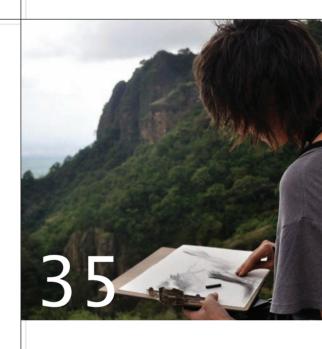


UNIVERSITY OF ARKANSAS

100





- 2 Dean's List
- 3 On Campus Save the Date: Jane Goodall
- 11 Pop Quiz
- 12 Class Notes Impact of 25K
- 23 Honor Roll
- 24 Alumni Profile
- 28 Alumni Updates
- 35 Road Trip



On the cover

Animal myths from Aesop to Disney inspired Luke Knox' Honors College thesis - a multimedia art installation featuring his original work and found objects. View the video:



Back to the Future

Architects have designed a new home for the Honors College in historic Ozark Hall. See interview pp. 4-5.

Field Notes

Our students are shooting film, taking leadership roles, tackling big issues and being honored at the White House. See pp. 16-23 for snapshots of discovery, creativity and service across campus and beyond.

Honors & Arias

Alumna Sarah Mesko found her voice and made the grades in the Honors College. Now she's winning success in a tough field: opera. See p.24.



The First 10 Years, and the Next

s we prepare to celebrate the 10th anniversary of the Honors College, I'd like to share with you an unconventional dean's list—not a roster of students who make all A's, but a short list of what makes me very proud about how the Honors College has taken shape in its first decade and what makes me look forward with great anticipation to the next one.

Looking back over the first ten years I'm especially proud that...

+ More than 500 of our top faculty members teach, mentor and help honors students. They do this not as a job requirement, but because they enjoy working with students who are up for a challenge, and they also enjoy collaborating with each other to create rich interdisciplinary experiences for honors students. (See pp. 14-15 for the latest round of interdisciplinary courses being developed by our faculty; you may wish, as I do, that you could sit in on every one of these classes). Our outstanding Honors College and honors program staff members also go the extra mile to help students get the most out of their honors experience.

+ Our students and alumni are not only bright and hardworking but also creative and open to challenges of all kinds, in school and beyond. They are truly amazing, and you can see for yourself why we are so proud of them by reading about their research, creative work and service in Field Notes, pp. 16-23 and Alumni Updates, pp. 28-34. + Our new home in Ozark Hall is under construction and slated for completion next summer. At long last, honors students from across campus will have an elegant and spacious place of their own in which to study, socialize and meet with Honors College faculty and staff. For more on the design thinking that has shaped our new home, see "Back to the Future," pp. 4-5.

Looking ahead to the next ten years I'm confident that...

+ The Honors College community will grow even stronger, both as a physical neighborhood, thanks to the new honors wing of Ozark Hall and to upcoming changes in on-campus housing, and as a social network bringing together students from all majors to focus their talents, expertise and passions on big and important issues.

+ Student- and faculty-led service learning initiatives like those you can read about in this magazine will inspire honors students, alumni, faculty and staff to make service learning ubiquitous among the honors community.

+ During the university's upcoming capital campaign the strategic initiatives put forth by the Honors College will translate into expanded and enriched experiences for the next generation of honors students.

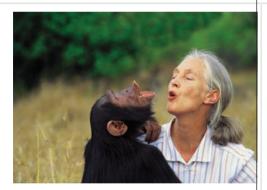
Bob Mc Matt

Bob McMath Dean of the Honors College and Professor of History

On Campus

UA HONORS COLLEGE

CELEBRATING 10 YEARS (2002-2012) SAVE THE DATE



We are partnering with the Distinguished Lectures Committee to bring legendary primatologist and conservationist Dr. Jane Goodall to campus. Dr. Goodall will speak at 7 p.m. on Friday, October 5, at Barnhill Arena. Her lecture, "Making a Difference: An Evening with Jane Goodall," is free and all are invited. No tickets are required, but come early to get a good seat! A book sale and signing will follow her remarks.

Photo: Jane Goodall. © Michael Neugebauer. Note: Dr. Goodall does not handle wild chimpanzees. This orphan chimpanzee lives at a sanctuary.





Space for the Crystal Bridges tour is limited; sign up early to reserve your spot! Top: interior gallery; below: view of upper pond from gallery bridge. *Photography by Timothy Hursley*.

SAVE THE DATE THE HONORS COLLEGE IS TURNING 10

Alumni, join us for a birthday celebration October 4-5, 2012.

- + Festivities will begin Thursday, October 4, at 5 p.m. with an alumni reception where we will announce the first recipients of our new Young Alumni Awards.
- + On Friday, October 5, enjoy a private tour and lunch at **Crystal Bridges Museum** of American Art, heralded by The New York Times as "the first major institution dedicated to American artists in 50 years ... [one that] seeks to bring high art to middle America." Connect with old friends, professors and Honors College staff at our barbeque and help us blow out the candles on a really big birthday cake. We'll wrap up with the Jane Goodall lecture and book signing.

For more information, visit honorscollege.uark.edu/ alumni.php.





Back to the Future: Updating Ozark Hall

magine a spacious, oak-paneled room bathed in natural light from a series of bay windows. A group of H2P students gather by the fireplace to work on a class project while nearby, assistant dean Maribeth Lynes meets with a prospective honors student and her father. Down the hall Kelly Carter, the college's fellowships, grants & awards budget officer, chats with a freshman fellow in a sunny office, and upstairs, Dean Bob McMath leads a meeting with honors faculty in a well-appointed conference room. In the courtyard, more students blow off steam with a quick round of Frisbee.

Beginning next fall, Honors College students, faculty and staff will be able to work, study and kick back in their new home - a 21,000-square-foot addition to historic Ozark Hall. The renovation and expansion project will breathe new life into the Collegiate Gothic structure and provide a much-needed signature space for the Honors College in the heart of campus. Robert A. M. Stern Architects of New York City, a leading architecture firm renowned for designing buildings for the nation's most prestigious and beautiful college and university campuses, designed the addition in collaboration with Arkansas firm Wittenberg, Delony & Davidson Architects. Gary Brewer, a principal with Stern, believes the completed project will help to define the character and identity of campus for



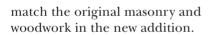
generations to come – and enable the Honors College and its new neighbors, the Graduate School and Department of Geosciences, to do their work better.

"What is rewarding about a project like this is that it will bring something from the past back to life again - and this facility needed help and work," Brewer said. Ozark Hall has welcomed many tenants over the years and has morphed significantly since the first phase, then known as the Classroom Building, was completed in 1940. The second phase of construction in 1947 added a second full wing to the planned quadrangle, and part of another, stopping short of the full build-out because the existing Commerce Building was in the way. When the Commerce Building was removed in the early 90s, Ozark Hall resembled "a lobster with one

claw – it was missing the wing that would complete the courtyard," Brewer said. Heating, cooling and electrical systems also needed to be updated to bring the structure up to 21st century standards.

