Message from the Dean's Office

Welcome to the Summer 2014 issue of the Fulbright Review. People often ask professors if we enjoy the summer—when we must have time to relax. While the type of work changes, the summers are often more busy than the semesters.

Since our Spring issue of the Fulbright Review was released in April, more than 250 students and 20 faculty members have traveled to 28 countries for study abroad opportunities. Here on campus, we hosted the Fulbright College Advisory Council and the Campaign Committee, and we hired 23 new tenured and tenure-track faculty members. We celebrated the television premier of the Center for Advanced Spatial Technologies, graduated more than 1,000 students and guided 1,470 new students through orientation. We’re also planning for fall events, including our first visit from the Fulbright Foreign Scholarship Board and the first in a series of grant writing workshops.

You can read about some of these milestones in this issue, and I hope you will. We enjoy learning about the wonderful things happening with our students, alumni, donors, friends, faculty and staff—our Fulbright Family. And I hope you enjoy them as much as we do.

We know that there are many stories we never get to hear. If you’re willing to send us updates about your experiences and accomplishments, then we would love to hear from you. I hope you’ll share them with us on our submit a story page or by email at Fulbright@uark.edu.

Best Wishes,
Preparation, Imagination Lead Alumnus to 9/11 Memorial and Museum

On May 21, 2014, the National 9/11 Memorial and Museum opened to the public. Running the communication efforts for the museum, including all of the fanfare and worldwide attention surrounding it, was Michael Frazier.

The public opening came just days after President Barack Obama and 9/11 Memorial Chairman Michael R. Bloomberg addressed 9/11 families, rescue and recovery workers, survivors and others at a May 15 dedication ceremony. The ceremony also included remarks by New York Gov. Andrew Cuomo, New Jersey Gov. Chris Christie, former New York Gov. George Pataki and former New Jersey Gov. Donald DiFrancesco, as well as New York City Mayor Bill de Blasio and former New York City Mayor Rudy Giuliani. First Lady Michelle Obama, former President Bill Clinton and former Secretary of State Hillary Clinton attended.

Coordinating the media around events with so many public figures is a unique challenge, and this 2001 graduate of Fulbright College’s Walter J. Lemke department of journalism was prepared. Frazier became vice president of communications for the museum after a 10-year career in journalism and serves as its chief spokesman and strategic media advisor. He also oversees mobile, online, social and digital communications, and he credits the University of Arkansas for much of his success.
“I am very proud to be from the Natural State, and I’m proud to have gone to the University of Arkansas,” he said. “These are the
places and people who shaped me
and made me who I am.”

Frazier describes himself as an “old-school reporter,” and he compares learning proper techniques in this field to that of any other craft—after you know the basics, your imagination can take you wherever you want to go.

“I think schools often forget that you need a firm foundation—that’s what allows you to be creative. Journalism has changed by leaps and bounds since I graduated. My professors taught me to play the basic notes, and as I grew, now I can play jazz. Every time I hit a bump, I go back to the basics. That’s what has helped me get to the next level or clear a hurdle.”

Throughout his career, Frazier has worked with people from around the world with many different personal and educational backgrounds. Through these encounters, he has learned that despite a person’s academic pedigree the college experience is only what you make of it.

“If you have a plan and the drive, then the U of A gives you all the tools you need to be successful—however you define success. There are opportunities to learn and grow everywhere you look. If you don’t take advantage of the opportunities, then you’re missing out on an unbelievable education. “I’m very happy with where I am and very happy with where I came from. If you can embrace both of those things, then the possibilities are practically unlimited.”

One of Frazier’s reasons for choosing to study journalism at the University of Arkansas was that many of the faculty members were either part of the journalism industry in the past or still actively reporting while teaching.

“At school I was fortunate to be exposed to veteran print reporters while in the classroom. I wanted to communicate—through writing in particular. I wanted real-world experiences, and I knew I would get that here. “I had many amazing teachers and mentors—in school as well as in the field—but Gerald Jordan was probably my greatest influence. I wouldn’t be here if not for him.”

Frazier grew up in Hot Springs, where he was active in the community and served as class president in high school. When he chose to continue his education in Fayetteville, he came without his twin brother—a huge
adjustment for a young man whose life revolved around family and community. However, after spending some time on campus, he found that connections could take many forms.

“It was nice to have a second home at the U of A,” he said. “I found many families here. Lemke was a family. For those of us who worked at the Traveler, that was also a family. Teachers were always helpful. They were happy to help you find a lead for your story, but then they’d ask, ‘Are you going to class?’ They wanted you to succeed.”

(from left to right):
President Barack Obama, Michael R. Bloomberg, First Lady Michelle Obama, Diana Taylor, Hillary Clinton, Bill Clinton
A view of Foundation Hall during the Dedication Ceremony
Young People Chorus of New York City performs at the Dedication Ceremony (photo credits: Jin Lee, courtesy of www.911memorial.org)
Legacy
Life Becomes Art in a Visual Memoir of the Fulbright Experience

*The Fulbright Triptych* by Simon Dinnerstein will be on extended exhibit at the University of Arkansas School of Law, beginning in July.

