

## Regional

## Instructors take unique paths to geography

Geography is often described as a “discovery discipline.” Students find geography by chance, taking a class to fulfill a general education requirement and realizing that the discipline brings together a wide variety of topics through a spatial perspective. This is exactly what happened to the three most recent additions to SIUE’s department of geography. Adriana Martinez, Michael Shouse and Stacey Brown all began their collegiate careers majoring in subjects other than geography. Brown considered pre-med, engineering and math before becoming a geography major.

“I did not start out as a geographer as an undergrad,” Shouse said. “I had ambition to go into biology, so I started out as a biology major along with economics. So I was going for a dual major. I learned what geography was and asked, ‘Why do I have to do both when I can just study geography?’” His path into urban and regional analysis allowed him to incorporate his interests in both ecological and biological principles.

Martinez’ path to geography took a bit longer. She majored in environmental geosciences at Texas A&M University. In that program, she took a number of geography classes, and one in hydrology really captured her interest, especially because of the focus on rivers. She grew up along the Rio Grande in Texas, surrounded by rivers. The course discussed river processes, including sediment transport and moving water, which she found fascinating. Her professor encouraged her interest.

“She said, ‘Why don’t you try graduate school in geography focusing on rivers?’ And I thought it sounded very interesting,” Martinez said.

All three educators see the future of geography intertwined with geospatial technologies. Geospatial technologies include geographic information systems (GIS), global positioning systems (GPS) and remote sensing. These technologies allow geographers to visualize, measure and analyze various features of Earth. For example, Martinez uses GIS to identify study sites and display her work. Three-dimensional modeling and satellite imagery of river flows serve as a form of “time machine,” helping her understand the past, present and future of rivers.

“Today I really use a lot of geospatial technologies together with fieldwork to study how humans impact rivers, including the effects of dams and vegetation, particularly how invasive species impact rivers,” Martinez



SIUE photo

Pictured are new the newest additions to SIUE's department of geography: Michael Shouse, Stacey Brown and Adriana Martinez.

explained.

Geospatial technologies can be used for a variety of tasks. After completing a master’s in retail geography at the University of North Carolina Charlotte, Brown took a position at Walgreens’ headquarters in Chicago where she helped identify new locations for stores. So if you’ve ever been to Florida and you see hundreds of Walgreens, it’s because most people over the age of 70 take on average 15 prescriptions per day. And that’s where a lot of money

comes into pharmacies. That data, she said, was then used to figure out where the next successful Walgreens store could be located.

Shouse’s background also illustrates the varied uses of geospatial technologies. While a doctoral student in geography at the University of Kentucky, he held a position at UK’s transportation center in the College of Engineering. This position involved developing tools in GIS, spatial analysis and model development. He also worked on diverse projects, includ-

ing traffic and public safety, archaeology, the energy sector and endangered species. This experience shaped the kind of research he does now, using geospatial technologies to study the interaction between invasive species and endangered species.

Martinez noted that one of the real strengths of geography is its focus on human-environment interaction. Her present research focuses on a Utah river that was dammed in 1992. Because the dam was put in recently, there is

College Talk  
Gillian Acheson

satellite imagery that captured the river channel prior to damming. Today, the river channel can be studied in comparison to its pre-dam state to evaluate vegetation changes, channel width and even the influx of invasive species.

Shouse’s research on invasive and endangered species benefits from the use of imagery and GIS. Typically, satellite imagery is quite expensive and might not be available for the location and time period that is needed, Shouse noted.

“One thing that we can take advantage of is figuring out inexpensive ways to accomplish research,” he said. To that end, Shouse has been working with a colleague in the School of Engineering to create a low-cost remote controlled helicopter that is equipped with environmental sensors that collect different types of data. This low cost alternative opens up all kinds of possibilities for further data collection. With inexpensive methods, potentially more data can be collected.