One benefit of age: Ozark Hall features materials throughout that are rarely found in modern construction. Two types of limestone grace the exterior: bluegray Batesville limestone laid in parallel random ashlar courses and buff-colored Indiana limestone that is used for "trim" stone at the windows, building details and quoins. "The masonry is a beautiful building material, an incredible asset that we inherited," Brewer enthused. "Inside, the hallways have beautiful terrazzo floors and solid oak doors with oak casings." The design team is taking great care to preserve what is there and

A 21,000-square-foot addition to Ozark Hall will provide a permanent home for the Honors College. Opposite page: Student lounge. Renderings by Tom Schaller/Robert A.M. Stern Architects and WD&D Architects.



The new Honors College wing will feature some design flourishes – a grand entrance, ranks of beautifully detailed bay windows – that build upon the design vocabulary of the existing building. "We considered the obvious, to mirror the north wing, which consists of classrooms," Brewer said. "But to use that window rhythm in the honors wing, with its lounge and meeting spaces, would be illogical. We decided as a team to create a distinct identity for the Honors College, which will also provide a visual anchor to that end of the student promenade."

Eric Silinsh, a design associate with Stern who researched original plans and studied vintage photographs of Ozark Hall, noted that this design approach was also informed by the campus' 1925 Plan.

"All of these buildings were intended to have a punctuation piece – a part that was different," Silinsh said. "Sometimes it was in the middle, sometimes the end. We felt it was appropriate to have that punctuation, but not go too far with it – we seem to have found a nice middle ground."

Inside, the design team has focused on creating spaces filled with natural light that invite flexible use. Finishes are classic, timeless neutrals that impart warmth and comfort: honey-colored oak, roughcut bluestone, leather upholstery, and geometric carpets in muted greens, golds and the occasional pop of persimmon.

"Oscar Wilde said, 'It is only the modern that ever becomes old-fashioned,'" Brewer observed. "Hopefully this will be a quiet building that stands the test of time."



What is rewarding about a project like this is that it will bring something from the past back to life again – and this facility needed help and work.

Robert A. M. Stern Architects of New York City

On Campus



Making the Honors Medallion

Culptor Hank Kaminsky leans forward and peers through a magnifying visor pulled over his gray ponytail. His 6'3" frame hunches over a clay disk 12" in diameter - a new medallion in the making. The words "Honors College" curve across the top in a flourish of Celtic-inspired script, while the outlines of the new addition to Ozark Hall - future home of the Honors College - are roughed in below. Kaminsky, himself a proud alumnus of the Fulbright College Honors Program, has been laboring on the clay model for more than a month. The lettering looks more or less complete, but he emphasizes that he's spent many more hours on the building that's barely begun to emerge from the picture plane.

"The lettering's in my head, and the building is not," he explains. "There are a lot of decisions to be made. How far should I go in rendering little bits of architectural detail? The building is complex, and I've got to simplify it so that it still reads and it's interesting."

Last fall Hank Kaminsky was



commissioned to create a new, three-inch-diameter Honors College medallion to be awarded to outstanding faculty, alumni and staff. A smaller medal of the same design will also be available to honors programs across campus to recognize students graduating with Latin honors. The design process began with a series of meetings with the medallion committee, which included honors faculty, a student, and staff. Discussions about the history, role and mission of the Honors College prompted a broad range of design ideas; the group eventually reached consensus on a bold, simple scheme emphasizing the Honors College name, new home and "mantra" – the words "Discover," "Create" and "Serve."

"It's an opportunity to address



"It's a sculpture of 10,000 touches. You just have to keep putting clay in places where it seems to belong; it's a very fluid process."

> HANK KAMINSKY sculptor

Honors alumnus Hank Kaminsky painstakingly carves the outlines of Ozark Hall on a clay disk. Plaster, plastic and steel models followed in the development of the final bronze medallion.

the tradition – but I love to experiment with form," Kaminsky said. The design innovations appear in subtle details, such as the way certain letters curve into oak leaves (a reference to the oak leaves in the University of Arkansas seal).

Originally from New York State, Hank Kaminsky began his studies in

electrical engineering but switched majors to art after a friend gave him some clay. He subsequently studied at the Art Students League, the Pennsylvania Academy of the Fine Arts and the New School before earning his bachelor's degree in art with high honors at the University of Arkansas. He studied medal making under Walker Hancock, designer of the original Olympic medal, and credits Italian Renaissance sculptors such as Pisanello, Ghiberti and Donatello as inspiration for the painstaking process of making a major statement in miniature.

"It's a sculpture of 10,000 touches," Kaminsky said. "You just have to keep putting clay in places where it seems to belong; it's a very



fluid process."

Last May, the ten professors who received Honors College Distinguished Faculty and Distinguished Leadership Awards in fall 2011 were the first to receive the finished medallion, delivered in time to wear with their commencement regalia. "How many grams is this?" marveled chemistry professor T.K.S. Kumar, as he cradled the medallion in his hand.

Hold Kaminsky's work in your hand, and you too will be hooked. The finely carved details invite study, while the solid heft of 170 grams of bronze embodies the achievement that the medal represents.

THE MEDALLION GOES TO ...

H onors faculty work hard to support honors students! They write countless letters of recommendation, prepare honors courses and mentor honors students one-on-one. Some might spend a day putting nervous prospective fellows at ease in a series of interviews, while others review grant applications.

To recognize faculty member's hard work and dedication, the Honors College has developed the Distinguished Faculty Award and the Distinguished Leadership Award. Each recipient receives a bronze medallion and \$1,000 to support undergraduate research. The inaugural group of honorees:

+ Distinguished Faculty Award Kathleen Condray Jamie Hestekin T.K.S. Kumar Timothy G. Nutt Gretchen Oliver Jennie Popp Molly Rapert Korydon Smith

+ Distinguished Leadership Award Nan Smith-Blair Duane C. Wolf For links to more information on

these faculty members, please visit honorscollege.uark.edu/543.php. The 2012 honorees will be announced at the Honors College faculty reception this fall. On Campus

Bright Lights, Big City ... But Where Are the Stars?

Start with one bright student who's passionate about a little-known environmental issue. Add a little bit of support and encouragement. Fasten your seat belt and hold on.

Last March, the Honors College brought documentary filmmaker Ian Cheney and dark sky advocate Connie Walker to campus, sparking two days of town and gown discussions and the largest-ever audience for a screening of Cheney's award-winning new documentary, *The City Dark*. These events were the first in a new series, Honors College Invites, which grew out of a lunchtime discussion on honors student Ameé J. Salois' first day on the job as Honors College editorial assistant.

Salois, who graduated with a double major in physics and English last May, has been passionate about the night sky since her first sight of the Milky Way at age seven. Research experiences at observatories in West Texas and Chile introduced her to the splendor of starry skies in places far from city lights. She's been working since then to raise awareness of light pollution.