Measuring seven by 14 feet and painted between 1971 and 1974 the triptych is Dinnerstein’s “visual memoir.” This set of three panels will be on display at the university for a year as part of Chancellor David Gearhart’s initiative to highlight public art and the Fulbright Program for international foreign exchange.
“Public art defines a sense of place, allows audiences to experience and consider new ideas, and can enhance the learning opportunities at the university,” Gearhart said. “A public art program can express the value of art and education to the campus community, regardless of one’s academic discipline.”

Dinnerstein is a painter and graphic artist from Brooklyn. He has a Bachelor of Arts in history from the City College of New York and attended the Brooklyn Museum Art School for painting and drawing.

In 1971, he received a Fulbright Fellowship to Germany. He traveled to the town of Hesse Lichtenau and it was there he began painting The Fulbright Triptych.

The title of the work leads some to assume that the painting is about the Fulbright Program when in reality it was Dinnerstein’s experience through the program that provided the backstory for the painting. The program brought Dinnerstein a grand sense of exploration, complexity and curiosity, and he would like to believe that these sensations are cemented into the triptych.

“When I finished the painting and thought of a title, The Fulbright Triptych came to me,” said Dinnerstein. “The title is a homage to the sense of imagination and life-changing voyage, which is Sen. Fulbright’s amazing program and year abroad.”

The painting was still in its beginning stages when he returned from his year in Germany. After a year of work, the middle panel was between two-thirds and three-fourths complete. A gallery owner named George Staempfli was impressed with his work and bought the painting in its unfinished state.

“I was, to say the least, quite stunned and knocked off my feet,” said Dinnerstein.

After Staempfli’s purchase, Dinnerstein completed The Fulbright Triptych and it is now displayed in exhibits around the world.

The painting has many themes and various meanings to different people. Some see it merely as an art studio; others notice how all the visual arrows and directives in the painting point to the copper plate on the table. The themes taken from the painting depend on the perception of the viewer.

Dinnerstein looks at the painting and sees a family in Germany, the push and pull between art and family, the sense of quest that is in an artist's life and the journey that life entails.
“It explains how visual images and enthusiasms define us,” Dinnerstein said.

The piece is scheduled to arrive in mid-July and will be on exhibit in William H. Enfield Hall on the third floor of the School of Law building. It comes to the university from the German Consulate New York at United Nations Plaza where videos were produced about The Fulbright Triptych and Dinnerstein.

Watch the university calendar for information about opening and closing dates as well as events associated with the exhibit. Many of Dinnerstein's other works are included in private and public collections. To learn more about Dinnerstein and view examples of his work, visit his website.

(top): The Fulbright Triptych
(bottom): (left) Copper Plate Detail, (right) Detail
Gifts
A Lifelong Journey of International Perspective

For Melissa Maddox, the urge to see the world came very early in life. Growing up, she possessed an international curiosity that was fed by family members who shared her interest. Whether it was entertaining
visiting professors as dinner guests, hosting exchange students or supporting her studies abroad, her family made sure her global perspective was expertly crafted. It’s no surprise that she has always been driven to look abroad.

Maddox studied Spanish at Fayetteville High School. Her first trip overseas was to Spain, and it didn't take long for her to know that she was hooked. A trend started to develop. She traveled to Spain twice more as an undergraduate and went to India while pursuing her MBA. She attributes much of her professional success to the skills she acquired during these experiences.

In her current role, with Nestlé Purina, Maddox travels to 14 countries spanning most of Latin America and the Caribbean. As a matter of simple business communication, be it a meeting or conference call, she uses her education in Spanish language and culture daily.

"I've used my language skills throughout my career, in everything from public service to international business," Maddox said. "The cultural flexibility and language skills I learned in study abroad play a large role in my ability to be successful in a dynamic, global environment."

Maddox’s trips to Spain as an undergraduate were made possible by private gift support. The Holly Turner Meek Endowed Scholarship Fund has been funding study abroad experiences for undergraduate students for more than 20 years.

"The scholarships helped me see the world, understand different cultures and shaped my perspective into a global vision. I was especially impressed by the selflessness of those who endowed these scholarships; their generosity provided me with life-changing experiences."

As a result of her drive to see the world, and the generosity of someone she’s never met, Maddox was given an opportunity to experience the culture of other countries firsthand. Always grateful for those who gave back, she looked for the right mechanism to allow her to pay it forward. While working with General Mills, she learned of their dollar-for-dollar educational matching gift program. Through this program she started the Melissa L. Maddox Endowed Award for Spanish Language and Study Abroad in 2009, just one year after earning her Master of Business Administration and eight years after her Bachelor of Arts in Spanish.

