

McNair News



Newsletter of the McNair Scholars Program at the University of Nebraska–Lincoln
published by the Office of Research and Graduate Studies

Volume 1, Number 2, Spring 2007

Scholars Gearing Up for Summer Research Experience

While most undergraduates are looking forward to chilling out next summer and enjoying a break from school, junior McNair scholar Juan Cangas is ready to step even further into the role of student-researcher. The psychology major from Grand Island is anticipating a summer of data-gathering, analysis and interpretation as he – and nine other McNair scholars – prepare to immerse themselves in the McNair Summer Research Experience (MSRE). Juan looks forward to working with Dr. Richard Wiener, learning firsthand what research is all about and eventually conducting a successful research project on affective forecasting that will contribute to greater knowledge in his field.

Research is a crucial component of the McNair Scholars Program at UNL. The intensive ten-week summer research experience provides junior McNair scholars with the opportunity to explore and develop knowledge and critical thinking skills they will need to perform independent research at the graduate level. Research topics vary widely in both discipline and focus, but all scholars get a real-world taste of the life of a researcher as they work with faculty mentors on projects they helped design. For example, Abby Visty, a mechanical engineering major from Papillion, will be working alongside Dr. Shane Farritor developing a miniature in vivo robot for laparoscopic surgery. Psychology student Corey Minchow plans to work with Dr. Cody Hollist to focus on the role of the family in Latino mental health.

Students have the unique opportunity to receive hands-on training and consultation not only in the techniques of academic research but also in scholarly writing. Yaravi Lopez-Wilson will be working with College of Architecture professors Nate Krug and William Borner to evaluate the existing curriculum with an eye to developing new teaching models that will incorporate sustainable “green” design principles into the core and adjunct architecture courses. At the end of the summer research experience, Yaravi and the other scholars will each have developed a research paper and poster that they will present at a national McNair Research Symposium.



2007-2008 UNL McNair Junior Scholars

Scholars participating in the summer research experience are required to spend 30 hours a week working on their research. In addition they attend weekly seminars to enhance other skills needed for graduate study.

Students new to the world of research can take advantage of lessons learned by their senior colleagues. For example, family and consumer science student Justine Buffalo Calf, who completed the MSRE in 2006, advises junior scholars to develop strong working relationships with mentors who are there to answer questions and provide direction through the research experience. In addition, Justine believes part of her success last summer was due to getting to know her fellow scholars who provided support, feedback and encouragement. Finally, Justine emphasizes the importance of keeping up with assignments and expectations, while also trying to find time away from research in order to unwind, refocus and rejuvenate.

The McNair Program provides financial support to scholars participating in the research experience in the form of a stipend for the hours they spend working on research; accommodations for housing; meal passes to campus dining halls; and other campus amenities during the ten-week program.

McNair by the Numbers: as of March 2007

Funded by the Department of Education and housed in UNL's Office of Research and Graduate Studies, the McNair Program prepares undergraduate students for doctoral studies through involvement in research and other scholarly activities. Participants are first-generation college students who demonstrate strong academic potential and who meet maximum financial guidelines or are members of groups underrepresented in graduate education.

Since the McNair Scholars Program began at UNL in 1995, it has served **176** students. Of those, **143** – or 81 percent – have earned bachelor's degrees. **Fifty-six** of those have gone on to earn master's degrees; **eight** have already achieved doctoral degrees and an additional **five** have earned professional and other degrees. Currently **21** McNair Scholars are actively pursuing master's degrees and **19** are enrolled in Ph.D. programs.

Meet the 2006-2007 McNair Junior Scholars

We are pleased to introduce our newest class of McNair scholars who were welcomed to the program in Fall 2006. Each is identified here by name, major, mentor, and research interest.

Juan Cangas, Psychology (Grand Island, NE)
Mentor: Dr. Richard Wiener
Research interest: Affective forecasting: The effects on decisions when overestimating negative emotions

Acacia Caraballo, Chemical Engineering (Salem, OR)
Mentor: Dr. James Hendrix
Research interest: Sulfur and cyanide interactions in processing complex gold ores

Martin Diaz, Electrical Engineering (Midland, TX)
Mentor: Dr. Rodney Soukup
Research interest: A new wide bandgap semiconductor material for high efficiency solar cells

Emily Haferbier, Sociology (Treyner, IA)
Mentor: Dr. Kellie Hagewen
Research interest: Role strain among college athletes

Sahar Hasim, Biological Sciences (Tehran, Iran)
Mentor: Dr. Mark Wilson
Research interest: Structural analysis of the human mitochondrial protein ES1

Yaravi Lopez-Wilson, Architecture (San Francisco)
Mentors: Nate Krug, AIA; William Borner, IFMA
Research interest: Greening the Curriculum: Research of sustainable design in existing studio/adjunct curriculum for possible development of future courses

