McNAIR PROGRAM DESCRIPTION

The Ronald E. McNair Postbaccalaureate Achievement Program is designed to provide talented low-income, first-generation, and minority undergraduate students with effective preparation for doctoral study. The McNair Program at Sam Houston State University encourages graduate studies by providing opportunities for undergraduates to define their goals, engage in research, and develop the skills and faculty mentor relationships that are critical for success at the doctoral level.

General Research Information

The McNair Program is more than just a research internship and a stipend. It is an opportunity to explore the goal of graduate education. The internship is a learning laboratory in which scholars can develop and sharpen the skills necessary for graduate study. In this program scholars are expected to select a faculty mentor and utilize his or her guidance, direction, and supervision on a research project of their choice. The internship period will take place during the summer months.

The Research Process

Spring 2014

In the Spring semester, scholars will participate in the McNair research class. The class will provide scholars with an introduction to the methods, problems, and terminology of graduate research. With the assistance of their mentors, scholars will be expected to formulate a research idea, to prepare a literature review, and to submit a research proposal by the end of the class (May 1, 2014). Scholars are expected to meet with their mentors at least twice a month and to submit biweekly progress reports, signed by their mentors to the McNair Office.

The following are some relevant research deadlines (please refer to the McNair 4301 class schedule for further details—page 17-18).

Research Action Plan (RAP) – 1/31/2014 Hypothesis and Research Questions – 3/20/2014 Literature Review – 4/3/2014 Research Proposal – 5/1/2014 Student Research Proposal Presentations – 4/22/2014 – 5/1/2014

Summer 2014

During the summer research process, McNair Scholars will conduct an independent research project under the supervision of their faculty mentor. Scholars are expected to devote time each week to their research **from June through August**. At least once a week, scholars are required to meet with their faculty mentor to discuss the research. If face to face meetings are not possible, scholars may communicate with their mentors in other ways (i.e., e-mail, phone, etc.). Scholars are also expected to submit weekly progress reports.

Scholars will meet as a group for a seven-week period (from early June to mid-July) to practice their presentation skills. Each week, scholars will give a short oral presentation, eventually leading to a 12-minute research presentation by the end of the 7-week period.

Fall 2014 and Spring 2015

In future semesters and within a reasonable amount of time, the research findings will be compiled, analyzed, and written for "peer-review" for presentation at a McNair conference and/or a regional/national conference in their discipline. The scholars will also present their research at the Annual SHSU McNair Program Research Conference to be held in early Fall 2014. Final manuscripts are due the fall term after the beginning of the research project, but deadlines can be extended to December 1 or May 1 (of the following year), depending on the student's graduation date. Many scholars may also ask for assistance with graduate school applications during this time.

FACULTY MENTORING PROGRAM GOALS AND OBJECTIVES

Goals

- 1. To provide McNair Scholars with a quality supervised research experience that will begin to prepare them for the level of research required at the graduate level.
- 2. To facilitate an increase of scholar interaction with faculty members.

Objectives

To ensure that 85% of McNair Scholars will publish a paper, present at a university research exchange, or present at a professional conference or symposium based on their participation in a research project directed by a university faculty member.

In addition to providing Scholars with a supervised research experience, the mentoring program is designed to identify role models, provide academic encouragement, and increase participation in the academic culture of the university campus. Faculty Mentors are selected upon the following criteria:

- 1. Successful record of working with students;
- 2. Diverse backgrounds and interests;
- 3. Professional training and experiences;
- 4. Academic and personal counseling skills;
- 5. Knowledge of the university and its resources; and
- 6. Desire to serve as a mentor.

The mentoring program bridges the academic and social gaps among peers, faculty, and Scholars. Through shared academic and social activities, bonding occurs between McNair Scholars and mentors. Faculty mentors provide insight essential for the scholar to understand the skills needed to become successful in the academic world. Through the mentoring program, the McNair Scholars' self-perceptions, levels of personal and academic expectations, and likelihood of success are increased. The mentoring program consists of a continuous supportive relationship between the students and mentors. McNair Scholars are encouraged to continue contact with their mentors after graduating from Sam Houston State University.