The first beneficiary, Michelle Agee, was selected last fall and elected to study abroad in Chile. Melissa frequently travels to Chile for work, and their time in country almost overlapped.
Nicole Howard, the most recent awardee, chose to participate in the faculty-led program to Puebla, Mexico. The program correlates with her studies and future goals. To complement their Spanish classes at the Universidad Popular Autónoma del Estado de Puebla, students also have the opportunity to participate in a service internship in a business in Puebla.

"This will provide me with hands on experience in the business world from a global standpoint, and I hope to learn a lot through this opportunity," Howard wrote in a letter to Maddox. "In addition to the classes and internship, I will have the opportunity to travel on weekend excursions to Mexico City, Teotihuacan, Cuetzalan, and Oaxaca."

Maddox’s education and career path have been the result of conscientious, strategic decisions. By the same token, the method and focus of her giving were the product of deliberate planning. She decided to help students in the same way she was helped as a student. Growing up in a globally conscious environment, and benefiting from the generosity of others, have shaped Melissa Maddox into a philanthropic alumna whose success has already spanned international boundaries.

(from left to right):
(Melissa Maddox in Santiago, Chile, and at La Sebastiana Pablo Neruda Museum in Valparaiso, Chile)
Gifts
Voluntarily Musical
It’s 10 o’clock on Friday evening—the perfect time to prop up your feet, turn on the radio and unwind after a long week. If the station happens to be tuned to KUAF, you’ll soon hear the unpredictable yet soothing sounds of jazz fill the air, thanks to volunteer Robert Ginsburg and his show, “Shades of Jazz,” which airs every Friday and Saturday from 10 p.m. until midnight.

Similarly, those driving to dinner on a Saturday evening might find themselves listening to a selection of bluegrass, singer-songwriters, honkytonk or acoustic blues if KUAF is their chosen station, thanks to Mike Shirkey and his program, “The Pickin’ Post,” airing every Saturday from 7 p.m. until 9 p.m. Both shows are the result of numerous volunteer hours from two individuals who blend their love for music with an appreciation for public radio.

A volunteer with KUAF since 1979, Ginsburg moved to Arkansas from Columbia, Missouri, in 1976. Part of the attraction of joining the station was the availability of music to him, since it provided him with the opportunity to become familiar with KUAF’s library of work at his fingertips. Though he does not consider himself a musician, he believes his role as a volunteer at KUAF fuels his love for music.

“It keeps me in the center of what is happening in the music world,” says Ginsburg. “The next best thing to creating music is sharing it.”

Today, Ginsburg realizes what an asset the station is for the community and how much it has improved the quality of life for people in Northwest Arkansas.

Shirkey, a graduate of Fulbright College, moved to Northwest Arkansas from Stuttgart in 1965. Because he had taken radio programming classes in college, he was a natural fit for taking over “The Folk Show” from his predecessor. He has now volunteered with KUAF for more than 30 years.

“I like the diversity of this radio station,” he says. “It’s a fun place to be. There’s always something going on. I try to put together songs and tunes that will take folks on a two hour musical journey.”

Organizing and recording their weekly shows is the fun part for both. Still, Ginsburg and Shirkey also speak honestly and easily about the importance of financial support for KUAF and the incredible difference it makes for the station. Shirkey regularly volunteers with the fundraising drives and enjoys seeing the funds help pay for the daily programming.
“Many people don’t realize how little it costs to become a member,” says Ginsburg. “It’s good for the body, mind and soul.”
Successes
Using Lasers to Map Mysteries of the Past

It started with a cold call in the dead of winter. Adam Barnes, a researcher in the Center for Advanced Spatial Technologies in Fulbright College, was headed into a meeting on Jan. 14, 2013, when he got a
phone call from a London-based television producer who was interested in hiring a technical expert for a new documentary series on ancient structures.

“She was looking for someone who could laser scan,” Barnes said, referring to the center’s specialty, geospatial analysis and modeling. “After hearing what it involved, it was clear that she needed a team. We had several conversations over Skype within the next few days, and things really moved quickly.”

Soon, researchers from CAST were traveling to historic locations around the world, including the pyramids in Egypt, St. Paul’s Cathedral in London and the ancient desert city of Petra in Jordan. They were filmed doing what they do best, using their advanced remote sensing technology to collect and analyze billions of measurements to form what is known as a point cloud, which provided a 3-D perspective of these structures but also solved some of the enduring engineering mysteries surrounding them.

The three-part documentary series, *Time Scanners*, made its United States debut on PBS in July. According to PBS, the series “reveals physical and forensic history, allowing viewers to reach out and touch the past.”

“Our role in the series is portrayed strongly as the technologists, experts and analysts in gathering and interpreting the data,” said Malcolm Williamson, a research associate at CAST who collected and analyzed data in Egypt and Jordan.

