Recognition Reception: A Time to Celebrate and Reflect

On Friday, April 23, the McNair Scholars Recognition Reception was held at the Lied Center, with over 80 Scholars, faculty and graduate student mentors, friends, and family members in attendance. This annual event celebrates Scholar accomplishments and recognizes faculty and graduate student mentors for their support of the Program.

Tessa Durham Brooks, Ph.D. was the featured speaker for the event. A 2000-2002 UNL McNair Scholar, she spoke about the McNair experience and how it helped her reach her academic and career goals of obtaining a Ph.D.

As an undergraduate at UNL, she connected with the McNair Program and began work with Dr. Ray Chollet from the Biochemistry Department and Wenxin Xu, a postdoctoral researcher who trained her in the lab. “[Ray] taught me how to be a scientist, and the postdoc in the lab took me under his wing and let me follow him around. It was incredible.” With the support of Dr. Chollet and the McNair Program, Tessa gained the confidence to apply to graduate school.

With a new sense of empowerment, she began a doctoral program in the Cellular and Molecular Biology Program at the University of Wisconsin. Her research focused on the physiological roles of glutamate receptors in plants, and in 2004 she was awarded an NSF Graduate Research Fellowship to pursue that project. In addition to her graduate work at Wisconsin, Tessa taught in the Biotechnology Training Program at Madison Area Technical College, developing her teaching skills.

After earning her Ph.D. in 2009, Dr. Brooks was appointed Assistant Professor of Biology at Doane College where she now teaches several courses, and is also pursuing her research interests in genome interactions with the environment.

Stressing the importance of hard work, perseverance, and mentoring in shaping her career, Tessa closed with these parting words, “You all have something that makes you successful, whether you recognize it as a strength or not. Your fields need your unique perspectives. Be true to yourself and don’t underestimate your ability to change the perspectives of those around you.”

Honored guests for the evening were the December 2009, May and August 2010 graduates, including: Jeff Belmont, biological sciences and insect science; Morgan Conley, psychology; Tara Cossel, psychology; Michael Harpster, English; Drew Nelson, geology; Jeannette Samuels, political science; Brian Shreck, political science; and Adrian Soltero, electrical engineering.

The graduating seniors shared their post-baccalaureate plans and were awarded a dictionary embossed with their name and “McNair Scholars Program.” The graduates also received a sky blue honor cord, in memory of Dr. Ronald McNair’s flight suit, to wear for the commencement ceremony.

A highlight of the evening was the presentation of two awards acknowledging a faculty member and a graduate student who’ve made significant contributions to the McNair Scholars Program and to our Scholars. Dr. Helen Moore, professor of sociology, received the 2010 McNair Faculty Appreciation Award. In presenting the award, Dr. Laurie Bellows noted Dr. Moore’s commitment to the McNair Program as an advisor, teacher, role model and friend, who has shared her knowledge of the graduate admissions process, and what admissions committees look for in stellar applicants. Dr. Bellows quoted Jeannette Samuels, a graduating scholar and one of Dr. Moore’s mentees, about the impact on her as a developing scholar: “Working with Dr. Moore was like seeing the light at the end of the tunnel. She has the uncanny ability to make everything make sense. When I’d reach one dead end, she would show me another avenue, always finding ways to make sure that I could reach my destination. Dr. Moore molded me into a scientist.”

The 2010 McNair Graduate Student Appreciation Award recipient was Maria Jose Herrera, a doctoral candidate in psychology and a former McNair Scholar from the University of California at Berkeley. Maria has served as a panelist at the annual New Scholar Orientation, speaking about her experiences in the McNair Program. As a graduate student mentor to Tara Cossel, Maria reviewed Tara’s personal statements, prepared her for campus interviews, and invited Tara to a graduate class to see how graduate courses are structured. Tara, who’ll begin a clinical psychology doctoral program at the University of Memphis in the fall, noted, “Maria has been truly amazing. I couldn’t have done it without her.”