"It's not just about light blocking out the beauty of the night sky, although that's a huge loss," Salois said. "Light pollution also causes a number of other problems. It's about baby sea turtles losing their way, birds circling lights to exhaustion, and even cancer cells multiplying in our own bodies. I am



so thankful that the Honors College made it possible for me to share my passion with the university and the community."

Events began with a Sunday night discussion on downtown Dickson Street that drew a diverse group of faculty, students and community members from all walks of life, including farmers, artists, campus planners and developers. Astronomer Connie Walker, a science education specialist at the National Optical Astronomy Observatory and director of GLOBE at Night, a citizen-science campaign to track light pollution around the world, launched the discussion with a demonstration. She positioned a flashlight at the center of a miniature mockup of a cityscape, then beamed a second flashlight through an ad hoc planetarium - a

box with holes punched through it. No "stars" appeared on the ceiling. Then, when Walker shielded the flashlight "city light" with a cap, pricks of light appeared on the ceiling above, demonstrating that streets could be safely lit while keeping stars visible.

"You save energy, save money, direct light when and where you need it for safety and keep the skies dark enough to enjoy the stars," she told the group. "It's a win win win win situation!"

Documentary filmmaker Ian Cheney shared his own journey to awareness, which began with his move from rural Maine to New York City. Confronted with the glare of city lights in the Big Apple, he embarked on what he thought would

Bright Lights continued on page 10

Honors international business student Michael Iseman uses a sky quality meter to measure light pollution in downtown Fayetteville while professor Steve Boss looks on; (opposite page) astronomer Connie Walker demonstrates the power of shielding city lights.

On Campus

be a modest six-month project.

"I started with the astronomers, but almost immediately it became clear that this is a much more interdisciplinary topic," Cheney said. "For millions of years there was a regular cycle of light and dark. In the last 40 years or so, artificial light has dramatically disrupted that cycle. It's as if mankind switched on a giant light – and human beings and wildlife are being affected by this habitat shift in ways we're only beginning to understand now."

A lively discussion of ongoing efforts to preserve the night sky in Northwest Arkansas ensued, and the evening concluded outdoors. Although cloudy skies cancelled the star party that had been planned, Walker demonstrated how to participate in GLOBE at Night using a smart phone app, and participants measured light pollution in downtown Fayetteville.

On Monday, Cheney and Walker discussed light pollution with more than 200 students in the Fundamentals of Sustainability course led by professors Steve Boss, Tahar Messadi, Jennie Popp and Zola Moon. Walker coupled discussion with a number of actions students could take to address the issue (see sidebar). "It's a global issue with a local solution," she emphasized. Student questions ranged from the pragmatic to the philosophical. One student, noting that he can see pictures from the Hubble Space Telescope on the web, asked: "Is there a value in human



SAVE THE NIGHT SKY! HERE'S HOW

- + Select outdoor lights that **direct** light down, not up.
- + Light only where and when needed (timers and motion sensors can help preserve the night sky, save energy and money and are readily available.)
- + Don't over light outdoor areas.
- + Use energy-efficient light sources.
- Participate in GLOBE at Night campaigns to raise awareness.
 For more information visit www.globeatnight.org.
- + Work to enact lighting ordinances in your community and watch to make sure that they are enforced. For more information visit www.darksky.org.

Filmmaker Ian Cheney discussed light pollution and documentary filmmaking at a town and gown event on downtown Dickson St.

beings seeing a starry night sky directly?"

Cheney responded: "You can't swap a Google view of the earth for the visceral, one-on-one experience of seeing the night sky. The value of a kid lying on the lawn and seeing the Milky Way – how do you put a price tag on that?"

Events were capped by the screening of *The City Dark*, which was selected as a *New York Times* Critics' Pick and won the Grand Jury Prize at the Environmental Film Fest at Yale and the Jury Prize for Best Score/Music at the 2011 South by Southwest Film Festival. More than 500 attended the screening and the discussion that followed.

As a follow up to these events, Boss identified a grid of 25 Northwest Arkansas streets, roads, and highways that his students and other members of the community could adopt and take light readings for during GLOBE at Night campaigns. There were 187 light readings taken this year, providing data that will support future research on the impact of outdoor lights on Northwest Arkansas' wildlife, health, energy consumption and cost.

"In the past it was just me taking readings in Fayetteville," Salois said. "There was so much more activity this year! It's so exciting to see real change coming out of these events."

The Honors College plans to continue bringing thinkers and doers to campus for the Honors College Invites series. Suggestions are welcome.



It's about baby sea turtles losing their way, birds circling lights to exhaustion, and even cancer cells multiplying in our own bodies.

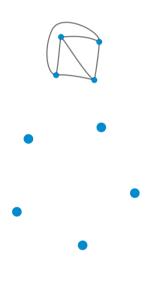
AMEÉ J. SALOIS honors physics and English student

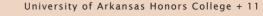
Pop Quiz

TEST YOUR KNOWLEDGE

A bat and a ball cost \$1.10. The bat costs \$1.00 more than the ball. How much does the ball cost?

Can you connect each pair of dots to one another, without crossings? A solution for four dots is shown as an example.





SNOITUJOS

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A FALSE (20 POINTS) Human breathing does not contribute

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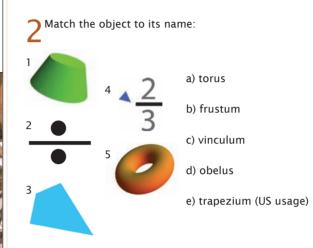
What building is this?

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EXTRA CREDIT



With the concern over emissions of carbon dioxide 4 to Earth's atmosphere from human activities, it is sometimes argued that the simple act of humans breathing contributes to global warming. Is this claim true or false and why?

EXTRA CREDIT

Vould a woodchuck chuck his own wood if he would chuck wood for exactly those woodchucks who would not chuck their own wood?

Z fair, but now you'll be able to

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Economic Perspectives (v.19, no.

Shane Frederick in the Journal of

is excerpted from the Cognitive

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THE BALL COSTS FIVE CENTS

(20 POINTS). If you guessed 10

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Reflection Test published by

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Class Notes

Impact of 25K

In 2006 the Honors College provided seed funding for 12 interdisciplinary courses, many of which are still flourishing today. A \$25,000 grant to fund Visualizing the Roman City tapped into cross-campus interest in game design, enabling honors students to use gaming technology to virtually recreate, experience and better understand ancient cultures. Drawing together students and faculty from fields ranging from computer science to math, art and architecture, this grant has been a gift that keeps on giving....



Courses

Visualizing the Roman City Jackson Cothran, geosciences; Tim de Noble, architecture; David Fredrick, classical studies; Fred Limp, anthropology. Offered 2007-2008

Using laser scans taken on site in Italy, students mastered 3-D software such as AutoCad and SketchUp to reconstruct portions of Ostia Antica, an ancient Roman port city.