Masoud Mahjouri-Samani, Electrical Engineering (Chaharmahale Bakhtiari, Iran)
Mentor: Dr. Yongfeng Lu
Research interest: Laser-assisted CVD for self-aligned carbon nanotube field-effect transistor array fabrication

Corey Minchow, Psychology (Lincoln, NE)
Mentor: Dr. Cody Hollist
Research interest: The role of the family in Latino mental health

Maegan Stevens-Liska, Sociology (Syracuse, NE)
Mentor: Dr. James Le Sueur
Research interest: The sociology and history of resistance to radical Islam in Algeria and diasporic communities in exile

Abby Visty, Mechanical Engineering (Papillion, NE)
Mentor: Dr. Shane Farritor
Research interest: Mechanical design of a surgical robot

Senior Scholars Scene

Last fall, members of the McNair staff and 11 senior scholars participated in a two-day cultural excursion to Washington D.C., during which they had the opportunity to experience the dynamic energy of the city as they visited several historical sites and museums.

Scholars were moved and inspired by exhibits at the American Indian Museum, the Holocaust Museum, and the National Museum of Natural History. In addition, they visited Capital Hill where they had their picture taken with Senator Chuck Hagel and met with Senator Ben Nelson's staff to talk about how the McNair Scholars Program helps first-generation, low-income and underrepresented students achieve their academic goals and prepare for graduate school. Orlando Cariaga commented that it was an honor to visit the capital and meet with Senator Hagel and Senator Nelson's staff.



The trip concluded with a tour of Howard University and a visit with UNL alumnus Dr. Barron Harvey, Dean of the School of Business. After that, the scholars sat down with Dr. Orlando Taylor, Dean of Graduate Studies and Director of Howard's McNair Scholars Program, who greeted the group with an enthusiastic "Nebraska is in the House" welcome. Dr. Taylor spent over an hour talking about the graduate school application process and encouraging the scholars to continue their education. Scholar Andrea Lowe found the university environment to be refreshing and said it was inspirational to witness such a diverse campus.

Almost all senior scholars are continuing their research endeavors by participating in UNL's Undergraduate Creative Activities and Research Experience (UCARE). As part of UNL's annual Research Fair on April 12, UCARE researchers will feature their work in a poster presentation session in the City Union from 3:15 to 5 p.m. All senior UCARE scholars are encouraged to participate and all others are welcome to browse posters to see the results of McNair scholars' research efforts.

McNair Scholars Program Staff

| | |
|--|--|
| Dr. Laurie Bellows Director lbellows1@unl.edu | Carol Boehler Program Assistant cboehler2@unlnotes.unl.edu |
| Nathan Palmer Graduate Assistant nathanpalmer1@gmail.com | Rachael Kluck Graduate Assistant rkluck2@unlnotes.unl.edu |

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.

McNair Faculty Mentor Profile: Dr. Mark Wilson

Among the many valued faculty mentors who work closely with the McNair Program, Dr. Mark Wilson is one of the finest. An assistant professor in the Biochemistry Department, Dr. Wilson is currently mentoring two McNair scholars.

Effective mentors support undergraduate McNair scholars in several different ways. They offer encouragement and assistance and reinforce the importance of learning, self-discipline and self-confidence. In addition, mentors serve as role models, offer advice, and open opportunities to future educational programs, research experiences and employment prospects.

Dr. Wilson puts his own spin on the definition of a good faculty mentor – in his view, it's his responsibility to treat students with respect and dignity, to gain a sense of individual student needs, and take a flexible approach in order to meet students wherever they are along the path. "I see my role predominately as a teacher who provides nurturing guidance and

encouragement along the way."

His primary goal, says Dr. Wilson, is to "guide students through the process of becoming independent scientists." He has high expectations of his protégés, too, assuming they will be "invested in their work, prepared to ask questions and [ready] to challenge themselves every day."



While mentoring, like all good teaching, takes time, Dr. Wilson finds the investment worthwhile, especially as he sees students grow as researchers, gain academic confidence and take control over their own education.

Faculty interested in becoming McNair mentors may contact Dr. Laurie Bellows, 402/472-9764, or lbellows1@unl.edu.