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

While many undergraduates look forward to summer and taking a break from their studies, McNair Scholars will be delving into a research project in their discipline. Although they've been preparing since last fall, Scholars are eager to officially kick-off the McNair Summer Research Experience (MSRE). Jeff Lopez, a chemical engineering major from North Platte, Nebraska, is “looking forward to being able to focus solely on research. Without having to worry about school, I can put my full effort into my project.”

During the intensive nine-week program, Scholars gain valuable research skills they’ll need to perform independent research at the graduate level, as they collaborate on their research with top UNL faculty, graduate student and postdoctoral mentors. The McNair Program provides a stipend to Scholars participating in the research experience, as well as a housing allowance and meal ticket to campus dining halls, so they can focus on their research and not have to worry about finding a job to support them.

Arianne Holland, a psychology major from Lincoln, is looking forward to “gaining further understanding of statistics as they apply to the field of psychology.” Arianne will be working with her faculty mentors, Dr. Sarah Gervais and Dr. Mike Dodd from the Psychology Department on subtle sexism and the objectifying gaze. Study participants will wear an eye tracker to measure how long a person’s eye rests on an area of an image and track the path as the eye moves over that image.

Before beginning the research process, Scholars who are conducting research with human subjects must complete the Collaborative Institutional Training Initiative (CITI) training and submit an application to the UNL Institutional Review Board (IRB). McNair Scholars undergo the same process that UNL professors and graduate students do to gain approval for their long-term research projects involving human subjects or vulnerable populations.

Karine Carrillo, who recently received IRB approval to begin her research on examining attitudes on organ donation, is looking forward to “learning how to create a research project from start to finish, as well as firsthand experience of data analysis using SPSS.” Karise added, “I’m also looking forward to collaborating with peers to learn about their research and receive feedback about my own.”

Zach Garfield noted, “I’m excited about getting lots of presentation experience, developing my skills as a presenter, and most of all presenting at the national level.” Zach and the others in his cohort will get plenty of presentation experience when they share their research at the UNL McNair Colloquium, before heading off to give oral presentations at the California McNair Scholars Symposium at UC-Berkeley.

Morgan Conley, who participated in MSRE 2009, offered this advice to the Scholar researchers: “Stay on task throughout the summer and things won’t seem as big. Manage your time effectively and have fun... there is room for both.”

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<tr>
<th>Scholar</th>
<th>2010 McNair Summer Project and Faculty Mentor</th>
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<tbody>
<tr>
<td>Karise Carrillo</td>
<td>“Examining Attitudes on Organ Donation for Transplant” Faculty Mentor: Dr. Susan Jacobs, School of Criminology &amp; Criminal Justice</td>
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<td>Justin Escamilla</td>
<td>“How do Past and Future Experiences Affect Behavior?” Faculty Mentor: Dr. Sarah Gervais, Psychology</td>
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<td>Melissa Garfield</td>
<td>“How Women Achieve Status in Traditional Societies” Faculty Mentor: Dr. Raymond Hames, Anthropology</td>
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<td>“The Prosocial Dimension of Status in Egalitarian Societies” Faculty Mentor: Dr. Raymond Hames, Anthropology</td>
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<td>Alex Goldstein</td>
<td>“The Impact of Dietary Fat on Body Fat” Faculty Mentor: Dr. Concetta DiRusso, Nutrition &amp; Health Sciences/Biochemistry</td>
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<td>Alan Goyzueta</td>
<td>“Material Delivery System for Incisionless Surgery via Esophageal Insertion” Faculty Mentor: Dr. Carl Nelson, Mechanical Engineering</td>
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<td>Katie Haferbier</td>
<td>“Impact of Hyaluronan Endocytosis on Prostate Cancer Cells” Faculty Mentor: Dr. Melanie Simpson, Biochemistry</td>
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<td>Michelle Haikalis</td>
<td>“Improving the Social and Behavioral Competence in Head Start Children: Evaluating the Effectiveness of Teacher-Child Interaction Training (TCIT)” Faculty Mentor: Dr. David Hansen, Psychology</td>
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<tr>
<td>Arianne Holland</td>
<td>“Subtle Sexism and the Nature of the Objectifying Gaze” Faculty Mentors: Dr. Mike Dodd and Dr. Sarah Gervais, Psychology</td>
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<td>Kaitlin Leslie</td>
<td>“Determining Error Rates Associated with Bloodstain Pattern Analysis” Faculty Mentor: Dr. David Carter, Entomology</td>
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<tr>
<td>Jeff Lopez</td>
<td>“A Novel Enzyme Chip Using Localized Electrochemistry” Faculty Mentor: Dr. Ravi Saraf, Chemical &amp; Biomolecular Engineering</td>
</tr>
<tr>
<td>Tyler Scherr</td>
<td>“Fluorescence Recovery and the Inhibition of Bacterial Primase and Helicase” Faculty Mentor: Dr. Mark Grier, Chemistry</td>
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Kudos to McNair Scholars

