



MCNAIR
S C H O L A R S
PROGRAM
University of Northern Iowa

2014 Summer Research Internship

Faculty Mentor Handbook



Faculty-Guided

Research offers the pleasure of solving a puzzle and the satisfaction of discovering something new, ultimately contributing to the wealth of human knowledge. For the beginning researcher, there are more immediate practical benefits. Conducting research helps students understand materials they are studying in a way that no other kind of work can match.

Research projects often distinguish applicants for graduate programs. Through faculty-guided research, students learn research methodology and protocol in their discipline and come to understand expectations common to graduate study and in the profession.

Research experiences increase the student's competitiveness for graduate study, and through close contact with the faculty mentor, the student should be able to receive a more detailed letter of recommendation for their graduate school applications. Oftentimes, a lasting relationship is formed between the faculty mentor and the student researcher that expands beyond the semester.

Student researchers and their faculty mentors who participate in summer research through the McNair Scholars Program work on various projects. While outcomes greatly differ, the steps are generally the same and students should participate in most, if not all, of them. These steps include:

- Turning an interest into a topic, that topic into a few good questions, and finding answers to the questions that will result in a solution to a problem;
- Constructing an argument or hypothesis;
- Review of the existing literature;
- Testing the hypothesis;
- Writing and presenting the research conclusions.

Research is hard work, but like any challenging experience, both the process and the results bring immense personal satisfaction. Reporting research findings requires the researcher to think steadily about how the work relates to the subject and the existing body of knowledge, especially when the researcher believes that they have something to say that is important enough to cause readers to change what and how they think.



Developing the Research Plan

Each McNair Scholar conducting research during the 2014 summer will prepare a research plan and submit it to the McNair Scholars Program Office by Friday, May 2, 2014. The faculty mentor must sign the research plan, acknowledging that they have read and approved the plan.

Research may not be started (i.e., no money will be disbursed) until the research plan has been approved, signed by the faculty research mentor, and submitted to the McNair Scholars Program Office. If appropriate, the UNI Institutional Review Board (IRB) must also approve the research before the scholar begins any data collection.

The mentor and student should talk several times to discuss the developing research plan, beginning with the outline of the research and a statement of the research problem. The objective of the plan is to provide a clear and logical presentation of the 10 week summer research project. Format, sentence structure, and grammar are as important as the subject content. Faculty mentors are encouraged to comment both on content and writing style of the research plan.

Research plan formats may vary slightly, but they should include these major sections:

1. Introduction

- What is the problem? (Review of literature - provides background to show that work needs to be done)
- Why is it significant?
- What is the solution? (Goals and objectives of this research project)

2. Methods (Outline of the Research Plan)

3. Literature Review (If not included fully in the Introduction)

4. Expected Outcomes (Student's predicted results)

5. References (Works Cited)

6. Benchmarks (Timeline of research activities) Four or five are recommended. The final two will be the oral presentation and the submission of the final paper.

7. Budget of Research Supplies (McNair may have funds available to assist with a limited amount of research supplies)

8. Appendices (If necessary/appropriate)



Project Time Commitment

Students are expected to devote a minimum of 35+ hours per week during the ten week of the program. (Monday, June 2 - Friday, August 8, 2014)

Research Logs

You will keep track of your research hours throughout the SRI on weekly log forms which you will submit to program staff.

Research Proposals

In the spring, as part of the SRI application process, you will present your research proposal to staff and other scholars. Your mentor should guide you in preparing the presentation. The Program Director may use the written proposal and the oral presentation of the proposal in making a final determination of whether your project will receive summer funding.

Research Papers

Final Research Paper – Due Noon, September 30, 2014 **NOTE:** This is an absolute final cutoff date. Grant funds are unavailable as of October 1, 2014.

The final paper should be written in a format that is acceptable for journal submission within the academic discipline. The final research paper should be reviewed and accompanied by a signed acceptance form by the faculty research mentor before it is submitted.

Research Presentation

Each McNair Scholar who conducts research during the 2014 summer will be required to present their research findings at a National McNair Conference or a professional conference. Typically, SRI participants make two presentations following the summer session.

The first is usually made at a regional McNair conference. Such presentations are made orally with visual (Power Point) aids. Most conferences will set their own presentation rules, but normally the presenter will be limited to 12 minutes with 3 minutes for questions and answer. If audio-visual equipment is needed for the research presentation, the student researcher should notify the McNair Scholars Program Office at least three weeks before the conference.

Poster Presentation

After the Summer Research Internship finishes, scholars will prepare a research poster under the guidance of their mentor and program staff. In early November (typically), summer interns will travel to a National McNair Conference to exhibit their research to the McNair community. As an additional benefit, most McNair Conferences have a



Graduate School Fair, where recruiters and other representatives of graduate schools are available to answer whatever questions you may have, and to provide information about their programs and unique opportunities their institutions have to offer.