Digital Pompeii

David Fredrick, classical studies. Begun 2009, ongoing Using existing plans and elevations, students recreate houses in the ancient city buried by the eruption of Mount Vesuvius in AD 79. "Pompeii, in spite of being studied forever, is very opaque in terms of what was where and how people experienced the spaces," Fredrick said. The goal? Provide an experiential space tied to a database of artworks - a new kind of 3-D catalog for art historians.

Introduction to Game Design

David Fredrick, classical studies. Begun Fall 2010, ongoing In this course, students learn to build computer games, drawing on classical texts as inspiration: Ovid's Metamorphosis, Homer's Odyssey and the Mahabharata, a Sanskrit epic of ancient India.

Grants

Teryl Hampton

SURF grant, 2007, work on decorations in reception areas of Roman houses

Carly Squyres

SURF grant, 2008, digital recreation of the House of Menander in Pompeii

Tyler Johnson

Honors College research grant, 2012, digital recreation of the house of Octavius Quartio

Tyler Johnson

Honors College research travel grant, 2012, travel to Pompeii for on-site investigation

Tiffany Montgomery

Honors College research travel grant, 2012, travel to Pompeii for on-site investigation

Tiffany Montgomery

Honors College research grant, 2012, digital recreation of the house of Ara Massima

Juan Rios

Honors College research travel grant, 2012, travel to game developers conference in San Francisco

Greg Rogers

Honors College research travel grant, 2012, travel to game developers conference in San Francisco

David Fredrick and Alyson Gill

(Gill at Arkansas State University) National Endowment for the Humanities grant, 2012, to explore use of game engines for visualization in the humanities.



Conferences

Computer Assisted Archeology Conference, Granada, Spain, 2010 Fredrick and two graduate students, Keenan Cole and Jasmine Merced, demonstrated that you could use game engines to tie 3-D recreations of space to databases.



Game Developers Conference, San Francisco, Calif., 2012

Several students, including honors engineering student Juan Rios and honors history student Greg Rogers, traveled to San Francisco to take in the latest trends in game design. Describing his ride down the hotel escalator to the convention floor, Rios said: "It was awesome, it was overwhelming, it was crazy. I thought, this is the greatest thing I've ever seen in my life!"



Honors Theses

Teryl Hampton,

with faculty mentor David Fredrick A Systematic Analysis of Mythological Frescoes in Tablina and Alae of the Pompeian Domus, 2008

Tyler Johnson,

with faculty mentor David Fredrick Visualizing Space Syntax in the House of Octavius Quartio at Pompeii, 2012

Awards

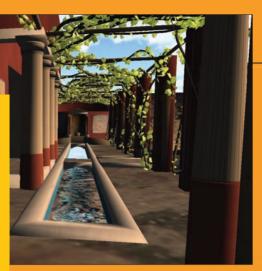
Grand prize, Unity Mobile Generation Great Education Giveaway

David Fredrick, classical studies; Russell Deaton, computer science and computer engineering; Nilanjan Banerjee, computer science and computer engineering; Keenan Cole, graduate student, Center for Advanced Spatial Technologies Spring 2011

The U of A was one of three grand prizewinners in an international contest sponsored by Unity, a cutting-edge game engine. The get: 20 professional licenses of Unity and 20 Google phones, in total worth about \$65,000.

Publication

Rachel Newberry, "Is Jove a Rock or a Leaner? Interpreting the Central Paintings of Pompeii's House of the Tragic Poet," *Inquiry: The Undergraduate Research Journal of the University of Arkansas*, vol. 10, 2009.



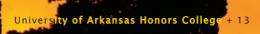
What's next

Fredrick, Cothren and several graduate students are preparing a grant proposal to fund development of a fully immersive environment using an omnidirectional treadmill. They also want to analyze how people move on site at Pompeii, using Google glasses to create an augmented reality. "We want to see how the space works, how art and color provide cues for movement," Fredrick said. "The Romans are long gone, so the idea is to study how people today navigate online and on the actual site."

Digital Antiquity

Jesse Casana, anthropology; Jackson Cothren, Center for Advanced Spatial Technologies, forthcoming

The grant cycle comes full circle with Honors College funding for a new course. Digital Antiquity will expand beyond ancient Rome, offering honors students an opportunity to participate in research ranging from an effort to map ancient roadways in New Mexico's Chaco Canyon to city planning informed by data from an Iron Age site in Turkey.





Funding Future Learning

Honors students can look forward to some terrific new interdisciplinary courses thanks to \$160,000 in grants awarded by the Honors College last year. Many of the courses that received Honors College seed funding in 2006 are still flourishing today (on pp. 12-13 we show how these grants keep on giving). The courses and faculty teams selected for funding include the following:

Childhood Obesity: Context and Prevention

Faculty: Mardi Crandall, Cindy Moore, Vernoice Baldwin, human environmental sciences; Michael Thomsen and Rodolfo M. Nayga Jr., agricultural economics and agribusiness.

Childhood obesity, which affects almost one-fifth of all children in the United States, will be addressed from multiple perspectives, including child development, nutrition, health behavior, economics and marketing.

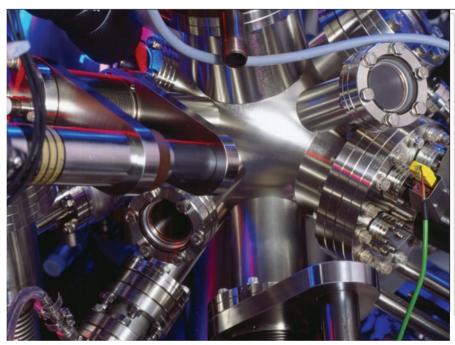
Computational Craft: The Algorithmic Generation of Form

Faculty: Santiago Perez, architecture; and Tyler Moore, computer science and computer engineering.

Honors students will learn to code computer software to generate forms or patterns, and will then fabricate tangible works of art and sculpture featuring these forms.

Digital Antiquity

Faculty: Jesse Casana, anthropology; and Jackson Cothren, Center for



Honors students pursuing research in nanotechnology may use the molecular beam epitaxy machine to grow nanostructures one atom at a time.

Advanced Spatial Technologies.

This course will offer honors students the chance to explore advanced problems in archaeology while learning sophisticated methods in three-dimensional modeling and visualization.

Educational Equity: A Cross-Disciplinary Approach

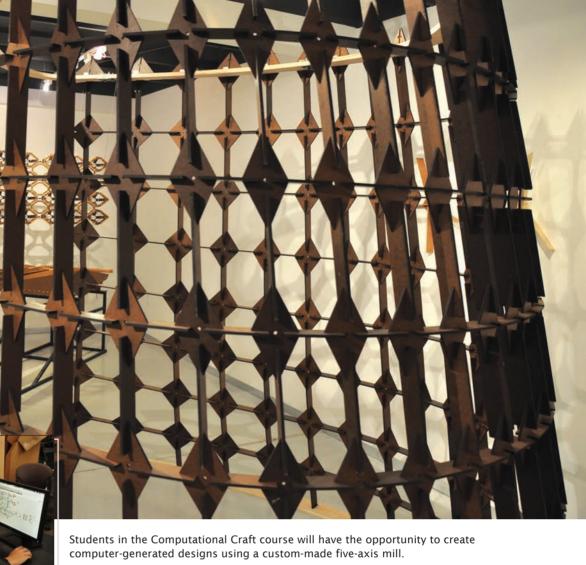
Faculty: Robert Maranto, education reform; Luis Fernando Restrepo, world languages, literatures and cultures; and Patrick Stewart, political science.