"Mentors are **advisors**, people with career experience willing to share their knowledge; **supporters**, people who give emotional and moral encouragement; **tutors**, people who give specific feedback on one's performance; **masters**, in the sense of a professional to whom one is apprenticed; **sponsors**, sources of information, and aids in obtaining opportunities; **models**, of identity, of the kind of person one should be to be an academic." (Zelditch, M., 1990, "Mentor Roles," Proceedings of the 32nd Annual Meeting, Western Association of Graduate Schools.")

LOGISTICS OF THE FACULTY MENTORING PROGRAM

Basic Requirements needed to serve as a Faculty Mentor:

- 1. Faculty Mentors must be assistant, associate, or full professors at Sam Houston State University.
- 2. Faculty Mentors must hold a doctorate unless they are in a discipline where a Master's degree is the terminal degree needed to be accepted as university faculty.
- 3. Faculty Mentors must be well-versed in the research style and requirements of their discipline. They must be prepared to instruct and guide scholars in the development of the research experience/paper according to the requirements and standards of the discipline.
- 4. Faculty Mentors must be dedicated to assisting first generation, low-income and underrepresented undergraduate students in developing the skills needed to be successful in graduate school.
- 5. Faculty Mentors must be available to mentor the scholar until the completion of his/her research project (approximately one academic year) and to serve as advisors for the scholars until they receive their baccalaureate degree.
- 6. Faculty Mentor payment will be disbursed as a one-time pay on August 31, 2014.

Evaluations & Documentation of Research Participation

- Faculty Mentors must submit the agreement to Faculty Mentoring letter to the McNair Office.
- Scholars must submit bi-weekly progress reports in the Spring semester and weekly progress reports in the summer term that document their research progress.
- Scholars must submit a research proposal on May 1, 2014 that has been signed and approved by their Faculty Mentor.
- Scholars must submit a final research paper at the conclusion of the research activity. Faculty Mentors are required to sign off on the final research paper documenting that the paper is a scholarly work following the style and requirements for research in that particular discipline. By signing off on the final paper, Faculty Mentors are also certifying that scholars have completed a research project that approaches or meets graduate level requirements. Final papers must be submitted in a reasonable amount of time (before the scholar graduates from SHSU).

Research Project

Faculty Mentors will be responsible for the supervision of the Scholar's research project. Research projects should prepare scholars for the type of research work expected of them at the graduate level while taking into consideration the scholar's previous research experience and skills. We tell scholars to think of this as a mini-thesis.

Scholars' research papers may be published in the SHSU McNair Scholars Research Journal and will indicate the faculty mentor (and any other individuals) responsible for the supervision of the project. The research project does not constitute an employee/employer relationship but is a required component for the Scholar to receive the McNair scholarship disbursement. The research is designed to be part of the student's academic and scholarly preparation for the graduate education experience. Scholar must be able to retain partial or full ownership of their research findings.

FACULTY MENTOR RESPONSIBILITIES

- Faculty Mentors must be available to meet with their McNair Scholar. Feel free to use e-mail, phone, and fax in order to communicate with your scholar but this technology can not replace the face-to-face meeting. By agreeing to become a Faculty Mentor, you are agreeing to give your time as well as your knowledge and experience to the mentoring relationship.
- Provide the scholar with a reliable way to contact you: home phone, office phone, office hours, e-mail, etc.
- Provide the scholar with critique, instruction, guidance, and advice until the proposal and final research paper meet your final approval. Sign off on both items upon approval.
- Coordinate with the McNair Office as needed.

Research

- Assist scholar in preparing a literature review of their topic (by April 3, 2014).
- Assist scholar in formulating and developing a proposal of research due prior to the start of summer semester (by May 1, 2014).
- Supervise research activities and assign tasks to scholar.
- Work closely with and assist scholar while writing the research paper and preparing the final manuscript.
- Assist scholar in preparation of research presentations to be delivered at school forums and regional and/or national conferences.

Graduate School Placement

- Assist scholar in the completion of an educational plan.
- Provide direction and motivation to scholar throughout the academic year.
- Encourage scholar to maintain a GPA of 3.0 or better.
- Encourage scholar to take the appropriate entrance exam (e.g., GRE, GMAT, LSAT, or MCAT).
- Assist scholar in selection of appropriate graduate programs.

- Provide critique of scholar's personal statement for graduate school applications.
- Provide scholar with letters of recommendation.