There is a challenge and opportunity in the amount of geospatial data available today. Brown explained that when she was a doctoral student there were a relatively small number of data options, but now it is a real challenge to understand how to deal with it all. The opportunity lies in engaging students to help collect and analyze the massive amounts of data available, especially on SIUE’s large campus – what Shouse describes as a “a living classroom.” Additionally, there are opportunities to engage “citizen scientists” and community groups in collecting and analyzing data.

It is especially exciting to see the collaborative work in which the three are engaged. In addition to Shouse’s projects with faculty in engineering, Brown is working on a collaborative project with colleagues in nursing, pharmacy and the Institute for Urban Research to study health disparities of African Americans in the Metro East.

Martinez said that she sees her research as combining geomorphology with ecology, engineering and computer science. “Geography,” she said, “is a really good place to come up with cohesive projects.”

Gillian Acheson is the chair of the SIUE Department of Geography.

## DESIGN

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He used his expertise in design to create the identification and logo for the event. “We’re doing all the graphics work and marketing,” he said. He developed the logo, which uses the tagline, “The funeral you don’t want to miss.” Inlandesign also designed the posters promoting the event and the programs for the re-enactment. Celuch is donating Inlandesign’s services for the funeral.

The Lincoln Funeral Re-enactment Coalition is expecting large crowds for the funeral. “As of a few weeks ago, we had 1,500 re-enactors planning to come,” Celuch said. In addition to the re-enactors, who will come in period dress, thousands are expected to view the events.

One task that Celuch helped with was acquiring a replica hearse for the weekend. “There’s only one photo of the hearse in existence,” Celuch said. The photo of the hearse is used prominently in the promotional materials Celuch designed. “Staub Funeral Home in Springfield decided to take on recreating the hearse.” Staub

coordinated with three other companies, one in Tombstone, one in Eureka, Calif., and one in Kentucky, Celuch said.

“The event is billed as an accurate recreation, as accurate as we can make it,” Celuch said. “We used reverse engineering to recreate the hearse.”

Another task of the board has been fundraising. “We’ve been raising money and will probably be raising money beyond the event,” Celuch said. “It’s a local event, but it’s Abraham Lincoln, so it’s an international event.”

Celuch founded Inlandesign in 1976. “We’ve been in Edwardsville for 38 years,” he said. “I started as Studio 298 and operated out of my garage for five years.”

The company moved to downtown Edwardsville in 1981. “It made all the difference in the world,” Celuch said. “To get respect and legitimacy, an office was important.”

Celuch bought the building that currently houses the business and restored it in 1991. “My preference is in historic buildings,” he said. Inlandesign has space on the second floor and 222 Artisan Bakery occupies the first floor.

Celuch’s interest in history is more than a hobby. He has a Master’s Degree in Architectural History. In addition to restoring the building that

houses Inlandesign, he also restored the company’s previous location.

Inlandesign’s work is all over the Edwardsville area. The company has designed the logos for several local businesses, including 222 Artisan Bakery, The Edge Bank, TheBANK of Edwardsville, and 1818 Chophouse. The company also designed the logos for the cities of Edwardsville, Glen Carbon, O’Fallon and Wood River. “We’ve probably done over 250 logos,” Celuch said.

Celuch is also proud of his design work for Allison’s Hope Foundation, a local foundation that raises money to fund cancer research. “We’ve worked with them and they’ve raised over \$1 million for cancer research,” he said.

Celuch said he is looking forward to all of the events connected to the funeral, as well as the funeral re-enactment itself.

“We have a reception at the airport in Springfield for all those involved and our major donors.” Governor Bruce Rauner has invited the board members to the Governor’s Mansion for a reception after Saturday’s re-enactment activities. “I’ve never been to that type of event,” Celuch said, adding that he was looking forward to seeing the historic mansion.

## DEATH

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“That’s just something you created because you were scared?” Fischer said. “All those intricate details. But now, today, you say it’s the first time you sold anything to him?”

“I was scared. Didn’t you see me shaking to death in there?” the defendant said. “I was scared to death.”