McNair Spring Event Calendar

| Month | Junior Scholars | Senior Scholars |
|-------|--|---|
| March | March 23, 4:30-6 p.m., Seaton 12 Scholar Meeting: Graduate Application Process (Jan Hostetler, director, UNL graduate admissions) Funding Your Graduate Education (Jane Schneider, UNL graduate fellowship specialist) | March 2, 3:30-5 p.m., Seaton 12 Scholar Meeting: Graduate Assistantships –TA & RA (Graduate students: Tanya Gladney, sociology; Toni Hill-Menson, family & consumer sciences; Cory Strobe, computer science; Jen Everson, mathematics) |
| April | April 11, 5-7 p.m., Regency B, City Union Thinking Ahead: The Nuts and Bolts of the Application Process (Dr. Rick Lombardo) | April 11, 5-7 p.m., Regency B, City Union Thinking Ahead: The Nuts and Bolts of the Application Process (Dr. Rick Lombardo) |
| | April 12, 3:15-5 p.m., City Union UNL Research Fair & UCARE Poster Session | April 12, 3:15-5 p.m., City Union UNL Research Fair & UCARE Poster Session |
| | April 13, 4:30-6 p.m., Seaton 12 Scholar Meeting: Getting Ready for the GRE (Nathan Palmer, McNair graduate assistant) | April 17, 5:30 p.m., The Oven Senior Scholar Dinner |
| | Sat, April 14, 9 a.m.-12:30 p.m., Seaton 12 GRE Pre-Assessment, followed by lunch | April 27, 5:30-7 p.m., Lied Center (Steinhart Room) Recognition Reception |
| | April 27, 5:30-7 p.m., Lied Center (Steinhart Room) Recognition Reception | |
| May | May 30, 5-7 p.m., Seaton 12 Scholar Meeting: Summer Research Review | May 4, 3:30 p.m., Kimball Hall Doctoral Hooding Ceremony |

Kudos to McNair Scholars

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

Todd Whitehill graduated in December 2006 with a degree in management from UNL's College of Business.

Danielle Luther graduated in December 2006 from the University Honors Program with a degree in English.

Tadiyos Gebre, a December 2006 graduate, has been accepted to UNL's master's program in electrical engineering.

Arlo McKee, a May 2006 graduate, has been accepted to the graduate program in anthropology at the University of Kansas.

Kacie Moore Blalock (McNair summer research scholar) received her Ph.D. in August 2005 from the University of Wisconsin-Madison. That same month, she started her career as an assistant professor in the rehabilitation counseling program in the Department of Human Development and Services at North Carolina A&T State University in Greensboro, NC.

Jenna Valadez and **Phuoc Nguyen** will graduate from UNL in May 2007.

Scholar Spotlight on Melissa Tehee



Melissa Tehee, a UNL McNair graduate in 2005, is currently completing a master of science degree in experimental psychology at Western Washington University, where she is working with Dr. Joseph Trimble. Her thesis work involves assessing both implicit and explicit attitudes and biases toward

American Indians.

She will graduate at the end of this academic year and is awaiting replies from several Ph.D. programs for next year. According to Melissa, “these are VERY different programs, so it will be good to go and meet everyone and get a feel for [each] program.”

Melissa says that “moving away for grad school has really allowed me to focus on learning,” but her biggest challenge has been figuring out how to be there for her family without actually being there.

She attended the Society of Indian Psychologists Conference last summer, on the recommendation of her adviser, who also attended. She was elected student representative for the society and found this meeting to be “really a nice break from the routines of graduate school.”

Melissa was one of seven recipients recently honored with outstanding student paper awards at the 76th annual

convention of the Rocky Mountain Psychological Association, held last April at Park City, Utah.

Melissa’s graduate experience includes a teaching assistantship that provides important financial support as she works toward her degree. Her duties range from teaching labs, supervising experiments, to grading assignments, papers and exams. Through her teaching, she has gotten to know a majority of the undergraduate students in the department and has been able to work closely with many professors, which really gives her a sense of belonging.

Melissa offers the benefit of her experience in advice to current McNair participants. She says, “McNair offers a lot of opportunities for scholars – take them and take them seriously. The summer program, GRE courses, mini seminars, travel funding, application fee waivers, and access to advisers are all opportunities I utilized and you should, too.”

She suggests taking a lighter course load the fall semester you will be applying to graduate programs. In addition, she recommends gathering materials early, like GRE reports, transcripts and letters of recommendation.

“Make sure these are sent out before the deadline . . . Also make sure and give letter writers enough notice that they can write a quality letter, and offer to let them read your personal statement so that they have a better understanding of your goals, both in school and career. Research and conference presentations will give you an advantage, so be sure to get involved as early as possible.”

McNair Tip: Test-Taking Strategies for the GRE

•Be familiar with the types of questions and directions for each

Advance preparation for the GRE will familiarize you with the types of questions that will appear in the test, the length of each section and the time limits. If you know how to approach the questions, you will save valuable time in the actual test situation.

•Don’t get “stuck” on one question for too long

Don’t spend too much time on any one question. You should spend only seconds on the easiest questions, no more than 1-2 minutes on even the hardest ones.

•Don’t rush, either

Try to devote the right amount of time to each question to maximize the possibility you won’t make careless mistakes. If a problem seems too easy, pay close attention to your response.

•The questions at the beginning of each section are the most important

The questions at the beginning of the GRE affect your score more than those toward the end. Correct answers to the initial questions will increase your score.