MENTORING HINTS

- 1. Create opportunities and a relationship in which the McNair scholar feels free to discuss career goals, desires, research projects, etc.
- 2. Provide guidance, support, and nurturing to your mentee.
- 3. Remain realistic about what you and your mentee can achieve.
- 4. Assist students in developing professional networks.
- 5. Think of your mentee when asked to make recommendations for committees.
- 6. Be willing to make things happen for your mentee.
- 7. Remember that you are not molding the mentee, just taking an interest in her/his development.
- 8. Teach mentee to think about the joy of teaching and research.
- 9. Strengthen and improve writing skills, research methodology, and critical thinking. Provide opportunities for the mentee to critique research papers, term papers, and proposals.
- 10. Focus on mentee's strengths and potential.

THE FIRST MEETING

The first meeting is the foundation on which you will build your future interactions with your McNair scholar. The following are some <u>suggestions</u> to make your first meeting a success.

- Many mentors prefer to keep their first meeting light and informal. Take some time to get to know each other and discuss significant events, likes, dislikes, and interests. Take this opportunity to informally explore your scholar's academic experience, history, individual circumstances, and outside influences.
- Talk about the mentoring experience. Has the scholar ever participated in a mentoring relationship in the past? What was that like? What would they do differently/the same? Ask the scholar what they anticipate from the Faculty Mentor experience. How do they see this working? What are your ideas concerning this experience as a Faculty Mentor?
- Share with the scholar what you feel you can contribute to this relationship and what your expectations are.
- Talk to the scholar about what you need to be successful as a Faculty Mentor. Candidly discuss your limitations and how that might impact the Faculty Mentor experience (limited time, limited experience, multiple responsibilities, etc.).
- Ask the scholar the following questions:
 - 1) What they feel they can contribute.
 - 2) What are their expectations?
 - 3) What they need to be successful.
 - 4) What are their limitations?
 - 5) How this will affect the Faculty Mentor experience.

IF TIME PERMITS YOU MAY WANT TO CONTINUE WITH THE FOLLOWING ITEMS DURING THE FIRST MEETING. HOWEVER, THIS CAN BE COVERED IN THE 2^{ND} MEETING, AS WELL.

• Lay out some basic ground rules – you may want to provide the scholar with a handout that provides them with some basic rules. For example:

WE WILL:

- Begin and end on time
- Both actively participate in the relationship
- Respect individual differences and learn from them
- Honor each other's expertise and experience
- Safeguard confidentiality
- Put interruptions aside during our meeting time

- Designate boundaries regarding access
 - What access will the scholar have to you? Are you going to provide them with:
 office phone, home phone, email address, office location, and/or home location?
 When can they utilize this access? (i.e. home phone number only provided for emergency situations)
 - Does the scholar need to set an appointment to meet with you at all times?
 - What limits will be placed on the amount of time you have available for mentoring?

AS YOU END YOUR FIRST MEETING:

- Recap what was discussed main points of your meeting
- Reflection time:
 - Ask the scholar if they have any questions
 - Ask the scholar if they have anything they would like to add or discuss further
 - Reflect on your feelings about the meeting, what you accomplished today, what you learned, did you get to everything you wanted to?
- Set a time for your next meeting. We highly recommend that you schedule a set meeting time for future meetings if possible.
- Mention what you propose for the next meeting's activities (outline of things you want to cover goal setting). Get your scholar's opinion and feedback on this plan. NOTE:
 You will want to make sure that the scholar progressively takes an active role in deciding the plan of action for future mentoring activities.
- Assign HOMEWORK! Reading or activities for the scholar to complete by the next meeting are highly recommended.

SPECIAL NOTES AND CONSIDERATIONS:

- The first meeting will probably be more "mentor-driven" than "scholar-driven." Keep in mind that we want scholars to be active participants in developing their learning goals and action plans to achieve those goals. In future meetings try to provide guidance and encourage the student to become an active participant in the development of future meetings.
- Reflection time you can schedule time in your meetings for reflection. This could be done at the end of every meeting or after a set number of meetings (every 2nd or 3rd meeting). Reflection time should allow the mentor and scholar to: review progress to date, review satisfaction with the relationship, renegotiate boundaries, access, or responsibilities, and celebrate achievements.