The Center for Advanced Spatial Technologies, established in Fulbright College in 1991, is dedicated to research and applications in geospatial analysis and modeling, remote sensing and digital photogrammetry. Remote sensing is the measurement or acquisition of information about an object without direct contact, such as by satellite imaging, aerial photography or radar. Photogrammetry is the science of recording, measuring and interpreting photographic images or other two-dimensional, remotely sensed data.

Four other current or former CAST researchers participated in the series: Eileen Ernenwein, Rachel Opitz, Katie Simon and Caitlin Stevens. Barnes, Williamson, Ernenwein and Simon are all Fulbright College alumni; Ernenwein joined the faculty at East Tennessee State University in 2012.

Overall, the researchers at CAST have diverse backgrounds. There are anthropologists, archaeologists, computer engineers and landscape architects.

“A lot of what we do is more science than art, but then there is some that is more art than science,” said Barnes, who holds a Master of Arts in geography from Fulbright College. “We
can speak to an archaeologist or a classicist but we can also speak to a scientist. There is a marriage between disciplines. We speak all of those languages.”

For instance, Simon graduated from Utah State University with bachelor’s degrees in anthropology and art and had experience in cultural resource management in the western United States before coming to Fayetteville for graduate school.

“CAST is a fantastic place to work because it is a team-oriented environment,” Simon said. “We’re constantly using one another as resources to help augment our projects and our research. It’s fantastic to be surrounded by all the experts you could possibly need to help you make the best of whatever you are working on. In addition to being able to travel a lot, which is fun, it is amazing to be able to work with so many excellent people in the field.”

Steve Burrows, executive vice president of WSP, a global engineering and design consulting firm, is the featured expert in *Time Scanners*.

“The laser scanning technology meant that we could analyze the ancient structures in a way that no one ever has before, and some of the things we found were incredible,” Burrows said.

*Time Scanners* premiered July 1 with “Egyptian Pyramids.” For the episode, Stevens and Williamson traveled to Egypt to scan the pyramids—the tombs of the mighty pharaohs—to find out how they evolved from simple mud-brick structures to the most impressive buildings in the ancient world.

“One of my high points on the show was scanning the Great Pyramid of Giza,” Williamson said. “I thought that was really cool. How many people in the world get to do that?”

The production schedule for the series was tight, so the CAST researchers had to collect and analyze data in a couple of days. The process typically takes at least two weeks, said Simon, a research assistant at CAST who holds a master’s degree in remote sensing applications in archaeology from Fulbright College.

“These were some pretty unique circumstances, so we were always thinking about making things work properly because we weren't going to get a second chance,” she said.

The second and third episodes in the series premiered on July 8 and 15. Check your local PBS listings for encore presentations.
Encore presentations of Time Scanners on AETN include:

- 07/17/2014 - Petra - AETN-1 HD
- 07/18/2014 - Petra - AETN-1 HD
- 08/04/2014 - Egyptian Pyramids - AETN-3 PLUS/WORLD
- 08/04/2014 - St. Paul's Cathedral - AETN-3 PLUS/WORLD
- 08/04/2014 - Egyptian Pyramids - AETN-3 PLUS/WORLD
- 08/05/2014 - St. Paul's Cathedral - AETN-3 PLUS/WORLD
- 08/09/2014 - Egyptian Pyramids - AETN-3 PLUS/WORLD
- 08/10/2014 - St. Paul's Cathedral - AETN-3 PLUS/WORLD
- 08/16/2014 - St. Paul's Cathedral - AETN-3 PLUS/WORLD
- 08/23/2014 - Petra - AETN-3 PLUS/WORLD

(from left to right):
(top) Center for Advanced Spatial Technologies (CAST) on location in Petra, London and Egypt for Time Scanners series on PBS
(bottom) CAST on location in Petra; Jack Cothren, Adam Barnes, Malcolm Williamson and Catlin Stevens (on screen) take questions from the audience at the Time Scanners premiere; an audience member asks a question at the Time Scanners premiere
Successes
Celebrating the Natural Sciences
The accomplishments of our students, faculty, staff and alumni are an important focus of the Fulbright Review. Fulbright College is comprised of four distinct areas, the fine arts, humanities, social sciences and natural sciences. Each issue of the Fulbright Review dedicates a story within the Successes section to some of the year's highlights within a particular area. The Summer issue features successes in the natural sciences.

The natural sciences welcomed seven new tenure-track faculty members last fall. Jeffery Lewis and Timothy Evans joined the department of biological sciences, Adriana Potra, Mohamed Aly and Song Feng joined the department of geosciences, Lance Miller joined the department of mathematical sciences and Pradeep Kumar joined the department of physics.

Ten faculty members were honored with CAREER awards from the National Science Foundation, including Ingrid Fritsch, Colin Heyes, Julie Stenken, Susanne Striegler and Feng Wang in chemistry and biochemistry, Greg Dumond in geosciences, Luca Caponga in mathematical sciences, and Laurent Bellaiche, Lin Oliver, Jak Chakhalian and Paul Thibado in physics.