The gap in equality of learning across ethnic and class lines is

a critically important issue in public policy, and among the most contentious. This course will introduce honors students to a wide range of perspectives and proposed solutions, and will expand beyond the classroom through a service learning experience in an area school that has increased social and educational equity.

Foreign Trade and International Order: History, Policy, and Theory

Faculty: Liang Cai, history; Jingping Gu, economics; and Ka Zeng, political science.





This honors course will explore the relationship between China's foreign trade and the world order, beginning with China's dominant position in world trade before European hegemony and extending through the Cold War and into our own time.

Integrating Nanotechnology into Honors Education

Faculty: Min Zou, Steve Tung, and Adam Huang, mechanical engineering; Gregory Salamo, physics; Donald Roper, chemical engineering; Jingyi Chen, chemistry and biochemistry; and Jin-Woo Kim, biological engineering.

Nanotechnology holds tremendous promise for new applications in a wide range of industries, from consumer goods and electronics to medicine. The professors collaborating on this project will engage honors undergraduates at all levels, from nanotechnology modules for freshmen and sophomore classes to hands-on research opportunities for juniors and seniors.

Music, Language, and Thought

Faculty: Elizabeth Hellmuth Margulis, music; Jack C. Lyons, philosophy, and Douglas A. Behrend, psychology.

Music and language are two distinctively human capacities, both of which seem to be closely linked to our capacity for thought; the exact nature of this link, however, is still somewhat uncertain. The course will combine critical reading and discussion and creative project-based learning to train honors students to think rigorously and analytically about such humanistic topics as music, poetry and human nature.

Social, Economic, and Computer Networks

Faculty: Jingxian Wu, electrical engineering, and Kathy Fogel, finance.

This course will introduce honors students to the science, technology and theory guiding the evolution and operations of networks ranging from international economic networks to Facebook and LinkedIn. Interdisciplinary teams will envision business applications of networks, some of which just might turn into real entrepreneurial opportunities.

Faculty members plan to begin offering these courses in the 2012-13 academic year.

Field Notes



Garden Grows Fresh Produce, Community on Campus

The sweet-spicy scent of Thai basil wafts across the sunwarmed garden. Honors premed student Emmy Crossfield peers down into the cucumber patch.

"Holy cow, look at this one Jonathan!" she exclaims.

"Whoa, that one's ready to go," responds Jonathan McArthur, a horticulture major who is managing volunteer labor in the garden over the summer.

Crossfield triumphantly plucks the large, curved cucumber and places it in a wicker basket. The first harvest of the new campus community garden is officially on and the yield, reported down to the last gram by Crossfield in an email sent later that day, was respectable by any measure: 1.2 kg of broccoli, 8.82 kg of cucumbers, 41 g of jalapeños, 540 g. of sage, 400 g of Thai basil and 327 g of sweet basil.

That first harvest, so proudly and precisely measured, was about two years in the making, and represents a cross-campus, interdisciplinary effort led by Honors College students and Curt Rom, horticulture professor and honors program director for the Dale Bumpers College of Agricultural, Food and Life Sciences. Rom recalled that Samantha Jones, then an honors environmental, soil, and water sciences major, got the ball rolling.

"Sammi visited community gardens while studying in Edinburgh, Scotland, and she was eager to do something similar here,"



Jonathan McArthur and Emmy Crossfield harvest sweet basil from the new campus community garden. The fresh herbs were donated to the Full Circle Food Pantry.

Rom said. "Given that an earlier effort proved not to be sustainable, we decided it was important to define what works first," he added. Jones surveyed 86 universities with community gardens and visited six of them, then outlined best practices in her honors thesis.

Armed with Jones' recommendations, Emily Crossfield, an honors pre-med student and director of sustainability for the Associated Student Government, led the effort to get the garden in the ground. That year-long effort served as the capstone project for her minor in sustainability. The first and perhaps most formidable task was finding a site for the new garden. Crossfield and Rom worked closely with the department of facilities management, eventually selecting a site nestled within the courtyard of Maple Hill dorm and close to the North Quad and Hotz dorms.

"You need the garden to be visible, where people pass by it, notice it and can easily take care of it," Crossfield said. She also secured support from the Associated Student Government, the Residents' Interhall

Community Garden continued on next page

Congress and two registered student organizations, GroGreen and the Horticulture Club. More than 50 students from multiple disciplines worked together to design and plant the garden, fostering connections across campus.

Crossfield is especially proud that garden harvests will be shared with

the Full Circle Campus Food Pantry, which serves students and staff facing food insecurity.

"I love the idea that they'll have fresh herbs for their soup, and some fresh cut flowers for the table," Crossfield said.

Rom and Crossfield presented their work on the garden at the

annual meeting of the American Society for Horticultural Sciences last summer.

"There are a lot of community gardens on campuses, but the

link to a campus food pantry is still relatively rare," Crossfield said.



Want to Fight Fat? Look to the Fly

The tiny fruit fly may offer insight into a big – and ever growing – problem.

"There are more than a billion overweight people worldwide, and half of them are obese," said Meenakshi Prajapati, a biology student and Sturgis Fellow from Trinidad and Tobago. "Given this pandemic, it's imperative that we study fat metabolism to help find newer and better treatments for obesity."

Working under the direction of Michael Lehmann, an associate professor of biological sciences in Fulbright College, Prajapati focused on dLipin, an enzyme that promotes fat storage and metabolism in Drosophila melanogaster, the common fruit fly. She was intrigued by a study that showed that Drosophila dLipin promotes fat storage, and a conflicting finding that starved flies, especially males, had increased levels of dLipin. Why would a starved fly have an increased amount of the enzyme that promotes fat storage?

Another surprising finding showed that a decrease in dLipin in starved flies caused dramatically increased flight activity. Prajapati hypothesized that starvation prompts an increase in dLipin in flight musculature, which allows starving flies to conserve energy by flying less.

To better understand dLipin's role in fat regulation, Prajapati spent four semesters in the lab, dissecting larval and adult fruit flies, both fed and starved. She then used Western blot techniques to analyze changes in dLipin levels in different tissues of Drosophila.

"There was a lot of troubleshooting involved," she recalled. "For every fly I got results on, there were 50 dissected that I couldn't use. The solution I was using to preserve the flies was too dilute, and at one point I had to start all over. I've learned to do analysis along the way, and not to assume that my procedure works."

