

The Connection

Your link to undergraduate researchers at Mizzou

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Meet Ambassador Connie Bubash By Margaret Berglund

MU senior and undergraduate research Ambassador Connie Bubash spent an average of five hours a day doing research this summer, but Bubash is no scientist. She is an English major originally from Lee's Summit, Missouri and her research subject was Giordan Bruno, an Italian Renaissance philosopher.

Bubash scoured not only Bruno's writings but also other writings of the time, trying to understand the environment and society in which Bruno worked. Dressed in jeans and a cardigan sweater with her curly hair pulled neatly back, Bubash explained the controversy regarding Bruno.

At a time when the common belief was that the heavens revolved around the earth, Bruno hypothesized that the planets revolved around the sun, a modern conclusion.

Copernicus (a predecessor of Bruno's) and Galileo (a contemporary of Bruno's) who observed the stars and used math to show that the earth revolved around the sun. In contrast, Bruno proposed that the earth like all things had a soul and therefore moved on its own. Bruno also used magic to explain some of his conclusions. Through her research, Bubash concluded that Bruno used a more regressive approach, but made modern conclusions.

For example he proposed that all things were made of the same material and that the universe was infinite, both new ideas, but he used ancient reasoning to explain them. Unfortunately these ideas were declared heresy by the church, and he was burned at the stake in 1600. This was 32 years before Galileo was found guilty of heresy and put under house arrest for similar ideas.

Uncovering these ideas was like being an archeologist for Bubash.

"I was like an excavator, going through his

work and trying to put it together and make sense of it," Bubash said.

Bubash was in the College of Arts and Science Undergraduate Research Mentorship Program this summer, but while many of the other students in the program went to a lab everyday, she went to the library with only texts for company. She had to learn a lot of self-discipline to be successful in that environment she said.



Photo by Shane Epping

Still Bubash's enthusiasm undeniably bubbles over as she explains what she has learned and where she plans to go now. Previously, she planned to go into publishing but after an internship at the *Missouri Review* she knew publishing wasn't a good fit for her. Now she plans to continue her education getting a PhD in English specializing in Renaissance philosophy.

"The [experience] really helped cement what I want to do," Bubash said about her decision to pursue a PhD.

The program has also prepared her for graduate school, she said. She plans to use the paper she is writing for the program as a writing sample in her graduate school applications. She also knows that she has learned a lot about research and how to be a better student. She credits her mentor, Dr. David Read, a professor in the English department, with much of her success.

"I have such a close relationship with Dr. Read, and he is helping me with other things too now," she said.

Bubash encouraged other humanities students to give research a try. She said most students in the English department don't realize it's an option.

"Just give it a try even if you find out you don't like it," Bubash said.

Networking Brings Opportunities for Senior Megan Pallo

By Margaret Berglund

MU Senior Megan Pallo has had two summer internships in Colorado and one in the Galapagos Islands. Both locations are a long way from her hometown of Independence, Missouri. Her secret to adventure is letting people know about her interests and



Giant Tortoises were some of the unique wildlife Pallo saw in the Galapagos.

then saying yes when opportunities present themselves.

“Those opportunities come along and you have to be ready for them,” Pallo said in a phone interview.

Pallo, a secondary science education major, earned her first summer job as a lab assistant by standing out in class. Her work caught the eye of the teaching assistant Jennifer Geib who asked her to apply as her field assistant for the summer. Pallo got the job and spent the summer after her sophomore year in Park County Colorado collecting data on bees as pollinators in the alpine environment.

In the meantime, Pallo began working as a lab assistant during the school year in Dr. Chris Pires’ lab, in the Bond Life Sciences Center. This work combined with the summer work caught the eye of Dr. Candi Galen in Biological Sciences, who encouraged her to apply for

the NSF Undergraduate Mentoring in Environmental Biology program.

Again she accepted the opportunity and found herself back in Colorado. This time she investigated the relationship between a small insect commonly known as springtails and fungal growth on plants.

Pallo’s most recent adventure was in the Galapagos Islands this summer where she assisted on three different studies about avian diseases.

On what some call the most pristine island in the world, Pallo studied the source of a new disease found in penguins. While working on Fernandina Island the researchers spent the day catching small

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Two great opportunities to share your research with lawmakers are approaching!

UGR Day at the Capitol is an important opportunity for students to demonstrate to state lawmakers the unique opportunities undergraduates have to participate with faculty in research at the University of Missouri. Many lawmakers do not differentiate between regional colleges and public research universities. This April event also underscores higher education’s role in developing educated citizens and preparing a work force with the necessary skills to further the economic growth of the state.

Posters on the Hill. MU is seeking nominations for undergraduates to share their university research experiences in Washington D.C. for Posters on the Hill at the Capitol in April. The deadline for MU nominees is October 26th, 2009. MU will select up to 6 students by October 31st to nominate for this event. Students selected must apply with the assistance of the Office of Undergraduate Research, on the CUR website by November 10, 2009. **Funding is available to cover travel expenses.** For more information:

The applications for both events are due **Monday, October 26th at 5:00 PM.** Please contact Sarah Beyers at sjbeyers@mail.missouri.edu or Brian Booton at BootonB@missouri.edu or pick up applications in room 150b Bond Life Sciences Center.