•Select responses by the process of elimination

If you immediately recognize that one option is clearly not the answer, you may eliminate it, to reduce the risk of guessing and increase the odds of choosing the correct answer.

•Don’t leave any question unmarked

Double check both your work and your answer before you click on the screen bubble. You cannot skip any question and you cannot go back after you’ve answered a question.

•Use the scratch paper provided by the test center

Make quick notes for yourself or use the paper to solve math problems (you don’t get extra credit for doing the math in your head).

•Get some R & R

RELAX and get a good night’s sleep before the big day.

•Wear comfortable clothes

Also bring along an extra sweater or jacket just in case you feel cold.

•Finally, don’t panic!

Keep your cool, no matter what happens. If you begin to panic, you may answer even the easiest of questions incorrectly. If you start to feel anxious or tense, take a quick break, ask for a glass of water, take some deep breaths, and calm yourself down.

Source: <http://www.svum.com/gre/>

McNair Alumnus Nathan Palmer Wins TRIO Award

Nathan Palmer, a UNL McNair scholar from 2004 to 2006, was honored as a TRIO Alumni Achiever at the Nebraska TRIO Day Conference on Feb. 24 in Hastings, Nebraska.

Nathan graduated with distinction in May 2006 with a B.A. in sociology and is currently pursuing a master's in sociology at UNL. Nathan served as President of the Undergraduate Sociology Association from August 2002 to May 2006, and received both an Undergraduate Creative and Research Experience Award (2005-2006) and the Allan P. Bates Award for outstanding undergraduate achievement.

Nathan credits the McNair Scholars Program with providing opportunities to build his skills and develop confidence, enabling him to set high expectations and accomplish his goals.

As a McNair Scholar, Nathan conducted research on the portrayal of the environment in children's books under the guidance of Dr. Al Williams from the Sociology Department.

As a graduate teaching assistant in the Sociology Department, Nathan teaches four recitation sections of an introductory sociology course involving a total of 160 undergraduates per week, and continues his service to the McNair Scholars Program.

Last summer, he provided critical support helping first-year scholars prepare oral presentations to deliver at the

annual California McNair Conference.

He also helps scholars prepare for the Graduate Record Exam and provides insight into the graduate application process.

Currently, he is leading our efforts to recruit the next round of scholars.

Nathan has affirmed on numerous occasions that, "TRIO has given me ten times what I have given back." Nathan is a strong advocate of TRIO programs, both campus-wide and community-wide. He tells everyone who will listen about how McNair and TRIO have helped him reach goals beyond his imagination.

The Nebraska TRIO Achiever Award recognizes and honors former Nebraska TRIO participants who have demonstrated exemplary accomplishments in their professional pursuits and for whom TRIO played a fundamental role in their educational achievements.

A former Nebraska TRIO participant is selected each year as the TRIO Achiever who embodies the TRIO spirit of excellence and achievement.



Senior Scholar Amy Castro Heads to Arizona for the Summer



Congratulations to Amy Castro, second-year McNair scholar, who has been accepted into the Summer Research Institute in the Graduate College at the University of Arizona.

Amy will work with a University of Arizona faculty member on a research project for 10 weeks, and receive a stipend and course credit for a research course and a research-writing course. In addition, she'll interact with approximately 75 other underrepresented students from the University of Arizona, as well as the U.S. and Puerto Rico, in workshops on research ethics, crafting a successful graduate application, creating an outstanding research poster, and other topics.

The program concludes with a Final Colloquium during which she'll present her research findings before her Summer Research Institute peers, faculty mentors and the UA campus community.

Words from the Wise: Natasha Luepke



As I write this, I can hear the winter rain outside my window. When it stops, I am going to walk to the store – I'd use the bike lane if only I had a bike! – I can picture the mountains, trees and flowers I will see along the way – in February. But then, life in Oregon is far different than my life in Nebraska, and in Georgia before that. It's gorgeous, and far surpasses anything I ever imagined. And it is thanks to the McNair program that I am sitting here now, experiencing this new life.

Before McNair, I'd never really considered the possibility of a Master's degree. Now, I am nearly through the first year of a two year program in Literature and Culture at Oregon State; in the fall, I will start the application process again, for PhD programs. I am more worried this time, since I will not have McNair to guide me.

I can thank McNair for teaching me a variety of things, information I never received elsewhere: how to write a resume and CV, how to write proposals and letters of intent, how to present papers, how to behave at a fancy dinner. Those first skills got me here; the latter I have used while here. I presented my first paper as a grad student earlier this month; I received many compliments, including that I was the best reader. I can thank McNair for all of the practice I received. This will sound silly, but I attended a formal dinner a week ago; again, thanks to McNair, I knew how to act.

I would have done okay without McNair – I would have graduated, certainly. But I would not be on the path I am now without McNair.