Prajapati's hard work eventually did pan out with data on where and how dLipin regulates fat metabolism



in Drosophila. She found that in flies subjected to starvation, dLipin increased in the nuclei of fat cells, where mammalian Lipin is known to activate genes that promote oxidation of fatty acids for energy. At the same time, dLipin decreased in the cytoplasm, where it promotes fat storage. She also found that starvation leads to an increase of dLipin in the thorax (flight musculature) and abdomen of adult male flies.

"This suggests that increased dLipin in the flight musculature may play a role in reducing physical activity under food deprivation. We don't understand the function of dLipin in the abdomen – that needs more research," Prajapati said.

We're still far from popping a pill to fool the body into burning fat instead of storing it, though.

"We start by understanding how dLipin works in fruit flies," Prajapati said. "Once we have a Drosophila model, then we can work to figure out human Lipins. We still have a long way to go!"



Given this pandemic, it's imperative that we study fat metabolism to help find newer and better treatments for obesity.

> MEENAKSHI PRAJAPATI biology student

Field Notes





H2P On Screen

12-minute film turned in as the final project for an honors course was screened at the sixth annual Little Rock Film Festival. *The Children of the Mother Beaver*, a grainy, sometimes-bloody meditation on the frontier justice meted out by 19th century Regulators, follows a pair of siblings through the wilderness as they hunt for their father's killer. The film was inspired by Friedrich Gerstäcker's first novel, *Die Regulatoren in Arkansas (The Regulators [Vigilantes] in Arkansas)*, an 1846 description of Arkansas' Wild West days.

"The Gerstäcker book was the most fun thing we read in class – a Western. It's genre fiction, but it has bigger themes," said John Erwin, an honors English major/ Japanese minor in the J. William Fulbright College of Arts and Sciences.

Erwin and honors classmates Zach Harrod and Lindsay Strong spent eight days shooting the film, largely in Elkins, using a Canon XF 100 video camera. The budget? Next to nothing.

"We bought costumes at thrift stores and blanks for shotguns – it was like \$10," Erwin said.

Erwin and Harrod wrote and produced the film and all three students acted in it. Erwin, who has made about 30 short films since age six, handled the cinematography and months of editing. He purposely degraded the film to achieve grainy, highly saturated color.

"I was going for the look of low budget art films from the '70s, shot on cheap film," he said.

frontier Arkansas.'

The team screened a three-minute excerpt for their classmates in the honors humanities course led by Kathleen Condray, an associate professor of German, and Fiona Davidson, an associate professor of geology. A scene in which Harrod casually skinned and beheaded a squirrel sparked criticism from classmates but is key to the film, Erwin said.

"It reflects the hypocrisy of Zach's character, skinning a squirrel while talking about his father's act of mercy to a beaver," Erwin said.

"Students read excerpts from Friedrich Gerstäcker's novel as part of a larger discussion on the rights and obligations of governments (and an individual's rights and obligations within that framework)," Condray noted. "And John has nicely captured the tension inherent in a society in which government is not performing as it should and some citizens feel they must act out of self-protection, which was a situation not uncommon in

Scenes from *The Children of the Mother Beaver*. The film was developed by honors students John Erwin, Zach Harrod and Lindsay Strong from a final project for an H2P course.



Andrew Arkell transformed four preliminary studies into this mammoth meditation on architectural space.

Drawing as Architecture/Architecture as Drawing

wasp's nest, rock, hollowed out log, and armadillo skull inspired architecture student Andrew Arkell's honors thesis. But those natural forms are unrecognizable in the 12¹/₂-foot-wide by 6¹/₂-foot-high abstract drawing that he produced to satisfy the thesis requirement. Ghost traces of Arkell's preliminary studies may be teased out, but the primary impact is spatial. The muralsized drawing presents openings, chambers, and edges that hint at architectural space without defining them - and that is just what Arkell hoped to accomplish.

"My thesis blurs the line between art and architecture," he said. "The drawing is 2-D, but I'm interested in creating a 3-D experience." Indeed, Arkell has taped "X"s on the studio floor to shape different viewing experiences, from an up-close vantage point that invites detailed inspection to a distant view that allows one to take in the overall impact of the piece.

Arkell began to explore the

boundary between drawing and architecture during a summer of architectural studies in Mexico.

"[Painter] Tom Mills joined us on the tour of northern Mexico. He taught me how to draw this way, and I liked it enough to turn it into my thesis project," Arkell said. Upon returning to campus, he worked with Laura Terry, an associate professor of architecture and award-winning painter, to produce the four studies and the final project.

The final drawing took shape over the course of 12 weeks. Arkell pieced together the drawings, cut out sections, and then patched in new sheets of paper and continued drawing, applying sandpaper as needed to erase marks. At some point, concluding that the piece was too "object-centric," he turned it upside down and continued working. He identified media used as "watercolor, graphite, conté, gouache, some blood sweat and tears, and a lot of sand paper!"

Terry described the finished project as "just what an honors thesis should be - it pushes the limits on what architecture is." The drawing alone is impressive, but Terry emphasized the amount of work that went into the piece: "There are about 40 drawings that have been sanded into the carpet," she said, pointing to the floor in front of the drawing. Arkell plans to enter the work in a competition once it's finished, but that may be a while. "I don't know what it's going to be, even still," he said. "If I could occupy the whole wall of the Field House, I would."

My thesis blurs the line between art and architecture. The drawing is 2-D, but I'm interested in creating a 3-D experience.

ANDREW ARKELL architecture student

Field Notes

Board Launches Future Leaders

It's 5 p.m. on a balmy Friday in May, and 18 honors students are dressed in their business best: silk ties, crisp button downs, nicely cut jackets and day dresses. Welcome to the last meeting of the year for the Walton College of Business Honors Student Executive Board – and take a good look at tomorrow's business leaders. No Friday afternoon cut-offs and hacky sack games for this group: they're summing up this year's activities and making plans – lots of them – for next year.

The meeting is co-chaired by Kristen Zachary and Rohit Mittal, who formed the group a year ago at the suggestion of Javier Reyes, then the Walton College honors program director, and assistant honors director Jason Adams.

"We started with the idea of improving the Walton honors program – we knew we had the resources and students to do it," Zachary said. Last fall she and Mittal made a fact-finding trip to Boston College, which has one of the best honors business programs in the country, then offered their first event, an honors thesis information session that attracted more than 100 students.



Honors business students Rohit Mittal and Kristen Zachary led development of the new Walton College of Business Student Executive Board. They will document the results in their honors theses.

"We ran out of chicken – that was a good sign for us," Mittal said.

"It was the first event we ever put on, and we thought, this is going to be okay," Zachary added.

Ably led by Zachary and Mittal, with four subcommittees regularly meeting, the group has accomplished a lot in just one year. The marketing committee worked closely with Walton staff to overhaul the honors program website and started work on recruiting pamphlets, a newsletter and a video. The freshman initiatives committee organized an ice cream social, inviting professors throughout the college to chat with new students. The alumni relations committee hosted a tailgate party before a baseball game; next year, they hope to tap honors alumni to mentor current students. The social committee, building on the success of that first information session, plans to organize a homecoming brunch and possibly, a formal dinner.