Fulbright College partnered with the College of Engineering and University of Arkansas Global Campus to lead an initiative to increase the number of STEM graduates with the state’s two-year colleges.

The departments of biological sciences, chemistry and biochemistry, and physics hosted the 2013 Conference for Arkansas IDeA Network of Biomedical Research Excellence, which featured Michael F. Summers of the Howard Hughes Medical Institute as keynote speaker.

**Department of Biological Sciences**

- Associate professor Jeffrey Silberman and alumnus Matt Brown discovered and characterized a new organism. They named their discovery *Pygsuia Biforma*.

*Photos: Jeff Silberman, professor of biological sciences*

*Pygsuia Biforma.jpg A false-color micrograph of Pygsuia biforma. Scale bar – 2 µm. Image credit: Matthew W. Brown et al / Proc. R. Soc. B.*

- Visiting professor Steve Stephenson, spent two weeks in Vietnam on a Fulbright Specialist Award. His visit included presenting seminars, holding workshops and developing potential research opportunities. Stephenson was also featured in a PBS Newshour science article.
Dmytro Leontyev, an associate professor in the department of biotechnology of Kharkiv State Zooveterinary Academy in Ukraine, spent the 2013-14 academic year studying slime molds at the University of Arkansas as a Senior Fulbright Scholar.

Doctoral student Rebecca Mickol found evidence in her research that suggests methanogens—among the simplest and oldest organisms on Earth—could survive on Mars.

Photo: Methanogens contained in these test tubes, which also contained growth nutrients, sand and water, survived when subjected to Martian freeze-thaw cycles at the University of Arkansas.

Assistant professor Andrew J. Alverson was awarded a grant from the National Science Foundation for genomic sequencing of diverse microalgae.

Photo: A scanning electron micrograph of the marine diatom, Triceratium, one of the species that will be studied under the National Science Foundation grant. Copyright Elizabeth Ruck

Assistant professor J.D. Willson addressed students and the public as a featured scholar for the University of Arkansas Clinton School of Public Service Speaker Series. Willson was also featured in a Discovery News article about Burmese pythons in Florida.

Photos: J.D. Willson and attendees at the University of Arkansas Clinton School of Public Service (photos by Jacob Slaton)

Student Cassandra Marnocha conducted research in Kärkevagge, a valley north of the Arctic Circle. Her research focused on minerals found in rock coatings that have also been identified on Mars.

Photo: A stromatolite on a large basalt clast from the Copper Harbor Formation on the Keweenaw Peninsula in Michigan. Gallagher says this formation is thought to have originated from river deposits. If so, a stromatolite here would be suggestive of life in a terrestrial setting. Credit: Timothy Gallagher

Undergraduate students Kassidy Joyner, Will Pohlman and Arhita Dasgupta were named Sturgis Fellows.
Honors College Fellow Wilson Guillory was selected for a summer internship at the Field Museum of Natural History in Chicago.

*Photo: Honors biology major Wilson Guillory*

Professors Michael Douglas and Marlis Douglas participated in the fourth International Symposium on “Alien Species in the Holarctic (= Northern Hemisphere)” organized by the Russian Academy of Sciences.

*Photos: (left) Michael Douglas (right) Marlis Douglas*

Undergraduate student Mikaila Wilson competed in the 2013 Miss Arkansas Scholarship Pageant.

**Department of Chemistry and Biochemistry**

A research team led by associate professor Feng Wang identified that water, when chilled to a very low temperature, transforms into a new form of liquid. The researchers performed a simulation in supercooled water and confirmed a “liquid-liquid” phase transition at 207 Kelvins, or 87 degrees below zero on the Fahrenheit scale.

Distinguished professor Charles L. Wilkins was awarded the 2013 American Chemical Society Division of Analytical Chemistry Award in Chemical Instrumentation.

*Photo: Award presentation by Cindy Larive to Charles Wilkins*

The National Science Foundation awarded associate professor Susanne Striegler a three-year grant to further develop water-soluble microgels with immobilized transitional metal complexes as catalysts for glycosylation reactions.

Assistant professor Nan Zheng was given the National Science Foundation’s Faculty Early Career Development Program award to further his research in chemical reactions sparked by visible light.
Associate professor Paul Adams received the 2013 Presidential Award for Excellence in STEM Research and Mentoring by the National Organization for the Professional Advancement of Black Chemists and Chemical Engineers.

- Doctoral candidate Kolawole Ayinuola was awarded a Love of Learning Award by the Honor Society of Phi Kappa Phi.

- Doctoral student Randy Cabrera was a member of one of six teams from the University of Arkansas that advanced to the finals of the 14th annual Donald W. Reynolds Governor’s Cup Collegiate Business Competition.

  Photo: Carol Reeves, associate vice provost for entrepreneurship at the University of Arkansas (far left), is joined by students on 2014 U of A business plan competition teams.

