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Scholars Cap Summer Research Experience with Presentations at California McNair Symposium

McNair Summer Research Experience
During the ten-week 2007 McNair Summer Research Program, scholars conducted research projects under the direction of their mentors. Through their summer research, scholars developed critical research skills, gathered and analyzed data, drew conclusions based on empirical evidence and prepared a scholarly research paper.

In addition, scholars gathered every week for continued research training and preparation for graduate school. A session on the fundamentals of research writing focused on developing an outline, writing an abstract and the importance of readability. Scholars drafted their personal statements and gave constructive feedback to each other on areas for improvement.

After completing a practice GRE exam, scholars assessed their strengths and areas for improvement, then worked in small groups to develop specific strategies for improving their scores. Additional GRE prep exercises involved “a word for the day” and math tutoring sessions.

Advanced doctoral students, Cory Strope (computer science & engineering), Toni Hill-Menson (child, youth and family studies) and Jen Everson (mathematics) shared their tips for success in graduate school, while J.D. Burton (physics), Amy Lehman (mechanical engineering) and Raychelle Burks (chemistry) showed scholars how to construct effective poster presentations.

UNL Summer Research Colloquium
By the end of the Summer Research Experience, scholars were ready to present their research at the UNL McNair Summer Research Colloquium on Aug. 1 in the City Campus Union.

In preparation for this event, Dr. Rick Lombardo conducted a session on effective research presentations. Scholars learned strategies for developing and delivering an effective presentation, including tips on understanding the audience needs and ways to anticipate and effectively field questions about their research. PowerPoint work sessions were held to assist scholars in the development of their posters and PowerPoint presentations.

Each scholar developed a presentation describing his/her research project, wrote a research paper based on his/her research project and constructed a research poster.

Participants presented the results of their summer research to their peers, UNL faculty, graduate mentors and advisers. The colloquium opened with a poster session, which offered the students an opportunity to explain their research to interested individuals. The poster session was followed by oral presentation sessions, which took place in three separate rooms.

Moderators for the oral presentations were Tadiyos Gebre, electrical engineering graduate student and McNair scholar (2004-2006); Azure Wall, women’s and gender studies major and McNair scholar (2005-2007); and Amy Castro, sociology major and McNair scholar (2005-2008).

Annual McNair Scholars Symposium
The ten senior scholars traveled to California to present their research at the McNair “capstone” event, the annual California McNair Scholars Symposium at the University of California, Berkeley, Aug. 8-12.

Names of the scholars (pictured above), their majors, mentors and research topics are listed in a table on the next page.

Abby Visty, mechanical engineering student, highlighted her research during a plenary session in front of approximately 200 students. (See article on page 3.)

Emily Haferbier, sociology major, offers her thoughts about the Berkeley conference on page 3.
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### Eleventh Annual MKN McNair Heartland Research Conference, Kansas City, Missouri

In September 2007, McNair graduate assistant Nathan Palmer accompanied two scholars to the Heartland Research Conference in Kansas City, MO. They also attended the Graduate School Fair that was held in conjunction with the conference. Scholars attending were Sahar Hasim and Abby Visty.

### Twelfth Annual Rocky Mountain McNair Scholars Research Symposium, Colorado State University, Fort Collins, Colorado

Six UNL McNair scholars – Acacia Caraballo, Martin Diaz, Emily Haferbier, Masoud Mahjouri Samani, Corey Minchow and Abby Visty – attended the Rocky Mountain McNair Research Symposium Sept. 27-29. The scholars presented their research in what many said was a very relaxed atmosphere.

Corey Minchow said he felt “more confident and was able to transition from slide to slide with ease.” Martin Diaz felt “better prepared and was able to answer questions appropriately and professionally.”

The students enjoyed the workshop on balancing graduate school and family. Abby Visty said the workshop “helped her identify things I will need to do in graduate school to maintain a good connection with my family.”

A graduate school fair closed out the conference.
When she was first invited to present her research in a plenary session at the California McNair Symposium, Abby Visty says she felt “shocked and honored.” The idea of presenting to such a large group seemed “intimidating,” but Abby was up to the challenge.

Says Visty, “We learned a lot on how to present during the Summer Research Experience, but I’d only practiced in front of small groups.” With the help of her graduate student mentor, Amy Lehman, and Dr. Rick Lombardo, she was able to adapt her presentation for a much larger audience.