**Summer Research Opportunity** - Brittany Sznajder-Murray, McNair Scholar 2008-2011, has been accepted to the Ohio State University’s 2010 Summer Research Opportunities Program. Brittany will be conducting research under the guidance of a faculty mentor, Dr. Natasha Slesnick, professor of human development and family science.

**NASA Nebraska Space Grant Fellow** - Khoa Chu, a senior mechanical engineering student, received a research grant from the NASA Nebraska Space Grant Fellowship Program. Khoa, who is a member of NASA's microgravity research program, traveled with his UNL team to Houston where they conducted experiments in a specially-designed NASA aircraft that simulates the moon’s low gravity environment. For the past two years, Khoa has worked with Dr. Carl Nelson, Department of Mechanical Engineering.

**Honors Theses**

Congratulations to our McNair Scholars who completed an original, thesis-length research project. Students who successfully defend their theses are recognized by their department as well as the UNL College of Arts and Sciences. With the submission and successful defense of their theses, the following students graduated "With Honors":


**Published Scholars**

A research publication is something many graduate students hope to achieve. Two McNair Scholars can check that off their “to-do” list before they earn their bachelor’s degree.


Conference Presentations

Khoa Chu presented his project, "A Four-DOF Modular Self-Reconfigurable Robot," in the Aeronautics and Space Science Section of the Nebraska Academy of Science Conference at Nebraska Wesleyan University, April 2010.

Morgan Conley attended the 2010 Society for Research on Adolescence Conference in Philadelphia, PA, where she presented her research, "Father Involvement in Dependency Review Hearings," at a poster session. The research was co-authored by Twila Wingrove, Sarah Beal and Victoria Weisz.

Tara Cossel presented her research at the Association for Behavioral and Cognitive Therapies Conference in New York, NY, in November 2009. Tara’s poster presentation was entitled, “Thoughts of Self-harm and Suicidality in Middle Childhood: Relatedness to Maternal Depression and Substance Abuse.”

Melissa Garfield attended the 2010 Nebraska Academy of Science Conference at Nebraska Wesleyan University and presented her research, "How Women Achieve Status in Traditional Societies.”

Zach Garfield gave an oral presentation of his research, “The Prosocial Dimension of Status in Egalitarian Societies,” for the Nebraska Academy of Science Conference held at Nebraska Wesleyan University, April 2010.

Brittany Sznajder-Murray presented her research, “Understanding the Help Seeking Behavior of Women with Alcohol Use Disorders: New Directions for Research,” at the Child, Youth and Family Studies 2010 Graduate Student Poster Session held at the University of Nebraska–Lincoln.

Undergraduate Research Fair

The 16th Annual Undergraduate Research Conference was held during the 2010 UNL Research Fair on April 8, 2010, at the UNL City Campus Union. The event is sponsored by the Office of Undergraduate Studies. Nine McNair scholars participated in the Poster Session, including:

Morgan Conley - “Family Structure and its Effect on Adolescent Risk Taking Behaviors”; faculty sponsor: Dr. Lisa Crockett, Psychology Department.

Melissa Garfield - “How Women Achieve Status in Traditional Societies”; faculty sponsor: Dr. Raymond Hames, Anthropology Department.

Zach Garfield - “The Prosocial Dimension of Status in Egalitarian Societies”; faculty sponsor: Dr. Raymond Hames, Anthropology Department.