Smith, who was 48 years old, lived a few houses down from Armbruster in Granite City. When investigators arrived at his home, they found Smith slumped in a chair in his garage, with empty packets of fentanyl nearby. A coroner’s jury ruled the death to be an accidental overdose from fentanyl. Armbruster was charged with drug induced homicide, in what is believed to be the

first such charge ever to be levied in Madison County.

Coroner’s investigators testified that Smith had a history of medical problems and depression and had been addicted to pain medication. He frequently passed out in the garage, and when relatives noticed that he was unconscious in the garage that night they assumed he was simply asleep, according to the testimony.

Toxicology tests showed that alcohol, fentanyl and other painkillers were found in Smith’s blood.

A Madison County Sheriff’s detective testified at the inquest that Smith apparently opened the patch and swallowed the contents.

At Armbruster’s sentencing, attorney Rand Hale asked whether he felt remorseful for what had happened?

“100 percent,” Armbruster said.

Hale asked whether he was sorry.

“Terribly sorry,” Armbruster said. “I had no idea he was going to chew it.”

Armbruster also acknowledged that he had used methamphetamine after the death. After charges were filed against him, he said, some friends and family members shunned him.

“It made me give up,” he said. “It made me want to make myself numb to any pain that I felt.”

He told the court that he has recently completed a drug and alcohol program. He told Tognarelli that he would benefit from similar treatment in prison.

Gerry Armbruster testified that he himself had been convicted of residential burglary and battery and had served three years in the Illinois Department of Corrections. He had struggled with drug addiction and he asked Tognarelli if he could receive drug treatment as part of his sentence. Tognarelli agreed.

Gerry Armbruster wound up serving 21 months of his sentence at the Southwestern Illinois Correctional

Center, in East St. Louis. The facility offers behavior modification and drug and substance abuse programs.

“I changed everything about my life, and I want my brother to be able to do those things,” he said. “I know who he is and I know what he’s capable of doing, pointed in the right direction.”

In August, Corey Armbruster pleaded guilty to one count of drug induced homicide, punishable by six to 30 years in prison. Prosecutors agreed to a cap of 10 years. Of the eight-year sentence imposed by Tognarelli, Armbruster must serve at least 75 percent.

Fischer said he will be sent to the Menard Correctional Center first, and officials there will determine if and when Armbruster receives drug treatment.

“Our office will continue to prosecute these, and hopefully people will get it into their minds that you can’t do this,” Fischer said.

Senior Services Plus  
earns recognition

For the Intelligencer

On Saturday, April 18th, 2015, Senior Services Plus was recognized as the recipient of the AllenForce Diamond Award. According to AllenForce, the non-profit agency was awarded due to its “Dedication, Determination and Drive.”

AllenForce’s mission is “To promote a healthy and successful lifestyle for all veterans of all eras of the United States Armed Forces and their families by providing positive networking, fitness and recreational opportunities and community events. AllenForce strives to bridge the gap between military and civilian life as veterans face an ever-changing adjustment process after serving our nation.”

Senior Services Plus was recognized for licensure of key personnel through AllenForce’s Healthy Minds Healthy Bodies Workshop both in 2013 and 2014. Devon Neal, SSP’s Community Based Services Director, oversees the grants, planning and reporting of the program. Tiffany Lubinski, Healthy Minds Healthy Bodies Coordinator, handles all day-to-day coordinating with the veterans. The non-profit also has two Healthy Minds Healthy Bodies trainers working with the veterans within the fitness center.

In 2013, Senior Services Plus received a cash grant from the Illinois Department of Veterans’ Affairs which made offering the Healthy Minds, Healthy Bodies program possible. Senior Services Plus has received this grant for two consecutive years giving them a unique opportunity to expand and grow the program into what it is today. As a Healthy Minds, Healthy Bodies Licensed Facility, Senior Services Plus offers a free health club membership to veterans with a 10% disability rating or health need and one free membership to a person of their choice (battle buddy), personal training sessions and monthly networking events to veterans and their loved ones-grant funds permitting. In Alton alone, they have served 52 veterans in the

past two years and currently have a waiting list of about 50 for the next program year beginning in July. According to Donna Allen-Sebok, President of AllenForce, “creative new special event programming has started above and beyond the program model.”

