McNair Scholars Attend Conference in Kansas City

On September 20, five Wichita State McNair and EPSCoR Scholars attended the 17th Annual McNair Heartland Research Conference at the Marriott Country Club Plaza Hotel in Kansas City, MO.

The Heartland Conference gave these students the opportunity to present their research to McNair students from other schools, to field questions from audiences, present their posters, and to hear details of research work being conducted by other McNair Scholars throughout the country, which encompassed sociology, education, and even a smartphone app that helps protect taxi customers from dishonest cab drivers who hike up their rates by taking the “long way.”

The conference also included a graduate school fair, allowing students to interact with admissions representatives from various colleges and universities and make connections with academic programs. Also during the conference, was a panel discussion of McNair Alumni who have now obtained their doctorate degree and Henry Jackson, a WSU McNair Alum was on the panel as well as the keynote speaker at the banquet on Saturday night.

The Heartland Research Conference gives McNair Scholars the opportunity to showcase their talents and excel in scholarly research.

A Promising Start

The McNair Scholars Program is excited to welcome the following scholars and mentors to research:

Danielle Bryant
Dr. Glendon Miller - Environmental Health and Safety

Francesca Chavira
Dr. Michael Birzer - Criminal Justice

Riana Cole
Dr. Sarah Taylor - Anthropology

Sharon Cox
Dr. Jeffrey Noble and Dr. Mark Vermillion - Sport Management

Rosa Palacio
Dr. Francisco Flores-Cuautle - Latin-American Lit. and Culture

Joshua Palacios
Dr. Anil Mahapatro - Bioengineering

Janelle Petrisor
Dr. Michael Rogers - Human Performance Studies

Stan Saiz, Jr.
Dr. Moriah Beck - Chemistry
Grammatically Speaking:
Easy Mistakes and
How to Avoid Them

There are plenty of mistakes to make while writing: the comma is the easiest punctuation mark to misuse, and American and British spellings, like center as opposed to centre, often get mixed up. The following grammar guide, part of a class syllabus by the novelist David Foster Wallace, outlines a few common mistakes and how to avoid them.

Mistake 1: Using British Spelling
The preposition towards is British usage; the US spelling is toward. Writing towards is like writing colour or judgement (Factoid: except for backwards and afterwards, no preposition ending in –ward takes a final s in English usage.)

Mistake 2: Writing “and so”
And is a conjunction; so is so. Except in dialogue between particular kinds of characters, you never need both conjunctions. “He needed to eat, and so he bought food” is incorrect. In 95% of cases like this, what you want to do is cut the and.

Mistake 3: Extra Commas in Compound Sentences
For a compound sentence to require a comma plus a conjunction, both its constituent clauses must be independent. An independent clause (a) has both a subject and a main verb, and (b) expresses a complete thought. In a sentence like “He ate all the food, and went back for more,” you don’t need the comma along with the and because the second clause doesn’t have its own subject, and therefore the clause isn’t independent.

Mistake 4: Commas and Signal Words
There are certain words whose appearance at the beginning of a clause renders that clause dependent. (They basically keep the clause from expressing a complete thought.) Examples include since, while, because, and as. You may have learned to call these kinds of words Signal Words or Temporal Adverbs in high school. They, too, affect the punctuation of a compound sentence.

The crucial question is whether the clause that starts with a Signal Word occurs first in the sentence or not. If it does, you need a comma. For example:

“As the wave crashed down, the surfer fell.”
“While Bob ate all the food, Rhonda looked on in horror.”

If the relevant clause comes second, you do not need a comma:

“The surfer fell as the wave crashed down.”
“Rhonda looked on in horror while Bob ate all the food.”

An Exception for Signal Words
In real prose stylistics, though, the Signal Word thing can get a little tricky. Look at this sentence:

“She doesn’t need her coat because it’s getting warm outside.”

You’ll notice there is no comma between “coat” and “because” in the compound. This is because of the basic rule outlined in Mistake 4. But because is a funny word, and sometimes you’ll need a comma before its appearance in the second clause in order to keep your sentence from giving the wrong impression. Example: Say Bob’s been murdered; the question is whether Rhonda did it. Look at the following two sentences:

A. “Rhonda didn’t do it because she loved him.”
B. “Rhonda didn’t do it, because she loved him.”

Sentence A, which is grammatically standard, here really says that Rhonda did kill Bob. The second clause of the sentence states that her reason for murdering him wasn’t love. Sentence B says that Rhonda did not kill Bob. Since it has a comma, the second clause states the reason that she didn’t: because she loves him. In 99% of cases, what someone’ll be meaning to say is what B says. So, though nonstandard in the abstract, B can be semantically correct, correct in a meaning-based context.