Mike Gubbels - “Budgeted Machine Learning Heuristics for Parameterizing Bayesian Networks”; faculty sponsor: Dr. Stephen D. Scott, Computer Science and Engineering.

Michelle Haikalis - third author, "Predicting Psychological Functioning of Victims of Childhood Sexual Abuse: The Impact of Perpetrator Characteristics”; faculty sponsor, Dr. David Hansen, Psychology Department.

Michael Harpster - “A Modern Ecopoetry of the Prairie: The Poetics of Marjorie Saiser”; faculty sponsor: Dr. Thomas Lynch, English Department.

Beth Ridling - “Insight and Locus of Control as Related to Aggression in Individuals with Severe Mental Illness (SMI); faculty sponsor: Dr. William Spaulding, Psychology Department.

Sherri Sklenar - “Paths to Zion: The Mormon Settlement at Wyoming, NE”; faculty sponsor: Dr. Paul A Demers, Anthropology Department.

Preparing a Successful Graduate School Application

by Maegan Stevens-Liska

The goal of the McNair Scholars Program is to help Scholars succeed and gain admittance to the graduate program of their choice. Our Scholars spend much of their time working hard to maintain high GPAs and being active members in the academic community around them. However, as graduate programs become increasingly selective, students are often left wondering what they can do to make their applications competitive and how to find the right program for them.

For the answer we turn to some experts: McNair Scholars who, with the guidance of their faculty mentor and graduate student mentor, along with McNair program staff, have been successfully admitted to the graduate program of their choice. In this article, recent graduates and soon-to-be graduate students Morgan Conley, Tara Cossel, and Brian Shreck lend their advice on the most important aspects of a successful graduate application.

For many students, the statement of purpose will be an important required document in their graduate applications. A statement of purpose is an essay about students’ research interests, and as Morgan noted, one of the most important parts of her graduate applications. Morgan advised that “the easiest way to think about your statement of purpose is to start early on your CV or academic resume. This way you can identify the areas where your strengths and weaknesses are.” Brian mentioned that as he began to interview with faculty at prospective programs, it became clear how important his statement had been to his acceptance. As he said, “…the things faculty members knew and remembered about me were all things I had listed on my personal statement.”

Another part of the application that many students are aware of but dread is the GRE or Graduate Record Examination. Brian shared his best advice for how to succeed on the exam, and emphasized, “…the best advice I can give is to take advantage of your resources here in the McNair Program; you’ll have GRE prep sessions over the summer, so use these to work to identify your weak areas. Also you’ll get a book, which is a great resource.” Brian also stressed allotting sufficient time to prepare in advance: “I took the GRE at the end of the summer and before classes started up again, and that worked out really well for me. I knew I would be too busy to study once classes started. Think ahead and figure out what will work best for your schedule to give you the most time beforehand to prepare for it.”

For many students, the graduate school search process can be overwhelming—what schools to apply to, how to locate funding, how to find professors who want to work with you—but our scholars shared what they did to search for, contact, and eventually get in to their top choice programs. Tara noted that many of the schools and faculty mentors she applied to work with came naturally through her research. She suggested, “pay attention to the authors you’re citing in literature…if these faculty members are doing the kind of work you’re interested in, and it’s the kind of work you can see yourself doing, contact them.” Tara definitely reaped the rewards of making contact with prospective faculty members and focusing on a perfect “fit” with the faculty members she applied to work with. Tara noted, “between those two methods, I think this was how I got into so many schools I applied to. Because [when you find programs that fit your interests] you know that your research is there. It’s not something that you ‘kind of-sort of’ have to tweak to fit. It’s really easy to sell yourself as “this program is perfect for me, your research is perfect for me. Because that is what you want to do, you’re not faking it—it’s truly what you want to study—it’s what you’re passionate about.”

Introducing the UNL McNair Research Journal

Beginning this summer the UNL McNair Scholars Program will begin publishing our very own online journal! The McNair Scholars Research Journal (MSRJ) will be composed of McNair Scholars original journal articles that they’ve written under the guidance of their faculty mentors. The MSRJ will be hosted online through UNL’s Digital Commons, an online site hosted through UNL Libraries that aims to bring together and store all of UNL’s research under one umbrella. We hope to have our first edition published later this summer.