MCNAIR SCHOLARS PROGRAM REQUIREMENTS

The goal of the McNair Postbaccalaureate Achievement Program is to provide its scholars with effective preparation for doctoral study. This includes extensive training in conducting research and assistance with the graduate school application process. To ensure the goals of the program are met, McNair scholars will be required to fulfill specific responsibilities each semester.

Year 1: Fall Semester Requirements* (Stipend Amount: \$600)

- Attend ALL mandatory workshops and make-up any missed workshops.
- Meet with Graduate Mentor once a month.
- Attend McNair induction ceremony and other group functions.
- Choose a faculty mentor by December 1, 2013.
- Maintain a 3.0 overall GPA.

Year 1: Spring Semester Requirements* (Stipend Amount: \$600)

- Satisfactorily complete three-credit hour research course.
- Submit a research action plan (RAP) by January 31, 2014.
- Meet with Graduate Mentor once a month.
- Meet with faculty mentor twice a month and submit bi-weekly progress reports.
- Attend McNair group functions.
- Maintain a 3.0 overall GPA.

Year 1: Summer Semester Requirements* (Stipend Amount: \$400)

- Collaborate with faculty mentor on research and meet weekly with faculty mentor.
- Submit weekly progress reports.
- Attend mandatory weekly research meetings and complete ALL requirements for summer research program.
- Attend and present research project at annual SHSU McNair Research Conference.
- Complete GRE/GMAT prep course by the end of the summer.
- Maintain a 3.0 overall GPA.

Year 2: Fall Semester Requirements* (Stipend Amount: \$800)

- Submit completed McNair research project in manuscript form by December 1, 2014 or before graduation.
- Meet with faculty mentor every two weeks and submit bi-weekly progress reports.
- Turn in applications to at least five graduate programs.
- Meet with Graduate Mentor once a month.

Year 2: Spring Semester Requirements* (Stipend Amount: \$800)

- Present research project at a McNair conference or a regional/national conference in your discipline.
- Meet with Graduate Mentor once a month.
- Complete exit interview with Director.

Future Semesters*

 Maintain contact with and report any educational changes to McNair Office (required for tracking purposes).

*If semester requirements are not successfully completed, research stipends will not be disbursed or will be collected (if already disbursed).

McNair 4301 **Class Schedule**

Week One

Introduction to Course

1/16/14

Week Two

GRE Pre-test (1/21); GRE Prep (Reade)

1/21/14; 1/23/14

Week Three GRE Prep (Reade)

1/28/14; 1/30/14 **Research Action Plan Due—In class (1/30) or McNair Office (1/31)**

Week Four

GRE Prep (Reade)

2/4/14: 2/6/14

Week Five Graduate School Politics; Applying to Graduate School Filling out 2/11/14; 2/13/14

Graduate School Applications; Selecting a Faculty Mentor (Dr. Fox)

Graduate School Paperwork Due (2/13)

Week Six

GRE Prep (Reade)

2/18/14; 2/20/14

Week Seven GRE Practice tests (McNair Office); each student will take two practice

2/25/14; 2/27/14 Tests

Quantitative/Qualitative Research; Ethics; Hypothesis & Research

Questions; Reading Scholarly Articles 3/4/14; 3/6/14

Week Nine

Week Eight

3/11/14; 3/13/14

Spring Break

Week Ten Reliability and Validity; Measurement Modalities

3/18/14; 3/20/14 Writing a Proposal; Literature Reviews

** Hypothesis/Research Questions Due (3/20)**

Week Eleven

3/25/14; 3/27/14

SPSS (3/25)—Reade; Library Work (3/27)

Week Twelve Library Work (4/1); Data Analysis; Writing Abstracts; Presentation

4/1/14; 4/3/14 Skills

Literature Review Due (4/3)

Week Thirteen Library Work (4/10); Posterboard, Oral and PowerPoint Presentations

4/8/14; 4/10/14 **Abstract Due (4/10)**

Week Fourteen GRE Post-test (4/15); Library Work (4/17)

4/15/14; 4/17/14

Week Fifteen Proposal Presentations

4/22/14; 4/24/14

Week Sixteen Proposal Presentations

4/29/14; 5/1/14 **Research Proposal Due (5/1)**