Maximizing Your Mentorship

Students’ relationships with faculty members are crucial to their academic success at the undergraduate, graduate, and doctoral levels of education. Research cited in Hartmann et al. found that, among a diverse range of students, the relationship with faculty members was the only stable predictor of student success. McNair’s Summer Research program allows Scholars to build close relationships with faculty mentors.

The project gives students the opportunity to learn how to construct research, analyze data, and articulate difficult concepts from a professional in the field. Along the way, they will learn about the ins and outs of publishing in professional journals, the range of jobs that will be available to them with a Master’s degree and a doctorate, and have their own work scrutinized and improved by an experienced eye.

Research has suggested, however, that the correlation between faculty interaction and student success mentioned earlier may come from other sources as well. As stated in Lundberg and Schreiner, faculty may:

- Encourage students they know well to become more involved in academics
- Communicate strong expectations to their pupils, providing more motivation to succeed
- Give students a model in conversation for how professionals in the field think and act.

All these factors probably play, in one way or another, into the benefits students will receive from their mentors, so you students out there, listen up!

Don’t just pay attention to your mentors when you need help with a problem. Pay attention to their conversation, so you can discover what kind of thought processing and problem-solving led to their academic success. Stay alert for encouragement and do your best to keep their expectations high.

Doing this will ensure that you get the most out of your faculty mentorship, improving your knowledge of the field and improving your professional thinking.

Sources: Hartmann et al., “Strong Faculty relationships and Academic Motivation” and Lundberg and Schreiner, “Quality and Frequency of Faculty-Led Student Interaction as Potential Outcomes of Undergraduate Research,” both retrieved from JSTOR.

Events to Come

December
7 Finals Begin
20 Holiday Shutdown - Offices closed
31 Research Assembly Meeting
“IRB Process”
Blackboard PowerPoint & Evaluation

January
2 Campus Reopens
21 Classes Resume
31 Literature Review Due

February
3 Counselor Meetings Resume
7 Research Assembly Meeting
Methodology/Data Collection,” McNair Staff
2 - 3 p.m., Devlin Hall, Rm 106
8 Grad Prep & Seminar
“Writing for Publication,” Deborah Soles
10 a.m. - 12 p.m., Devlin Hall, Rom 106
14 McWrite
“Integrating Sources into Paragraphs,”
Noah Trammell
2 - 3 p.m., Devlin Hall, Rm 106
21 Grad Seminar
“Etiquette Dinner/Seminar” *(must be registered)*
3:30 - 8 p.m., Wichita Country Club
28 Grad Prep
“Networking and Mentor Selection,”
Blackboard PowerPoint & Evaluation

Happy Birthday

from the McNair Scholars Program

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<td>Joy Foster</td>
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<td>Jamie Farrelly</td>
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Sources: Hartmann et al., “Strong Faculty relationships and Academic Motivation” and Lundberg and Schreiner, “Quality and Frequency of Faculty-Led Student Interaction as Potential Outcomes of Undergraduate Research,” both retrieved from JSTOR.
Imagine building a house from scratch. How would you know where to start or how many supplies you would need? How would you tell where to put things like doors or windows? Architects and builders use blueprints to help them design and construct houses everyday. The blueprints provide detailed instructions that tell about the size and shape of each room and measurements for how large the house will be.

Our body is like a house and inside our cells are the blueprints for what our body should look like and how our body should work and grow. These blueprints are called DNA. Like a set of blueprints, DNA provides instructions to the cells about how to work. For example, the DNA in an eye cell tells that cell how to help you see and even what color your eyes are. The area of science called genomics studies all of the different instructions DNA provides the body to understand how they work together to create the complicated machine that our bodies are. And if genomics studies a cell’s blueprints, the area of science called bioinformatics creates the tools that help scientists think about those instructions. By studying genomics and bioinformatics, scientists can further understand what makes us sick, how we can get better, and how we are connected to all of the other living beings that have DNA. Currently, I am the Director of Minority Training in Bioinformatics and Genomics at Harvard University. My work is to get more people from our Latino and Native American communities involved with this important scientific research.