Check us out at: http://digitalcommons.unl.edu/mcnair/
McNair Scholars continue to make an impact on the University of Nebraska-Lincoln campus and in the community through their volunteerism and leadership roles. This is just a partial listing of their campus and community involvement:

Jeff Belmont - University of Nebraska Regents Scholar; and Center for Biotechnology Milton E. Mohr Scholarship.

Karise Carrillo - National Hispanic Scholar; Tutor for student athletes at the Hewit Center; President for Mexican American Student Association, 2010-2011; Diversity Strategic Development Committee, Spring 2011; Students of Color Career Advisory Committee, Fall 2009; Annual MASA Youth Latino Leadership Conference (MYLLC); Children's Carnival activities with MASA at the Big Event; Dance Marathon; Children's Museum; Grand Island Preparatory Academy; Park Middle School; and Big Brothers Big Sisters.

Khoa Chu - College of Engineering Student Advisory Board; layout editor and writer for the College of Engineering Blueprint Magazine; UCARE Ambassador; Habitat for Humanity McNair Community Service Event, October 2009; 2010 Nebraska Space Grant Student Fellowship Recipient; 2010 UNL NASA Microgravity Team; Dean's List; 2010 Astronomy Day volunteer, University of Nebraska State Museum; and has accepted a six-month Co-Op at Fort Calhoun Nuclear Station, summer & fall 2010.

Morgan Conley - Mortar Board People Who Inspire Co-Chair; National Achievement Scholarship; Dean's List; Psychology Department Teaching Assistant; Nebraska College Preparatory Academy Mentor Supervisor; and Psi Chi Psychology Honor Society.

Tara Cossel - earned Bachelor of Arts in psychology with Distinction and Honors; University Honors Program; completed Honors Thesis; Deans List; Translator, Project SAFE (Sexual Abuse Family Education); Crisis Line Counselor and Enhanced Advocate for Voices of Hope; Therapeutic Mentor and Group Facilitator for St. Monica's Behavioral Health Services for Women; Family Resource Partner; and CEDARS Youth Services.

Melissa Garfield - elected treasurer of Anthro-group, UNL's anthropology student group for 2010-11 academic year; and Matt Talbot Kitchen, October 2009.

Zach Garfield - Co-president of Anthro-group, UNL's student anthropology group; and Habitat for Humanity McNair Community Service Event, October 2009.

Alan Goyzueta - National Hispanic Scholar; Dean's List, Fall 2009; TA/Grader for MECH 300; Pi Tau Sigma Mechanical Engineering Honor Society; International Association for the Exchange of Students for Technical Experience (IAESTE); and American Society of Mechanical Engineers.

Mike Gubbels - Vice President of UNL Chapter of Upsilon Pi Epsilon, an international honor society for computer scientists and engineers; and TA for CSCE 156 lab, Fall 2009.

Katie Haferbier - Campus Red Cross

Michelle Haikalas - National Hispanic Scholar; Dean's List; Alpha Chi Omega Philanthropy Vice President for Friendship Home; and McNair Recognition Reception Co-Host, April 2010.

Michael Harpster - University of Nebraska Regents Scholarship, 2006-2010; Peter Kiewit Legacy Scholarship, 2006-2010; University Honors Program, 2006-2010; completed Honors Thesis; UNL Department of Philosophy Ed Hirsch Scholarship, 2009-2010; Sigma Tau Delta; International English Honor Society Vice President 2009-2010; Dean's List; Habitat for Humanity McNair Community Service Event, October 2009.

Ariane Holland - Served as Vice President for Tau Sigma National Honor Society for Transfer Students, 2009-10; selected for Law/Psych REU for 2010-11; and organizer of the Making Strides walk for Lincoln Benefit Life for 3 years.