Publications/Research Paper

All scholars should take their research very seriously and participate in scholarly activities such as paper submissions and conferences outside of the McNair program. The McNair program may provide an opportunity for you to make an oral presentation of your research at either a professional conference, a McNair conference, or a local symposium. You should make plans with your mentor to co-author professional articles. Throughout the research experience, you should keep in mind that you are encouraged to submit at least one publication-quality research paper before you graduate. We strongly recommend that mentors and scholars discuss this at the beginning of their research experience. A published, peer-reviewed article is not required, but should be your goal.

Mentor Evaluations of McNair Student

Faculty mentors who participate in the McNair Scholars Summer Research Institute are asked to submit evaluations of their student's progress on the following dates:

- Midterm Mentor Evaluation of Student: Due Date: Thursday, July 3, 2014
- Final Mentor Evaluation of Student: Due Date: Friday, August 8, 2014

McNair SRI Stipend

A scholar may receive as much as \$2,800 for the research internship. Installment payments will be made as the student fulfills benchmarks in the program. Benchmarks are agreed upon by the Mentor, the Scholar, and the McNair Director and are included as part of SRI Agreement. Stipends will affect any summer financial aid the student receives if a credit class is taken in the summer session.

Research Expenses

SRI Students may need books and/or supplies to conduct their individual project. The purpose of this financial assistance is to defray a portion of the expenses that are directly related to the student's research project. A tentative budget of research expenditures should be submitted with the Research Project Plan. Limited funds are available for supplies and the Director must approve any such funding. Approved expenditures may include such items as research books, computer supplies, audio or videotape, still film, markers, pens, and expendable supplies. **Approval for expenditures not included in the research plan must be requested, in writing, from the McNair Scholars Program Office.**



Student researchers should discuss their research supply needs with the faculty mentor before the request is written. The faculty mentor must sign the written request before it is submitted to the McNair Scholars Program Office.

Travel is not a normal research expense for student researchers. A detailed rationale, signed by the faculty research mentor, that describes the relationship of travel to the research goals must be submitted to the McNair Scholars Program Office one month in advance of the travel dates.

Procedures for making purchases will be discussed at the McNair Scholars Program Orientation.

Faculty Mentor Research Role

1. To commit to mentoring the McNair Scholars during the ten weeks of the summer research Internship (Monday, June 2 through Friday, August 8, 2014).
2. To design a research project with the student researcher that will be intellectually stimulating and challenging, as well as one that can be completed within the ten weeks of the summer.
3. To be willing to meet with the student researcher at least once a week during the summer to discuss the progress of the research project. Additional meetings should be anticipated as the student progresses throughout the summer.
4. To complete a midterm and final evaluation of the research project, sharing the information with the student researcher and the McNair Scholars Program Office.
5. To advise the student researcher if and when academic and personal concerns arise and refer them to resources of help on and off campus, and to notify the McNair Scholars Program Office.
6. To foster a sense of self-worth, self-confidence, and academic achievement in the student researcher.
7. To advise the student researcher about graduate school opportunities and to provide information that will increase their competitiveness for graduate study.

Should difficulties arise between the mentor and the student researcher at any time during the program, please contact:



Final Mentor Evaluation of Scholar
Due Date: Thursday, August 4, 2011 by 4:00 p.m.

Faculty Mentor: _____

Student Researcher: _____

1. Briefly evaluate your student's performance on his/her research project over the ten weeks of the summer. If more space is needed, please attach a separate sheet.

2. Do you plan to continue working with your student on his/her research project after the summer ends? Yes No

If yes, please describe:

3. Do you have any plans for your student to present the results of his/her research at a professional meeting? Yes No

If yes, please describe:



4. Do you expect your student to be listed as an author on an article or book chapter as a result of his/her research work this semester? Yes No

If yes, please describe:

5. Would you be willing to serve as a faculty research mentor for another McNair Scholar during the 2015 summer or in subsequent years?
 Yes No

If no, please explain:

6. Do you have any other comments about the McNair Scholars Program?
 Yes No

If yes, please describe:

Please grade your student's overall progress to date (used for internal records only):

<input type="checkbox"/> A (4.0)	<input type="checkbox"/> C (2.0)
<input type="checkbox"/> A (3.7)	<input type="checkbox"/> C- (1.7)
<input type="checkbox"/> B+ (3.3)	<input type="checkbox"/> D+ (1.3)
<input type="checkbox"/> B (3.0)	<input type="checkbox"/> D (1.0)
<input type="checkbox"/> B- (2.7)	<input type="checkbox"/> D- (0.7)
<input type="checkbox"/> C+ (2.3)	<input type="checkbox"/> F (0.0)

Faculty Mentor Signature

Date

Please return to the McNair Scholars Program, 007 Innovative Teaching and Technology Center, University of Northern Iowa. The evaluation form may also be sent by e-mail attachment (dennis.irons@uni.edu) or by fax (319) 273-2982.



University of Northern Iowa
007 Innovative Teaching and Technology Center
McNair Scholars Program
Cedar Falls, Iowa 50614-0388
(319) 273-2284
(319) 273-2982 fax
mcnair@uni.edu
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