I grew up Naschitti, New Mexico with my six brothers and sisters. Naschitti is a small, close-knit community within the Navajo Nation. This is where I first became interested in science and where I still keep connections that remind me of who I am and where I’ve come from. On one of my visits to Naschitti, my uncle asked me to explain bioinformatics and genomics to him in the Navajo language. It was hard to translate all of the scientific language, but I managed to explain that by using genomics and bioinformatics, scientists have discovered that all living things are connected and everything on this planet is more similar than different. My uncle was silent for a few minutes but then he said, “Oh! That’s good to know—it sounds like they’ve finally caught up with us!” You see, in most native traditions, we believe that we are one with nature and that the Creator has created everything so that we are all connected.

My personal connection to science started when I was very young. I remember helping my mother gather wool from our goats and sheep that she would later weave into rugs. As I helped her wash and card the wool, I watched her use local plants to dye the wool into beautiful colors. She never used regular bleach if she wanted the wool to be brighter. Instead, she would use the sun, sand, and various minerals from the land to naturally lighten the color of the wool. Besides teaching me about the land and Navajo traditions, my mother made sure that my siblings and I went to school. I loved learning and I especially loved science. After high school, I attended New Mexico State University where I majored in industrial engineering. I enjoyed my major, but I didn’t see how I could use it to help people in the future. I decided that I wanted to become an academic or financial aid advisor and work with minority students—specifically Native American students. I left New Mexico State University and graduated from the University of New Mexico with a degree in Child Development and Family Relations. Afterwards, I attended the Harvard Graduate School of Education and recently completed my Ed.D. at the University of Pennsylvania where I did research on what makes Native American men successful students at Harvard University.

If I were an undergraduate student again, I would certainly study bioinformatics, but I know that it is not for everyone. It is important to study what interests you. Whether it is art or geology, you’ll find a way to make a contribution to your community. In the end, how you use your education is the most important thing.

Graduate School: Searching for Funding

If you’re pondering a graduate degree, it’s possible that the number one thing on your mind is how on Earth you’re going to pay for it. It seems like there aren’t as many scholarships for graduate students as there are for undergraduate students, so you may be tempted to take the traditional route—loans—and hope that eventually the degree and the debt will pay off in terms of salary, benefits, and prestige.

What you may not realize (as many people don’t) is that there is money available for graduate and doctoral students, just not in all the usual places that you’re likely to look, and that it might not always come in the form of scholarships for graduate school.

Assistantships are similar to work-study programs

Assistantships are available at many schools with graduate programs, and can be teaching or research centered. Some schools offer so many of them that the majority of their graduate students are teaching classes or doing research on the school’s behalf. Unlike with scholarships for graduate school, which are essentially free, assistantships are more like work-study programs.

With assistantships, in exchange for completing some work or research for the school, you’re offered free or reduced tuition, as well as other possible benefits, such as health insurance and a monthly stipend. Assistantships often involve teaching undergraduate classes a few hours a week, proctoring exams, or assisting with important research. It could also involve publishing a set amount of articles in a specific field while attending school. Sometimes, awards are granted in exchange for full-time work in a specific field, such as working for a year in a psychiatric hospital conducting psychological testing while finishing up your degree in clinical psychology.

The type of work varies from school to school. So does the number of hours required, amount of money you receive, possibility for tuition waivers, and other benefits. But if you plan carefully, you may be able to get that advanced degree for free. Do keep in mind, though, that it is work on top of your studies. If you’re struggling to keep up with classes or are an older student with work and family obligations, it may be a difficult route to undertake. Either way, it’s worth looking into—and it looks great on a resume!

Fellowships are similar to graduate school scholarships

Fellowships are more like graduate scholarships or grants. Basically, you are awarded money which could cover the costs of everything you need while getting an advanced degree (tuition, housing, food, etc).

The great thing about graduate school fellowships is that they are wildly diverse and are offered by hundreds of schools and organizations to both students and working professionals. Check with organizations that promote research or advanced study in your specific field. This can reveal a number of opportunities, as can looking into agencies that offer philanthropic fellowships to promote things such as advanced degrees for minorities, or support of studies that promote awareness of global issues.

Since graduate school fellowships are so varied, the best way to get started on finding out about opportunities specific to your school and field of study is by checking directly with the school. They will be able to tell you what fellowships are offered and guide you toward other resources, which might include scholarships for graduate students, that may be able to provide money toward your degree.

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Ronald E. McNair received numerous honors, including North Carolina A&T’s Presidential Scholar, Ford Foundation’s Fellow, National Fellowship’s Fund Fellow, NATO’s Fellow, Omega Psi Phi’s Scholar of the Year, AAU’s Karate Gold Medalist, and National Society of Black Professional Engineers Distinguished National Scientist Award.

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