Website of the Month

<http://career.missouri.edu/students/explore/whatcanidowithmymajor.php>

Wondering what careers might be available to you when you graduate? Visit our career center online and check out “What Can I Do With My Major.” Learn about the professional pros and cons of different majors. You may be surprised by some of the options available to you.

ATTENTION!

ALL UNDERGRADUATE MAJORS!

Kick start your career and get ready to research!
The MU Office of Undergraduate Research presents...

Undergraduate Research Month

Monday, Oct 5th

How to get involved: Undergraduate Research 101

Hawthorn Hall, Room 1500 8 – 9 pm

Come listen to students that are involved in undergraduate research, learn about the various opportunities in undergraduate research, discover funding sources for your project, and find out how you can get involved here at MU!

Wednesday, Oct 7th

How to get involved: Undergraduate Research 101

Portal Room (3rd floor lounge space between Excellence & Discovery Halls) 7 – 8 pm

Come listen to students that are involved in undergraduate research, learn about the various opportunities in undergraduate research, discover funding sources for your project, and find out how you can get involved here at MU!

Tuesday, Oct 13

Life Sciences Undergraduate Research Opportunities Program

Memorial Union Rm N232 3 - 4pm

Thinking about doing research in the life sciences? Want to get funded to do your own project in conjunction with a faculty mentor?

This is the seminar for you! Come and learn about the application process, how to improve your application, and have the opportunity to talk to students about their LSUROP experiences.

Tuesday, Oct 20

Graduate Student Panel

Memorial Union Rm N232 3 – 4pm

Come to a relaxed student panel with all of your questions about graduate school and how undergraduate research better prepared them and enhanced their experiences. This seminar is recommended for students who want to get the insiders scoop on what its like to be a grad student.

Wednesday, Oct 21

Faculty Panel

Bond Life Sciences Center Rm 572 5:30 – 6:30 pm

The Office of Undergraduate Research is teaming up with the Society of Undergraduate Research in Life Sciences (SURLS) to bring you a faculty panel from all different majors. Faculty will be discussing what they look for in an undergraduate researcher, what types of projects they are involved in, and how working in their lab can be beneficial to your academic experience.

Tuesday, Oct 27

Travel Grants, Summer Research, Off-Campus Research

Memorial Union Rm N232 3-4 pm

Find out about undergraduates who have done summer research at MU and beyond! These students have also traveled around the nation and the world to present their research at various conferences. Come learn about the different opportunities available through the MU Office of Undergraduate Research.

Featured Fellowships

<http://fellowships.missouri.edu>

Boren Scholarship:

The Boren Scholarships provide undergraduate students with the resources they need to acquire skills and experiences in areas of the world critical to the future security of our nation, in exchange for their commitment to seek work in the federal government.

The program funds study abroad in areas of the world that are critical to U.S. interests and underrepresented in study abroad, including Africa, Asia, Central & Eastern Europe, Eurasia, Latin American, and the Middle East. Eligibility: Sophomores and juniors who are U.S. citizens and who demonstrate commitment and ability. Campus nomination required.

<http://www.borenawards.org/>

Churchill Scholarship:

At least thirteen Churchill Scholarships, tenable for nine or twelve months of study at Cambridge University, are offered annually to pursue graduate work in Engineering, Mathematics, and the Physical and Natural Sciences. The one-year awards lead to the Masters of Philosophy, the Certificate of Post-Graduate Study, the Certificate of Advanced Study, or a Diploma (in Computer Science). Eligibility: Applicants must be citizens of the United States and upon taking a Churchill Scholarship, be between the ages of 19 and 26, hold a bachelor's degree or its equivalent from a United States college or university, and may not have attained a doctorate. The minimum GPA is 3.7. Campus nomination required.

<http://www.winstonchurchillfoundation.org/>

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birds with fine nets called mist nets. Once caught, they took blood samples and measured the bird's weight and size. The goal is to find out if any of these birds are the source of the new disease found in the the penguins.

Her biggest accomplishment this summer was learning new skills.

"I can handle a bird like nobody's business," Pallo said of one newly acquired skill.

But the secret to success isn't all out in the field. Pallo lived in close quarters with eight to nine other people. Learning to cooperate and work as a team was important in those conditions she said.

For those who want to follow in Pallo's far globetrotting footsteps she recommends networking.

"To get started talk to your professor and let them know that your willing to work and interested in what they are doing. The first step is to put yourself out there." Gallo said.

Society for Undergraduate Researchers in Life Sciences (SURLS)

is an organization for anyone who is interested in, currently involved in, or wanting to become involved in research in the life sciences!

October Meetings:

The next meeting is October 7th from 5:30-6:30 pm in Life Sciences Center Rm 107 - Dr. Dennis Lubahn will be joining us from the Biochemistry department to present information on prostate cancer and other cool research currently being done in his laboratory.

October 21st from 5:30-6:30 pm in Life Sciences Center Rm 572 - SURLS is teaming up with the Office of Undergraduate Research to organize a faculty panel from various majors! Faculty will be discussing what they look for in an undergraduate researcher, what types of projects they are involved in, and how doing research can be beneficial to your academic experience.

Want to know more about who we are:

www.undergradresearch.missouri.edu

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