Is a Ph.D. worth it? Yes, indeed

Dr. Eugenia Kalnay calls meteorology “physics applied to the real world” and she is one of the top authorities in this field in the country. Her research on the impact of land use on climate change has been the most frequently cited work in all the geosciences in the past decade. In simplest terms, she has found that urbanization has an impact on global warming independent of greenhouse gas emissions.

Now at the University of Maryland, Dr. Kalnay is from Argentina. Although her mother did not finish high school, she encouraged her daughter to continue in school. And she did, all the way through the doctorate, becoming the first woman to earn a Ph.D. in meteorology from MIT (also the first to become pregnant).

In April, Dr. Kalnay visited MTSU as a Distinguished Lecturer, where she addressed McNair scholars and more than 100 students who qualify for the McNair Program. She spoke of experiencing dictatorships in both Argentina and Uruguay, working with NASA Goddard for eight years, then to the University of Oklahoma and then to Maryland. Her message was straightforward.

Is a Ph.D. in science worth it? Emphatically yes if you have an inquiring mind, like challenges, and “don’t just want to repeat what others have done or said.”

You may not become rich as a scientist but you will earn enough to live well, she says. Speaking to students of all disciplines, Dr. Kalnay continually emphasized the importance of working for the good of society.

What has she learned over the years? “Be flexible and don’t give up, even if fired. Find good advisors and supportive mentors. Be persistent because research does not always go smoothly. Be appreciative of others. Don’t be intimidated but also work by consensus. Exercise your body as well as your mind.”

In the end, a doctorate will provide the means to succeed.
What to Ask on Grad School Visits

Before you ask anything, find out all you can about the program you’re interested in, the available financial aid, and so on. You don’t want to ask something like, “What assistantships do you offer?” because you should already know. Far better would be a follow-up question based on what you’ve learned. For example, “I know that research assistants get paid $20,000 but do they have office space?”

Assuming you have done your homework, you might consider asking the following:

1. How would you rate your graduate program nation-wide? The top half? The top 10 percent?
2. How many students do you accept, on average, each year into your Ph.D. program?
3. About what percentage of these students eventually earn a doctoral degree?
4. Could you give me an idea how long it takes them?
5. What are the reasons for students not finishing?
6. [If relevant] Is it better to get a master’s degree first and then a Ph.D. or go straight for the Ph.D.? Why?
7. Do you help students publish their own research? How?
8. Are there funds for grad students to travel to conferences to present their research?
9. How are graduate assistants chosen? Would you recommend a TA [teaching assistantship] or an RA [research assistantship]? Why?
10. Do TAs teach introductory courses (or labs), or is it mostly grading exams, or what?
11. [To admissions] When is financial aid dispersed? If it is after the first day of class, are emergency loans available?
12. Can you describe qualifying exams? Are they both written and oral, just written, or what?
13. Can you describe the career-placement program you have here? [This is the service universities provide to help find positions for newly minted Ph.D.s.]
14. How successful has your career-placement program been in recent years?
15. How diverse are grad students in the department?

Speaking of grad students, if you have the chance to talk with any of them, you might want to ask them about reading loads, faculty members who are particularly helpful, how they like the program, and what it takes to succeed in the program.

Of course, after you’ve read about the prospective graduate school, you might have follow-up questions, like the office-space question mentioned above. Another possibility, if you’re interested in university housing: “About what proportion of grad students live in graduate housing?”

And finally, if the information you’ve found is hazy on this subject: “When are decisions about acceptance actually made?”
In April, several McNair students presented their research posters at Scholars Day on campus, including those shown here.

McNAIR GRADS

Eight McNair scholars graduate in May and three more graduate in August 2007. Congratulations!

Muorcol Acut
Jeffrey Blackman
Brandy Dacus
James Edmondson

Ken Garrett
Terri Proctor
Linda Selby
Angela Stroupe

May →
August →

Catie Cameron
Kim Cubit
Dione Johnson

SCHOLARS DAY

In April, several McNair students presented their research posters at Scholars Day on campus, including those shown here.

Dr. Boyer-Pennington and Terri Proctor
Dr. Thomas and Claire Marshall
Muorcol Acut, right

Brandy Dacus
Collin Davey
Jeffrey Blackman, below

James Edmondson
Thank you, Dr. Enderson

For Your Years of Service

At the end of this month, Mary Enderson, academic coordinator of the McNair Program, will leave the program to pursue her career on a full-time basis in Mathematics Education at MTSU.

Dr. Enderson began as a McNair mentor in 2001; she became the academic coordinator in 2004. During this time, she has counseled dozens of scholars, helped guide their research, found tutors for them when needed, monitored their academic performance, provided GRE preparation, organized seminars, brought in guest speakers, and served as a liaison to mentors on campus.

The time and energy she gave to the program as well as her dedication to making it better will be sorely missed by students and staff alike, and we wish her the very best in the years ahead.

POTPOURRI with Cindy Howell

James Edmondson, a May graduate from MTSU, has been accepted into the Ph.D. program in computer science at Vanderbilt University. James’ claim to fame is that he originated an algorithm called M Pivot Sort.

Karin Hooks, former McNair scholar, has earned her Masters in English at the University of Delaware and heads to the Ohio State University this fall for her Ph.D. Well done!

Terri Proctor, also a May graduate, will begin her Masters at Austin-Peay this fall. Meanwhile, she will join the McNair Program this summer on an interim basis. Among other things, she will be conducting graduate retention research, leading seminars, and helping students with posters.

Ken Garrett, another May graduate, recently demonstrated an invention of his, a powered bike, at the Engineering Technology & Industrial Studies open house on campus.

Angela Stroupe, graduates in May as well, and will soon be heading from Murfreesboro to Boston. What’s in Boston? Brandeis University, where she will enter the Masters program in anthropology. Her focus of study is Japanese culture in non-Japanese contexts.

MCNAIR STAFF

L. Diane Miller, PhD, Director
Steve Saunders, Program Coordinator, Editor
Mary Enderson, PhD, Academic Coordinator
Cindy Howell, Secretary