- Keaton Piper was featured in the September 2013 issue of Inquiry: The University of Arkansas Undergraduate Research Journal.

  Keaton Piper developed and examined whether low-cost titanate nanofiber-bioscaffolds compensate for the longstanding problem of implantable biomaterial’s poor stability and versatility.

Department of Geosciences

- The department came home last fall when University of Arkansas rededicated Ozark Hall, which also houses the Honors College and the Graduate School.

- Professor Tom Paradise presented Solving Mysteries in the Valley of the Crescent Moon: Two Decades of research in Petra, Jordan and gave the audience a sneak peek at the NOVA series Paradise is doing about Petra, which will be shown on PBS.

  Photo: (left) Tom Paradise (right) Petra

- Professor Christopher Liner was elected to lead the Society of Exploration Geophysicists, serving consecutive one-year terms as president-elect (2013-14), president (2014-15) and past-president (2015-16) of the organization.
• Distinguished professor David Stahle and graduate student Jordan Burns have discovered an important relationship between periods of drought and famine in agricultural regions of central Mexico and typhus epidemics. Their findings were published in *Emerging Infectious Diseases*, a Centers for Disease Control and Prevention journal that tracks and analyzes disease trends.

*Photo: Jordan Burns and Rodolfo Acuna at the Zocalo, the central square in the heart of historic downtown Mexico City.*

• Stahle’s research on core-sampling of old growth cypress was featured in the media for bringing understanding to the importance of preserving the Lowcountry (a geographic and cultural region along South Carolina’s coast) ecosystem.

*Photo: For more than a decade, Distinguished Professor David Stahle has taken core samples from trees and examined the chronology of their rings to help explain the societal impact of drought and other climate changes.*

• Assistant professor Song Feng led an international research team that calculated that the spread of plant species in nearly half the world’s land areas could be affected by predicted global warming by the end of the century.

• The Arkansas Famous and Historic Tree Program recognized the historical significance of several noteworthy trees that were cored and dated by the university’s *Tree Ring Lab*. The trees were discovered to be more than 1,000 years old.

*Photo: courtesy of David Stahle’s research website*

• The department hosted employees from Devon Energy Corp. to talk with students about potential internship and career opportunities.

**Department of Mathematical Sciences**

• Associate professor Shannon W. Dingman and professor Bernard L. Madison were honored with the *Steen Award* by the Board of the National Numeracy Network for their article "Quantitative Reasoning
in the Contemporary World, 1: The Course and Its Challenge,” which covers course development, pedagogy, student population served and assessment.

Photo: (left) Shannon Digman (right) Bernard Madison

• The department hosted its 39th annual Spring Lecture Series. Alexander Nagel of the University of Wisconsin delivered a series of five lectures on Multiparameter Geometry and Analysis.

• Distinguished doctoral fellow Raymond Walter was featured in Quest Magazine for his academic accomplishments while battling Duchene muscular dystrophy.

• Professor John Ryan was appointed external examiner for a mathematics Ph.D. thesis at the University of Newcastle in New South Wales, Australia.

Department of Physics

• Robert L. Byer, professor of the school of humanities and sciences at Stanford, presented “50 Years of Lasers: Meeting the Challenges of the 21st Century” as the 2014 Robert D. Maurer Distinguished Lecturer.

Photo: (left) Robert L. (right) Byer Robert D. Maurer

• The National Science Foundation awarded Woodrow Shew a three-year grant for a collaborative research project with biophysicist Ralf Wessel at Washington University in St. Louis. The scientists and their research teams will investigate how turtle brains process visual information.

• The Institute of Physics in the Chinese Academy of Sciences awarded professor Jak Chakhalian with a senior foreign visiting professorship. Chakhalian began his three-month professorship at the institute’s State Key Laboratory for Surface Physics in Beijing in June.
Chakhalian and his former doctoral student Jian Liu developed a tool that allows them to control and engineer the novel behavior of the nanomaterial on an atomic scale. The finding makes it possible for researchers to design new classes of material for the next generation of electronic devices.

*Photo: Jian Liu, Ph.D.student*

• Visiting professor Joseph Herzog and his colleagues demonstrated the capability of measuring temperature changes in very small 3-D regions of space by using the interaction between light and charge fluctuations in metal nanostructures called plasmon’s.

• Research professor Sergey Prosandeev and distinguished professor Laurent Bellaiche produced research showing that behavior could be predicted and understood in thin films made of materials called relaxors, which can be used in electronic devices.

*Photo: Laurent Bellaiche*

• New analysis by Bellaiche and research assistant professor Yurong Yang revealed a novel magnetoelectric effect that makes it possible to control magnetism with an electric field.

*Photo: Yurong Yang*

• A study led by research associate Peng Xu found that platinum nanoparticles limit their size and organize into specific patterns when bonded to freestanding graphene. The research was conducted in professor Paul Thibado’s lab. Thibado oversaw the research, which also included graduate students Matthew L. Ackerman, Steven D. Barber, Dejun Qi and James Kevin Schoelz and scholars from Missouri State University, the University of Antwerp and Shanghai University China.