As she approached the podium and looked out at 200 conference participants, Abby said she felt confident that she was well-prepared to deliver a successful presentation. “In fact,” she explained, “I was surprised at how calm I felt. I just focused on my material and on communicating, as Dr. Lombardo told us, ‘to inform rather than impress!’”

She also had prepared for audience questions and was able to field them with poise. “A number of people approached me after the session to give me feedback and talk more about the research. It was a very proud moment for me.”

Way to go Abby! We’re proud of you too!

Reflections on the McNair Scholars Symposium

by Emily Haferbier, McNair Scholar, Sociology

In August 2007, after an intensive ten-week summer research experience with the McNair Scholars Program, I attended the annual California McNair Symposium at the University of California, Berkeley. What an incredible experience!

As we approached Dwinelle Hall on the first day, we were greeted with a bright blue banner that read “Through These Doors Pass the Greatest Undergraduate Researchers in the World.” It was very exciting to have this opportunity. The McNair scholars I met at Berkeley were intelligent, hard working and passionate about their research. There were so many different disciplines represented it was impossible to come away from the conference unaffected.

Before attending the McNair Symposium at Berkeley, I was nervous; I wasn’t confident that my research was “good enough.” And I was worried the other researchers attending my presentation wouldn’t take me seriously. To my wonderful surprise, just the opposite occurred. I overcame my nerves and was able to effectively—and passionately—talk about something I had completely dedicated myself to over the summer months.

Audience members asked questions, and we engaged in a truly scholarly discussion. The question that still intrigues me was: “Do you think with the research you are doing, someday you or others could inform all types of high school athletes about what they may experience as a college athlete if they choose to sign and play college sports?” That question suggested an entirely new career path that I hadn’t thought of previously.

Not only did I gain more confidence in my research—and my presentation skills—but I learned about other disciplinary research methodologies as well. Did you know that only 20% of plastic that is put in recycle bins is actually recycled? Something definitely needs to be done to allow all that plastic to be recycled!

What I enjoyed most about attending the conference was the opportunity to meet new people, listen to their research and hear what their plans are for graduate school.

I gained a lot from attending the California McNair Symposium conference. The work I did all summer was definitely worth it!

UNL McNair Program Earns Funding for Another Five Years

The U.S. Department of Education has awarded UNL a five-year, $1.125 million federal renewal grant to continue the successful Ronald E. McNair Postbacca-

laureate Achievement Program that began here in 1995.

This was the most competitive grant cycle in the program’s history. Of the 318 proposals submitted, 189 were funded – and only the top 15 percent of those submitted received five years of funding.

Under the new grant cycle, McNair staff will continue to serve students in the program through 2013, encouraging them to enter graduate programs and tracking their progress to successful completion of advanced degrees.

“We thank the UNL community, our faculty mentors and our scholars for contributing to the McNair Program’s achievements. It is because of their support and commitment that we were able to compete so successfully,” said Dr. Laurie Bellows, UNL McNair Program director.
On Oct. 6, the 2007-2009 McNair scholars gathered at Wilderness Ridge Lodge for the annual New Scholars Retreat. Dr. Laurie Bellows welcomed the new cohort, noting that they were joining a select community of scholars from across the country. She described the retreat as “an initiation into the life of a scholar and an opportunity to learn about the structure of the McNair Program and its traditions.”

Dr. Ellen Weissinger, associate vice chancellor for research and executive associate dean of graduate studies, addressed the scholars, explaining the many reasons to pursue a Ph.D., and the joys and the responsibilities that come with earning the degree. She invited each student to don her doctoral robes and explained the significance of the academic regalia.

Dr. Julie Stone, assistant professor of biochemistry, shared with the scholars her passion for research and teaching. She described the wonders of her path from the baccalaureate to graduate school through post-doc at Massachusetts General Hospital and Harvard Medical School.

McNair scholars were encouraged to “think big” by Dr. Rick Lombardo in an interactive session to help them focus on their professional goals and how they plan to achieve them.

A panel of UNL graduate students who have participated in McNair programs at other universities explained how McNair helped them prepare for graduate school.

Brian Armenta, an advanced doctoral student in psychology from California State Polytechnic University-Pomona, noted that his McNair experience helped him define his research interests and provided him with important research tools – all of which made his transition to graduate school at Nebraska easier. He also said wherever he goes across the country he enjoys support from the McNair community of scholars.

Tony Kelly, second year graduate student in physics from California State University-Bakersfield, said McNair made it possible for him to participate in a summer research experience at UNL, where he was mentored by Dr. Aaron Dominguez. The experience prepared him for graduate-level research and led him to enroll in graduate school at UNL.