"The craziest thing for me personally is what I thought it would look like, and what it looks like now; it's nothing alike," Mittal said. "You learn so much from going through this process."

The student board and other honors program initiatives have received generous support thanks to the leadership of former Walton College dean Dan Worrell. That support will continue under the new dean, Eli Jones; the group will manage a dedicated budget next year. They are also excited about the opportunity to work with new honors program director Molly Rapert on the Walton College Honors Council.



FULL CIRCLE

Honors pre-med student Julia Lyon led the effort to address food insecurity on campus as the first president of the U of A's Full Circle Food Pantry. Last March she and several other honors students won a trip to the White House to receive a Campus Champions of Change Award from President Barack Obama.





Engineering students designed an inexpensive water filtration system for a Kenyan orphanage founded and run by Fayetteville native Sarah Fennell.

Engineering H_2Ope

Thirsty? Turn on faucet, fill up glass. Americans take clean running water for granted, but slaking one's thirst or starting a pot of soup is a major task in other parts of the world. At the James Christopher Opot Children's Centre, an orphanage in rural Nyanza, Kenya, well water must be hauled up a hill and dosed with chlorine before it is drinkable.

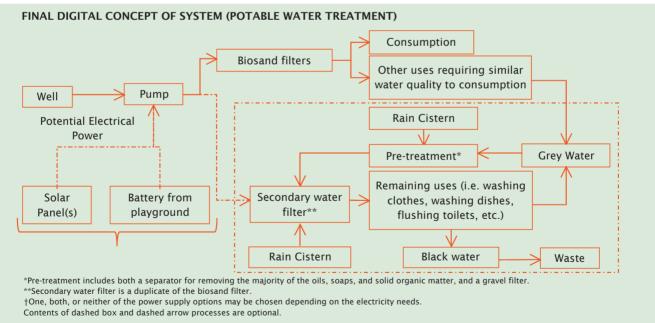
"I can't imagine anyone here would drink that water," said Ismael Mojica, an honors student from Berryville, Ark., who recently earned his B.S. degree in biological engineering. Mojica and teammates Iain Bailey, Samantha Puckett and Jessica Hart resolved to make drinking water more readily available for the orphanage, founded and run by Fayetteville native Sarah Fennell. Using 55-gallon plastic barrels, PVC pipe and sand – all readily available in Kenya, a key design constraint – they built a prototype water filtration system for \$473.72. The system uses a biologically active sand filter and an elevated tank to filter the water (there is no electricity at the orphanage).

The next steps include testing the water for bacteria count, turbidity (how clear water is) and taste, and then possibly, sending a team of students to build the system at the orphanage. Mojica also hopes that future students will develop a system to pump water from the well to a filtration unit outside of the orphanage kitchen, and design a separate filtration system so that gray water may be used for irrigation.

"In the long run, maybe future teams can do this type of work and scale it up – helping out a whole village, for example," Mojica said. "This is a good first step."

The project served as the senior design project for all four students. Mojica credits honors faculty mentor Tom Costello, associate professor of biological engineering, in helping the students identify realistic goals for the project.

"We have high ambitions, but it takes a little bit of work to get there," Mojica said.





In the long run, maybe future teams can do this type of work and scale it up - helping out a whole village, for example.

ISMAEL MOJICA biological engineering student

Field Notes

Can Multiple Choice Spark Creativity?

Bubbling the correct answer on a multiple-choice test can confirm a student's grasp of long division, but it doesn't measure a more intangible quality – creativity. To cultivate independent thinkers who can creatively problem solve, teachers must move beyond "teaching to the test" and expand the concept of multiple choice.

"So often we ask direct questions,

looking for a specific answer. This really limits the student's options. Just changing the way you teach a little bit can help, so that lessons becomes more student-centered and less teacher-directed," said Jessica Roy, an honors student who is currently working towards her Master of Arts in teaching in the College of Education and Health Professions. "To increase creativity, children need to be given more choice assignments so they can pick how they want to demonstrate their learning and have more opportunity to do their own thinking."

Roy, who hopes to work with gifted and talented children in the future, wondered, how does a teacher spark creativity? She set out to determine if there were tangible differences between teachers'



Presenting open-ended assignments encourages creative responses from students. iStockphoto.

Honor Roll

perceptions of creativity and their practices to promote creativity in students.

With the help of faculty mentor Vinson Carter M.A.T., Roy surveyed 32 teachers in Northwest Arkansas. She gave the teachers three different surveys: the first two surveys provided the teachers with statements that did or did not promote creativity, such as "Grades in my class are mostly based on the student having the correct answer, not the correct process." The first survey asked the teachers to rank the statements by how often they occurred in the classroom and the second survey asked them to rank how well the teachers believed the statements encouraged creativity. The third questionnaire surveyed the teacher's individual classroom practices and beliefs about teaching.

Roy found that teachers know exactly what fosters creativity. "Using ungraded assignments that take the pressure off students to get the right answer, presenting brainteasers that have multiple solutions instead of a problem that has one answer, and giving feedback that prompts students to think are all proven ways to foster creativity in students, and teachers know this," she said.

Roy attributes the gap between understanding and implementation to a scarcity of time and training, and the expectation of meeting standardized testing requirements. "There's not enough time in school to teach thinking skills – it's all content based. That's why I wanted to study it. We aren't necessarily teaching problem-solving skills, and that's something you're going to need in everyday life." This year Honors College students continued to excel in winning nationally competitive awards. Congratulations to the following honors students and to the professors and staff who mentor them:

PICKERING FELLOW

The Pickering Undergraduate Foreign Affairs Fellowship provides financial support for undergraduate and graduate study; only 20 undergraduates were selected nationwide.

+ Clint Shoemake Anthropology and Political Science -Sidney Burris and Patrick Conge

TRUMAN SCHOLAR

This award recognizes students who aspire to careers in government and public service; only 54 students were selected nationwide.

- + Mike Norton Agricultural Economics and Poultry Science - Lanier Nalley
- Honorable mentions
- + Matthew Seubert Business Economics and Political Science -Andrew Horowitz
- + Grant Hodges Political Science - Janine Parry

GOLDWATER SCHOLAR

his award recognizes outstanding mathematics, science and engineering students planning careers in scientific research.

+ Jimmy Vo

Biomedical Engineering - David Zaharoff Honorable mentions

+ Raven Bough

- Horticulture Curt Rom + Katelin Cherry
- Biological Engineering Jeff Wolchok
- + Christopher Peterson Biological Sciences - Steven Beaupre

GILMAN SCHOLAR

- The Gilman Scholarship provides funds for study abroad.
- + Rachel Calandro Jordan

J. WILLIAM FULBRIGHT SCHOLARSHIPS

- This program awards grants for research and teaching assistantships in foreign countries.
- + John Jolly English - Susan Marren Germany
- + Carl Monson German - Kathleen Condray Germany
- + Cameron Word International Relations -Elizabeth Markham and Hoyt Purvis Japan

NATIONAL SCIENCE FOUNDATION GRADUATE FELLOWS

Recipients are awarded three years of support for graduate studies in all scientific disciplines.