*Photos: (left) Peng Xu (right) Paul Thibado*

• An international research group led by assistant professor Salvador Barraza-Lopez studied graphene’s properties using a new mathematical framework to make extremely accurate characterizations of the two-dimensional material’s shape. The groups’ findings were published in the journal ACS Nano.

Graduate students Benjamin Davis and Amanda Schilling traveled with assistant professor Julia Kennefick to the *Kitt Peak National Observatory* to observe growing black holes in the centers of nearby spiral galaxies.

*Photos: (from left) Julia Kennefick, Benjamin Davis and Amanda Schilling*
Events
New Ways to Support Innovative, Interdisciplinary Research

Fulbright College will host a new grant writing workshop in the fall. The Arts and Humanities Grant Writing Workshop, which will be held from 3 p.m. until 5 p.m. Tuesday, Sept. 16, in Old Main room 523, is designed to benefit faculty at every level, from recent graduates to advanced researchers. It will be the first in a series of events focused on the nationally competitive fellowship process and the importance of applying for external funding.
“The workshop’s spotlight on innovative and interdisciplinary research in the fine arts and humanities distinguishes it from other grant writing programs at the university,” said Lynda Coon, associate dean of Fulbright College and workshop organizer. “By building on Fulbright College’s impressive record of garnering nationally competitive grants, the goal of these regularly scheduled workshops is to increase the number of faculty applying for top fellowships. We will also celebrate the achievements of those scholars who have already earned awards and are generously willing to share the art of successful grant getting with their peers.”

Fulbright faculty members have already established impressive records in winning the most prestigious fellowships in the Humanities and Fine Arts, including:

- American Council of Learned Societies
- Fulbright American Scholars
- Guggenheim Fellowships
- Mellon Foundation Fellowships
- National Endowment for the Arts
- National Endowment for the Humanities
- National Humanities Center

The Sept. 16 session will concentrate on Top American Research University fellowships in the fine arts and humanities, including those offered by the Guggenheim, National Endowment for the Arts, National Endowment for the Humanities and National Humanities Center.

The workshops will feature faculty who have previously received such awards and who are willing to impart their expertise, experience and enthusiasm for winning nationally competitive grants. Organizers and presenters hope to intensify engagement with competitive grant awards as part of the university’s initiative to increase federal and extramural research expenditures.

The inaugural workshop will showcase Fulbright College faculty members Geoffrey Brock, Lynn Jacobs and Beth Schweiger. All three have won multiple Top American Research University fellowships. The methods used by these three scholars bridge the often artificial divide between artistic and humanistic research endeavors.

Brock, professor of creative writing in the department of English, is a poet and translator who has taught in the university’s highly ranked Creative Writing Program since 2006. He received a Guggenheim Fellowship
in 2005, which he applied to his most recent book is *The FSG Book of 20th-Century Italian Poetry*. His latest collection of original poems, *Voices Bright Flags*, will be published in January 2015. He received a 2010 fellowship from the Cullman Center for Scholars and Writers at the New York Public Library to complete the collection. Brock has also received two fellowships from the National Endowment for the Arts and one from the Howard Foundation at Brown University.

Jacobs, professor of art history and religious studies in the department of art, teaches courses in Medieval, Italian Renaissance, Northern Renaissance and Baroque Art. She has written articles on Northern Renaissance painting, sculpture and manuscript illumination, which have appeared in journals such as *Art Bulletin*, *Zeitschrift für Kunstgeschichte* and *The Sixteenth Century Journal*. Jacobs has been awarded two fellowships from the National Endowment for the Humanities, and her article, “The Marketing and Standardization of South Netherlandish Carved Altarpieces: Limits on the Role of the Patron,” was the 1990 recipient of the *Art Bulletin’s* Arthur Kingsley Porter Prize. Her books include *Early Netherlandish Carved Altarpieces, 1380-1550: Medieval Tastes and Mass Marketing* (Cambridge University Press, 1998) and *Opening Doors: The Early Netherlandish Triptych Reinterpreted* (Penn State Press, 2012). Her current book project focuses on boundaries and liminal spaces in Netherlandish art.

Schweiger, associate professor of history and religious studies in the department of history, teaches early American social and cultural history. She is the author of *The Gospel Working Up: Progress and the Pulpit in Nineteenth Century Virginia* (Oxford, 2000) and co-editor of *Religion in the American South* (North Carolina, 2004). She is completing a study of print and vernacular culture in the early South that has received support from many institutions, including the National Endowment for the Humanities, Yale University, the American Antiquarian Society, the Library Company of Philadelphia and the Huntington Library. She received an American Antiquarian Society Fellowship (2008-09) and a Faculty Fellowship (2011-12), both from the National Endowment for the Humanities.