Maria Jose Herrera, first year graduate student in psychology from the University of California, Berkeley, said her McNair program helped her articulate goals for graduate education, write a good statement of purpose and complete the graduate application process.

Following lunch, the 2006-2008 senior scholars met with the new scholars to share insights from their experiences with the UNL McNair Program. They provided tips on getting through the McNair Summer Research Experience, working with their research mentors and keeping up with deadlines.

The day wrapped up with presentation of the fall schedule and plans for the scholars’ first fall session. Scholars left feeling welcomed and excited about the many opportunities McNair has in store for them.

McNair scholars continue to shine! Congratulations to these former and current UNL McNair scholars on their recent accomplishments.

Todd Whitehill, a December 2006 graduate, has been invited to present his research paper, “The Effects of Collegiate Entrepreneurship Education,” at the 2008 United States Association for Small Business and Entrepreneurship Conference in San Antonio, Texas, January 10-13.

Maegan Stevens-Liska, senior McNair scholar, was awarded first place for a theoretical paper at the recent Nebraska Undergraduate Sociological Symposium (NUSS) held at Wayne State College in Wayne, NE. Maegan submitted her McNair summer research paper entitled “Threatening Islam’s Critics: Islamic Extremists’ Use of Fatwas as a Defensive Response to Globalization” to NUSS, and was invited to present at the symposium on Oct 26. Congratulations to Maegan!
This past year I worked with Corey Minchow, who did an incredible job on a very difficult project. Corey was responsible for obtaining and cleaning a nationally available data set that is difficult to use. The data set is the National Longitudinal Survey of Youth that began data collection in 1997. We were particularly interested in high risk behaviors and mental health issues as they relate to family functioning.

Corey has been involved in designing the direction of analysis and the identification of key variables. Because of his efforts at understanding the variables and the data set, we were able to identify important indicators for analysis. While I was there to steer Corey in the right direction, his initiative was important to the success of the project. As a mentor I can help point him in the direction of literature or teach him about statistics and analytical approaches, but what I can't teach him is personal investment and initiative.

Our project was successful because Corey was committed to solving the many barriers that present themselves during the process of research. This initiative was invaluable in our research, just as it is for the academic success of any first generation college student.

My work was greatly enhanced through involvement with the McNair program. Corey was able to put the effort into a project I had not had the time to tackle. His work has led to several presentations at local and national levels, a manuscript in process and the groundwork for further grants. Not only has Corey benefited from experience in this program (I hope) but I have as well. His work has furthered my research agenda.

Although it was Corey’s commitment to this project that made this project successful, the mentoring relationship is a collaborative process that is necessary for success. Working together in any field or in any project more than doubles the potential for success. I find that one of the biggest sources of professional frustration for me is the feeling of isolation. By working with the McNair students it gives me not only the opportunity to coach and teach them the process of research but it enhances my research by giving me someone to bounce ideas off and discuss potential directions. From my perspective, the mentoring relationship has bidirectional benefit.

The last thing I want to say about the McNair program is the impact of mentoring on first generation college students. I think mentoring is important for all students but I think it is vital with first generation college students. I was a first generation college student and had it not been for a mentor who helped me understand the university setting I would not have finished my undergraduate degree, let alone an advanced degree. Mentors in the McNair program serve not only as research instructors but more importantly as cultural brokers to help students navigate a very bureaucratic environment of higher education. I cannot stress enough the benefit I see through the McNair Program.

-- Cody Hollist

Degree Watch

Congratulations to UNL McNair scholars who achieved their doctoral degrees during 2006-07:

Michael Garcia earned his Ph.D. in English from Cornell University on August 20, 2007. Dr. Garcia has accepted a one-year lecturer position at Texas Christian University.

Daralyn Plains earned her Ph.D. in school psychology from Texas Woman’s University on May 12, 2007. Dr. Plains completed her master’s degree at Southern Methodist University in clinical/counseling psychology. She is currently working as a school psychologist for the Richardson Independent School District in Richardson, TX.

Cuong Nguyen earned his Ph.D. in immunology from the University of Florida at Gainesville in August 2006.

Rye (Hicks) McIntosh completed dual master’s degrees in public administration and social work, with a concentration in integrated social work practice, in May 2006 from the University of Nebraska-Omaha.
This fall we're initiating a new program component: graduate student mentoring. Modeled after the mentor matches made by Preparing Future Faculty programs, senior McNair scholars are matched with graduate student mentors or postdocs as an additional resource to help them prepare for graduate school. Graduate student mentors are recommended by scholars' faculty mentors.