“They have had wait lists for veterans to get involved and through their other special events and outreach, have served hundreds of veterans,” said Allen-Sebok. “Some of their additional veteran programming includes a monthly Veteran Coffee Chat, which brings in speakers to share about resources in the community specifically geared at veterans and which facilitates a forum for veterans to share with each other.”

Neal feels that since beginning the program at Senior Services Plus, she has observed so much improvement with each individual enrollee.

She added, “It has been incredible to see how once they begin opening up, the healing starts in ways we could not have imagined. We have a family team in our veterans. They support each other and get to know each other’s families and are there for one another when life comes to a stand-still with illness and death. They have found the bond again with other veterans that they once had out in the field or in the service office. The entire program is amazing and humbling to witness.”

Some of the veterans are now volunteering in our Senior Corp Foster Grandparent Program as mentors and tutors in area schools and Achievement Centers. Veterans also have the opportunity to help at the center as volunteers and participate in outreach as a team. The newest project of volunteering is at the local Juvenile Detention Center at Pere Marquette.

The Healthy Minds Healthy Bodies participants also go bowling, fishing, skeet shooting, go to the drive range. The social networking events often connect them with an activity that has been lost due to ailing health, or isolation.

## SUMMER

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Each day of a Summer Zone week highlights a unique experience for all students to enjoy. Programming includes activities across the areas of art, drama, technology, literacy, sports, recreation and science.

For example, two hours of every Monday is devoted to art when local artists provided by the Edwardsville Arts Center visit the Summer Zone students for Masterpiece Mondays. During this time, students work with various art mediums and techniques.

Compton was excited to announce the new programming for this year’s Summer Zone. “We will be using the Chuck Fruit Aquatic Center for our swimming and water activities, STEM activities will be provided and presented by the SIUE STEM Resource Center and our students will be introduced to agriculture edu-

cation provided through the Madison County Agriculture in the classroom program,” she noted.

As part of this new programming, Compton explained that Tuesdays through Thursdays SIUE’s STEM Resource Center would be providing six student interns who have designed and will teach an interactive science lab. “Students will participate in science enrichment activities four and a half hours a week. The STEM labs will feature experiences in the areas of physics, robotics, chemistry, astronomy and biology,” she said. “It’s amazing to watch even our youngest kindergarten students work together across the branches of science.”

In addition to these partnerships, the district has established partnerships with the athletic and performing arts departments at Edwardsville High School. The T3 or Training Tomorrow’s Tigers involves the Edwardsville High School athletic department conducting a mini-sports clinic each Friday. The clinics feature 11 different EHS sports. “EHS varsity athletes and their coaches volunteer their time

to design and lead the sport clinics,” Compton noted. “Summer Zone students enjoy each sport with their home town sports heroes in Tiger territory at EHS.”

Last summer the T3 program was expanded to include Tigers Take the Stage where the EHS performing arts department designed a series of interactive workshops for the Summer Zone students introducing them to various performing arts.

“These partnerships have proven to be invaluable to our program – our partners’ willingness to share their expertise provides our students with opportunities they might not have otherwise,” Compton said.

Summer Zone offers flexibility for parents too. Parents may choose any number of weeks to participate. The weekly Summer Zone rate is \$125 plus a \$25 deposit for each week selected. The registration deadline is May 22.

Contact Compton for additional information at 655-6011 or kidzone@ecusd7.org. Registration forms may also be downloaded at www.ecusd7.org/summerzone.

## LIBRARY

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A number of sponsors will be on hand, including Anytime Fitness, Studio Eleven, Southern Illinois Healthcare Foundation, Fantastic Sam’s, Leisure World and Touchette Regional Hospital.

The Women’s Health Jam is the last of the major events at the library until June 3 when the library hosts its Summer Reading Kickoff Party outside the library at Edwardsville City Park.