Kaitlin Leslie - T.A. for Forensic 120 Lab in the Fall 2009; Habitat for Humanity McNair Community Service Event, October 2009; East Campus blood drive volunteer, Fall 2009; Member of Alpha Zeta academic fraternity; Member of Forensic Science Club; East Campus Community night volunteer for CASNR Week, Spring 2010; McNair Recognition Reception Co-Host, April 2010.

Jeff Lopez - University Honors Program, American Institute of Chemical Engineers, National Hispanic Scholar, UNL Water Polo Club President, Neihardt Council President, Residence Hall Association Senator, Nebraska Human Resource Institute Counselor, Engineering Diplomat, Committee For Fees Allocation Representative, Robert C. Byrd Honors Scholarship Recipient, Dean's List; Matt Talbot Kitchen volunteer, October 2009.

Drew Nelson - W & D Schild Geosciences Scholarship and Rex Monahan Scholarship (departmental merit scholarships); Treasurer of UNL Student Veterans Organization; and 2010 Dinosaurs & Disasters, University of Nebraska State Museum.

Beth Ridling - University Honors Program; and University of Nebraska Regents Scholar.

Jeanette Samuels - Habitat for Humanity McNair Community Service Event, October 2009.

Brian Shreck - Habitat for Humanity McNair Community Service Event, October 2009; Department of Political Science Outstanding Undergraduate Award, 2009-2010; Dean's List; College of Arts and Sciences Honors Colloquium; Certificate of High Scholarship, 2009-2010; elected to Phi Beta Kappa; and graduated with High Distinction, December 2009.

Sherri Sklenar - Habitat for Humanity McNair Community Service Event, October 2009; and secretary of the University of Nebraska Student Veterans Organization.

Adrian Soltero - Engineering Honor Society; and National Hispanic Scholar.

Brittany Sznejder-Murray - Dean's List; Rising Scholar Award; University Honors Program; Matt Talbot Kitchen volunteer, October 2009; Heartland Big Brothers Big Sisters Program Mentor, June 2008- present; Husker Choices Peer Educator, November 2008-present; and St. Monica's Behavioral Health Services for Women Therapeutic Mentor, September 2009 – present.
Alumni News: Publications & Fellowships

Congratulations to these UNL McNair alumni whose research was recently published:


**Masoud Mahjour-Samani** (McNair Scholar 2006-2008) - "Laser induced selective removal of metallic carbon nanotubes," M Mahjour-Samani, Y S Zhou, W Xiong, Y Gao, M Mitchell and Y F Lu1, Department of Electrical Engineering, University of Nebraska-Lincoln, *Nanotechnology*, November 6, 2009. Masoud, a doctoral student in the electrical engineering, was awarded the J.A. Woollam Graduate Fellowship for 2010-2011 academic year.


Sahar Hasim is currently working on her project, "Modification of Farnesol by Candida albicans," in Dr. Kenneth Nickerson’s lab at the University of Nebraska–Lincoln.

McNair Scholars Headed for Graduate School

**Morgan Conley** will begin a counseling psychology doctoral program at the University of Nebraska–Lincoln. Morgan has accepted a graduate assistanship with the Office of Multicultural Affairs.

**Tara Cossel** has accepted an offer from the University of Memphis in the clinical psychology doctoral program. Tara received a graduate assistanship to fund her program.

**Michael Harpster** was accepted to the University of Nebraska–Lincoln College of Architecture, where he’ll be pursuing a Master of Architecture degree.

**Drew Nelson** will begin master’s program in geology at Oklahoma State University in Fall 2010. Drew received a graduate research assistantship and will work with Dr. Tracy Quan.

**Jeanette Samuels** was accepted to the Juris Doctorate program at the Chicago-Kent College of Law for Fall 2010.

**Brian Shreck** will begin a political science doctoral program at Texas A & M University in Fall 2010. Brian received a four-year research assistantship.

**Adrian Soltero** was accepted to Texas A & M University, electrical engineering doctoral program, Fall 2010. Adrian has received a diversity fellowship and departmental assistantship.

McNair Alumni

Please keep us informed about your progress in graduate school.

You may update your information at anytime: [http://www.unl.edu/mcnair/scholarupdate.shtml](http://www.unl.edu/mcnair/scholarupdate.shtml)