Scholars will learn first-hand what life in graduate school is like. They can elect to sit in mentors’ graduate-level courses, observe their mentors teaching, or participate in social or service activities. Scholars also can draw on the recent experience of their mentors as they apply to graduate school.

Graduate students and post-docs gain the experience of advising an undergraduate student, an opportunity rarely afforded by graduate programs but often obligatory in academic careers. Mentors will receive a letter of recognition for their academic portfolio and grateful applause at a banquet next spring.

2007-08 graduate mentors are: Leah Skovran, psychology; JoDell Whittington, biophysical chemistry; Chad Kamler, electrical engineering; Devan Crawford, sociology; Maha Lakshminarasimhan, biochemistry; Rosie Masek, architecture; Yunshen Zhou, electrical engineering; Brian Armenta, psychology; Elisabeth Maurer, history; and Amy Lehman, mechanical engineering.

**Scholar Spotlight on Juan Cangas**

Juan Cangas grew up in Grand Island, Nebraska, where he attended Grand Island Senior High. Juan’s uncle gave him a CD from the motivational speaker Anthony Robbins that got him interested in what drives human behavior. He knew then that a career in the social sciences was right for him.

After high school, Juan pursued a college education at the University of Nebraska-Lincoln because he loved the Huskers and wanted to stay close to home. His interest in human behavior lead Juan toward a major in psychology. His stellar academic achievements did not go unnoticed, and Juan was awarded both the Davis and Peter Kiewit Legacy Scholarships.

Under the guidance of Dr. Richard Wiener, throughout the summer Juan conducted research on the effects of gender in predicting levels of fear and anger among jury members. The results of his study contradicted popularly held assumptions about the connections among gender, fear and anger. This experience confirmed for Juan his interest in both law and psychology.

Juan has two younger brothers, Ricky, age 15, and Eric, age 2. He also has a 5 year-old son named Christian. Juan says, “The most influential person in my life had been my mother Sulia.” He says he loves to learn, especially things that can help him grow and expand as a human being.

Juan plans to graduate from the University of Nebraska-Lincoln with a bachelor’s degree in May 2009. After graduation, he plans on pursuing a joint Ph.D./J.D. degree. Juan's love of learning has led him to where he is today and will surely see him through his graduate career.

**McNair Mentoring Program Begins**

This fall we’re initiating a new program component: graduate student mentoring. Modeled after the mentor matches made by Preparing Future Faculty programs, senior McNair scholars are matched with graduate student mentors or postdocs as an additional resource to help them prepare for graduate school. Graduate student mentors are recommended by scholars’ faculty mentors.

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**Armenta awarded Fling Fellowship.**

Brian Armenta (left), a doctoral student in psychology, was awarded a 2007-08 Maud Hammond Fling Fellowship by the Office of Graduate Studies. The Fling Fellowship — one of UNL’s two major competitive fellowships — provides full support for students to work on their own research for one year without the burden of outside employment, so they can complete the degree in a timely manner. Mr. Armenta was a McNair Scholar at California State Polytechnic University-Pomona and currently serves as a McNair graduate student mentor. He is pictured with Dr. Gustavo Carlo (right), Professor of Psychology and chair of Brian’s doctoral supervisory committee.

**Note to McNair Alumni:**

Please keep us informed about your progress in graduate school. If you haven’t sent us a recent update, please go to http://www.unl.edu/mcnair/scholarupdate.shtml and tell us about yourself.
How Graduate Committees Make Admissions Decisions

When selecting new graduate students for their programs, graduate admissions committees look for a good fit among the knowledge, interests and skills of applicants, the characteristics of their programs and the research and training interests of their faculty. They also consider the available number of slots, amount of funding and faculty who can take on new students.

Reviewing and evaluating graduate applicant portfolios is often subjective, influenced by admission committees’ opinions and biases, and it varies greatly from department to department. Graduate chairs Helen Moore, Sociology; Marjorie Langell, Chemistry; and Lance Perez, College of Engineering explained the process to the senior McNair scholars on Sept. 24.

Many graduate programs require a standardized test, such as the GRE or the GMAT, while others require an additional GRE subject test. However, test scores are never the sole criterion used to select and admit graduate students. In fact, most graduate programs also weigh students’ understandings of the field and or subject matter and their undergraduate experiences as communicated through an admissions essay, curriculum vitae and letters of recommendation.