For more information about the the workshop, contact Lynda Coon at llcoon@uark.edu. To register, contact Dawn Fisher at dfisher@uark.edu or (479) 575-4804 no later than 4:30 p.m. Tuesday, Sept. 9. Seating is limited to 40 participants.

(from left to right):
Events
Expanding Our Fulbright Connections

In September 1945, the freshman senator from Arkansas, J. William Fulbright, introduced a bill in the U.S. Congress that called for the use of proceeds from the sales of surplus war property to fund the “promotion
of international good will through the exchange of students in the fields of education, culture and science."

One year later, President Harry S. Truman signed the Fulbright Act into law.

In September 2014, the J. William Fulbright Foreign Scholarship Board will come to Fulbright College for its 264th meeting.

The U.S. Congress created the board to oversee the Fulbright Program, which has become the most widely recognized and prestigious international exchange program in the world.

This is the board’s first trip back to Sen. Fulbright’s hometown and at the college named in his honor since Feb. 1996. The university where he served as president hosted a series of events, which opened a year of special activities for the program’s 50th anniversary.

In addition to the meeting, the board participated in a Fulbright Institute symposium on “Promoting Global Understanding” and were part of the first-day issue of the commemorative Fulbright program postage stamp from the U.S. Postal Service.

“Fulbright College and the Fulbright Foreign Scholarship Board share a very simple goal, to preserve and advance Sen. Fulbright’s legacy of peace through education,” Shields said. “The Fulbright Program does this by increasing mutual understanding between the people of the U.S. and those of other countries, while we produce citizens of the world in an atmosphere where, as Sen. Fulbright would say, ‘differences of culture and outlook are respected and appreciated rather than feared and condemned’ and the ‘common bond of human dignity is recognized as the essential bond for a peaceful world.’”

The board's 12 members are appointed by the President of the United States and represent many facets of American society. Four of the current members are Fulbright Program alumni. The board meets four times a year not only to supervise the global Fulbright Program, but also to establish policies for Fulbright selection and operating procedures. The members work outside of board meetings to select students, scholars, teachers and others from the United States and abroad to participate in Fulbright exchanges.

The university has many connections to the program, including Chancellor David Gearhart, who was a Fulbright Scholar to Oxford University’s Merton College in 1992, and professor Hoyt Purvis who was appointed to the Fulbright Foreign Scholarship Board by President Bill Clinton. Purvis served for ten years (1993-2003) and chaired the board from 1996 to 1999.
“We first started discussing the possibility of hosting a board meeting when Chairman Tom Healy visited campus last November,” Shields said. “We didn’t know if the schedules between the university and the board would work out, but Tom and I both thought it was an important connection for the two organizations so we started planning a way to make it happen. I’m thankful that it worked out and hope that it will become a tradition.”

As part of its quarterly meeting, the board presents a public forum. The event for the September meeting, "Fulbright for Food Security," will begin at 6:30 p.m. Thursday, Sept. 11, in Hillside Auditorium, room 206. The forum will be followed by a reception with board members and other special guests.

The board's visit will also include tours of campus, the house where Sen. Fulbright was raised the Fulbright Papers in Special Collections and Crystal Bridges Museum of American Art.

Just as the Fulbright Program has fostered bilateral relationships between other countries and governments and the United States, now Fulbright College is building a connection between the program and the college that carry his name.

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Members of the 2014 Fulbright Foreign Scholarship Board:

- Tom Healy, a poet and writer from New York, serves as the board’s chairman
- Betty Castor, former president of the University of South Florida who serves as vice chair
- Mark Alexander, a professor at Seton Hall University School of Law in New Jersey
- Rye Barcott, co-founder of Carolina for Kibera and co-founder and managing partner of Double Time Capital
- Lisa Caputo, executive vice president of marketing and communications for The Travelers Companies, Inc.
- Gabrielle Giffords, former U.S. Representative for Arizona’s 8th Congressional District
- Christie Gilson, an instructor, public speaker and disability rights advocate based in Pennsylvania
- Gabriel Guerra-Mondragón, former U.S. Ambassador to Chile
• Shelby Lewis, professor emeritus at Clark Atlanta University
• Anita McBride, executive in residence at the Center for Presidential and Congressional Studies, School of Public Affairs, American University
• Susan Ness, founder of Susan Ness Strategies and senior fellow at the SAIS Center for Transatlantic Relations, Paul H. Nitze School of Advanced International Studies, Johns Hopkins University
• Laura Skandera Trombley, president of Pitzer College in California

Members of the 2013-14 Fulbright Foreign Scholarship Board (from left to right):
Mark Alexander, Rye Barcott, Lisa Caputo, Betty Castor, Gabrielle Giffords, Christie Gilson, Gabriel Guerra-Mondragón, Tom Healy, Shelby Lewis, Anita McBride, Susan Ness, and Laura Skandera Trombley