

News Release

IU East announces Summer Research Scholars

FOR IMMEDIATE RELEASE
JULY 6, 2011

Richmond, Ind. — Indiana University East awarded five scholarships for the 2011 Summer Research Scholar Program. Undergraduate students receive \$2,000 to conduct a research project under the supervision of a faculty mentor.

Funding for the program is provided by the Office of the Vice Provost for Research and is matched by funds from IU East. The competitive program has expanded from the first single award given to now include up to six students each summer.

All recipients will present their research findings during the seventh annual Student Research Day in spring 2012.

Beth Crose, Eaton, Ohio. "Researching a hidden treasure: the Richmond Symphony Orchestra." Psychology and English major with a minor in creative writing working with Christie Joy, adjunct faculty in English.

The purpose of the project is to identify and describe what goes on in order for the Richmond Symphony Orchestra — a non-profit, small town symphony — to operate, to show the growth of Richmond Symphony Orchestra over the years, and illustrate the benefits it brings to Richmond, Indiana.

Crose described the RSO as somewhat of a hidden treasure.

"RSO brings something unique to Richmond and Richmond also benefits from having RSO here. I think it's important to bring awareness to what they do and how they do it," Crose said.

Throughout the summer, Crose will attend meetings and see what the RSO does behind the scenes in order to operate. She added that she will visit the Wayne County Historical Museum and Morrison-Reeves Library, which hold the RSO's archived records, to research it in more depth. Along with this there would be a discussion of how RSO gives back directly to the community.

Nathaniel Akers, Lewisburg, Ohio. "Suite for Piano." Humanities major working with Elliott McKinley, assistant professor of Music.

Akers said for his project, he is composing eight character pieces for piano. Akers explained a character piece is music that tries to convey an emotion, a personality trait or an overall feeling of a person or thing. Some of the moods, personalities and ideas that Akers will be writing on are love, Attention Deficit Disorder, attraction, coexistence, and youth.

"It is also to evoke a mood or an idea and is found mostly in the Romantic period of music," Akers said. "I usually like character or portrait pieces of music, so I thought this would be something nice to do. I do hope that this project will in some way inspire others to think more creatively."

Codie Kirby, Williamsburg, Ind. "Role of Fibronectin Type III Domain in D. melanogaster Dscam binding specificity." Biology major working with Hitesh Kathuria, assistant professor of chemistry.

A total of seven Down syndrome cell adhesion molecule (Dscam) constructs will be created via a method termed as recombineering (recombination-mediated genetic engineering), a highly specific method for fast and efficient modification of the DNA molecules. This method allows accurate tailoring of recombinant sequences, without the constraints imposed by restriction enzyme site location. Through the use of recombinant methodology, precise deletions will be made between adjacent fibronectin type III (FNIII) domains in an effort to identify the function of such domains in *Drosophila melanogaster* Dscam.

It is understood that Dscam plays a vital responsibility in the organization of the nervous system. But an understanding of the role of FNIII domain in Dscam is lacking. It is therefore the intent of this project to identify the role of FNIII domains in *Drosophila* Dscam specificity through multiple structural motif deletions.

"Over the years the scientific community has unveiled provocative neurological data through the study of Down syndrome cell adhesion molecules in *Drosophila melanogaster* (fruit flies). I would like to begin my understanding of an important neurological aspect in a model organism, as it has been a dream of mine, and a goal at which I strive to achieve, to become an invaluable asset in the medical and research community, more specifically in the field of neuroscience. As I near the completion of my undergraduate career, I would like to seize every opportunity to develop my analytical skills, quantitative skills, and research skills that will be imperative as I further my education in a challenging and diverse future that awaits me."

Christina A. Persson, Brookville, Ind. "Human Recreation and Its Effect on the Environment: A Compilation of Journalistic and Personal Essays on the Balance between Human Recreation and the Natural Environment of our Parks." Humanities and creative writing major working with Jean Harper, associate professor of English. Persson is also a graduate student at IUPUI and is working on completing a Master of Science in Adult Education.

"Through the lens of the place-based essay I hope to create a holistic picture of the balance that exists between our recreational pursuits and the natural environment of our state and county parks and state forests," Persson said. "I chose this project due to what I have observed as a County Park employee as well as one who uses these parks for my own recreational activities. It is of interest to me how people seem to forget about what should be the primary purpose of these public owned lands; the preservation of the natural environment that surrounds us."

Persson's focus is on Southern and Central Indiana including McCormick's Creek State Park, Turkey Run State Park, Lincoln State Park, Brown County State Park, Brookville Lake/Mounds State Park, Whitewater State Park, Franklin County Park, Pike State Forest, Yellowwood State Forest and Spring Mill State Park.

"It is my hope that those who will read these essays will become more conscious, as I have been becoming while working on this project, of the balance that exists between what they do in these parks and how nature is coping or not coping with what they do," Persson said.

Zachary A. Bishop, Connersville, Ind. "Victory Garden, Inc." English major working with Tim Scales, lecturer of business administration and director of the Center for Entrepreneurship.

Bishop is a second-time recipient of a Summer Research Scholars award. In 2010, he spent the summer volunteering at an organic farm, Bruinslair Ecology Refuge, located in the Tahoe National Forest in Northern California to document the experience through photography.

This year Bishop will focus his research on two main points. First, he plans to examine the possible implementation of "Victory Garden, Inc.," a non-profit organization that teaches the benefits of organic gardening and that grows food to donate to local charities. Second, he will put his knowledge of organic gardening garnered from last year's summer research project into practice by using his parents' garden as a model for the non-profit organization's future endeavors.

"Over the last few decades, American society has become further removed from the production process of their food. We are no longer fed by food grown by ourselves or our neighbors," Bishop said. "Instead, our fruits and vegetables are shipped in from far flung corners of the globe while the majority of our farms produce one of two crops: corn or soy beans. This is something I strive to remedy."

Bishop said he hopes to discover that the community is receptive to the creation of Victory Garden, Inc.

"More than that, I pray that our community is hungry for an organization like this one," Bishop said. "I hope to discover that my efforts will have some positive, tangible effect on the community besides merely providing some locally grown vegetables. I hope to effect a bit of change in the way we perceive our food and our consumerist ideals."

Media Contact

Hali Cartee, Manager
Media Relations
hcartee@iue.edu
765-973-8202