Enright & Gitomer (1989) identified six general competencies graduate faculty would like to see in their students:

1. **Explanation:** ability to develop an argument, produce hypotheses, defend ideas
2. **Synthesis:** mastery of content, ability to work independently, synthesize information
3. **Creativity:** intellectual playfulness, the ability to generate new ideas
4. **Communication skills:** ability to write reports, give presentations, discuss ideas
5. **Planning skills:** ability to design an experiment, organize a paper, develop a goal
6. **Professionalism:** participation in professional organizations, collaborative work, informal engagement with peers and faculty.

The first four are cognitive variables, measured by GRE in the verbal, quantitative and analytical writing sections. The last two are noncognitive variables; students’ best opportunity to showcase these skills in their graduate application is through the personal statement and the curriculum vitae.

**Question:** If this is what graduate admissions committees are looking for when they make decisions, how can YOU demonstrate evidence of these skills and abilities?

Source:
HUNG NGUYEN is enrolled in the mechanical engineering doctoral program at the University of Texas-Austin. His research focus is human rehabilitation robotics.

SANDRA POTTER is enrolled in the educational psychology master’s program at the University of Nebraska-Lincoln. Her research focus is on Latinos and education.

DARRELL (DJ) TODD, Jr. is enrolled at the University of Nevada-Las Vegas in a higher education leadership doctoral program. His research centers around student affairs issues in higher education such as Greek life, student of color leadership and black male retention.

2003 Cohort:

TIA COLE is enrolled in a master’s program in English at Oklahoma State University. Her research focus is African American women in literature.

NATALIA LUKEE is currently enrolled in a master’s program at Oregon State University in the Department of English, with specialization in literature and culture. She will earn her degree in June 2008.

ARLO MCKEE is pursuing his master’s degree in anthropology at the University of Kansas-Lawrence. His research focus is on geochronology and he expects to graduate in May 2009.

CAMILO RAMIREZ is enrolled in the Trans-Atlantic Master’s Program in political science at the University of North Carolina-Chapel Hill. He is currently studying and completing his thesis in Madrid, Spain, and expects to graduate in December 2007.

KACEY (REIDER) SCHRAEDER is currently enrolled at the University of Phoenix in the marriage, family & child therapy master’s program. Her research focus is adolescent depression.

MELISSA TEHEE earned her master’s degree from Western Washington University in June 2007. She currently is attending the University of Arizona in a joint J.D. (American Indian law) and Ph.D. (psychology, policy and law) program with a research focus on domestic violence policy and family law in Indian Country.

2004 Cohort:

DANIELLE DESCHENE-LEEPER is enrolled in a master’s program in speech-language pathology & audiology at the University of Nebraska-Lincoln. She expects to graduate in August 2008.

TADYOS GEBRE is enrolled in a master’s program in electrical engineering at the University of Nebraska-Lincoln. His current research focus is the optical emission spectroscopy (OES) study of excited species during multi-energy processing of materials for diamond deposition. His expected graduation date is December 2008.

ERICA (GINN) HOLLEY is in her second year of a Ph.D. program in management at the University of Washington. Her research focus is organizational justice, emotional regulation and relational demography.

DANIELLE (LUTHER) LUEBBE is enrolled in the master’s program in English at the University of Nebraska-Lincoln. Her research focus is fiction writing.

ANITA MALLORY is in her second year of a counseling psychology doctoral program at the University of Nebraska-Lincoln. Her research focus is depression in American Indians.

NATHAN PALMER is enrolled in the sociology master’s program at the University of Nebraska-Lincoln. The focus of his research is technology and the consumer. Nathan is a graduate assistant for the UNL McNair Scholars Program and a research and teaching assistant in the sociology department.

ERICA ROGERS is in her second year of an English doctoral program at the University of Nebraska-Lincoln. She just finished her work with Dr. Chris Gallagher on the “Writing at the Transition” project, and she is working on a poetry collection.

HOPE VAN HOUTEN is a second year master’s student in school counseling at the University of Northern Iowa. She expects to earn her degree in May 2008.

JESSICA WALL is in her second year of a joint history and gender studies doctoral program at Indiana University-Bloomington. Her research focus is gender and sexuality in the U.S.

2005 Cohort:

JENNA VALADEZ is enrolled in a history doctoral program at Southern Methodist University. Her research focus is American interethnic relations and borderlands history.