- + Troy Long Chemical Engineering - Scott Mason
- + Alex Lopez
- Chemical Engineering Jamie Hestekin + Ali McAtee
- Chemical Engineering Jamie Hestekin + Thomas Rembert
 - Physics Greg Salamo
- Honorable mentions
- + Danielle Frechette Biological Engineering - Jamie Hestekin
- + Morgan Race
- Civil Engineering Richard Coffman + Derrek Wilson

Physics - Surendra Singh



Honors & Arias

he sweeps onto stage in a sequin-studded strapless gown, bows, and calmly takes her place in the curve of the Steinway grand piano. You expect a big voice, and Sarah Mesko does not disappoint. Her warm, rich mezzosoprano moves fluidly from the Baroque opening aria composed by Giacomo Perti to the dreamy lyricism of Gustav Mahler, from a suite of bluesy cabaret songs by Benjamin Britten to the nimble vocal fireworks of Gioachino Rossini. The surprise comes in the way Mesko fully inhabits the world of each song. In Britten's Johnny, to take just one example, she is by turns flirtatious, enraptured, crestfallen and petulant, at one point letting fly a small shriek of rage at her recalcitrant lover. Her small sigh of release after some numbers, audible in the intimate space of the Stella Boyle Smith concert hall, is the only clue that what Sarah Mesko is doing is actually quite hard. Perhaps most remarkably, she is 27 years old, returning to campus as a seasoned professional just four years after earning degrees in both voice and flute, summa cum laude, from the J. William Fulbright College of Arts and Sciences.

"The poise is what I always think about, when I think of Sarah Mesko," said Janice Yoes, an associate professor of music who led Mesko's vocal training during her years at the University of Arkansas.



"You saw that on stage when she was here – at the age of 27 she did what a seasoned artist does. She takes time with the phrasing, to bring out the beauty of the musical score, and each character has a dramatic inner life from beginning to end." Yoes allowed that she worked on dramatic delivery with Mesko, but was quick to emphasize that the singer has benefitted from many teachers, and added that the poise is all her own: "Maybe she learned it at three, maybe she was born with it," she said with a chuckle.

One of Mesko's earliest memories suggests that her flair for performance was in place at a very young age.

"There's a home video of my sister Emily playing piano," she recalled over a steaming cup of vanilla latte. "I'm three or four, in my pajamas, singing this little church song, and there was a lot of sound pouring out of my body - every note was there!" With her mother teaching piano to 40 students a week, and her father leading music in church on Sundays, Mesko was steeped in classical music from an early age. She sang occasionally in church, but her focus was on the flute, which she began studying at age 10. In high school, she played flute in the Arkansas Youth Orchestra for four years and was proud to be a "three-peat," making first chair flute in the All-State Band three years in a row.

At age 16, determined to audition for top music

Mesko continued on page 26

Sarah Mesko presented a homecoming concert on campus last January. (Opposite, right) Mesko performs as Suzuki in *Madama Butterfly* with the Washington National Opera, directed by Plácido Domingo. *Photo courtesy Washington National Opera*.

Alumni Profile



Mesko performs in an emerging artist production of *Cosi fan tutte* at the Washington National Opera. *Photos by Scott Suchman courtesy Washington National Opera*.

There was music, movement, dancing – it was a more holistic artistic experience. Plus, the flutist has to stay in the pit, and I'm such a ham! I love to perform.

> SARAH MESKO singer and honors alumna

conservatories around the country, she turned for help to Richard and Laura Rosenberg, who led the Hot Springs Music Festival at that time. They listened to her perform on the flute and gave her some pointers. On the way to her car afterwards, Mesko began singing a Debussy song, and a secretary with the music festival overheard her through an open window.

"When I got home, there was a message waiting from the Rosenbergs, to come back and sing for them. I sang *Misty*, and a French art song, and they ended up offering me a role as Third Lady in *The Magic Flute*," Mesko recalled. She loved her first experience singing opera, and expanded her musical studies to include voice. After auditioning in both flute and voice at several top programs, she chose the University of Arkansas.

Talented faculty members, including Yoes and flutist Ronda Mains, were the main draw, and upon arrival on campus Mesko stepped into a lead role, with extensive *recitatives* – musical dialogue, sung in Italian – in Handel's opera *Rinaldo*.

"We were short on male singers,

so Sarah had a 'pants' role," Janice Yoes recalled. "It was very difficult, and she had to learn to sing better to make it through. Every year, she got better."

In addition to meeting these musical challenges, Mesko thrived on the academic riches offered up by the Honors College. She reeled off a number of memorable courses, from a "physics for nonmath majors" class to an honors colloquium on the Byronic hero. "Now I know I would have been miserable at a conservatory," she said. "That level of focus would've burned me out." Sarah's mother, Kathy Mesko, who traveled from Hot Springs to attend the homecoming recital, concurred.

"The Honors College was great for Sarah. She's so diverse in her interests, and here, she was challenged both academically and musically."

Mesko's Bodenhamer Fellowship and an Arkansas Governor's Scholarship were also helpful, fully covering her tuition, room and board, as well as study abroad in Paris and three summers at the Aspen Music Festival, where she studied with top students and performers from around the country.

"I can't thank Dr. B enough for saving me from student debt – that's such a weight on young people," Mesko said. Beyond the academic and financial support she received, Mesko credits her faculty mentors, Yoes and Mains, for helping her find her way as she struggled to choose between voice and flute.

"When I first came here, it was a complete toss up. I wanted to delay the decision as long as possible," Mesko said. Sometimes she focused on the flute, and sometimes she was excited about the vocal repertoire. Over time, she began to lean towards a career in opera.

"There was music, movement, dancing – it was a more holistic artistic experience," she mused. "Plus, the flutist has to stay in the pit, and I'm such a ham! I love to perform."

In her sophomore year, she sat down with some trepidation to talk with Ronda Mains, who advised her student to "'give it some time, be courageous, see what happens," Mesko recalled. "She gave me permission to practice the flute less, to have voice be my primary instrument." Mesko ended up completing a degree in both flute and voice, and is glad she did. Though she's pursuing a career as a singer, she still pulls out the flute to play for her own pleasure, and uses it to learn music that's really difficult.

"Ultimately, the choice had to be hers; she could have done either," Mains said. "She has a natural stage presence that is compelling, and her innate sense of timing and phrasing is just exquisite. This is apparent on the flute, but even more apparent when she sings."

Yoes concurs: "The timbre of her voice was so unusual – lush and dark and Slavic; I think it may come from her Slavic roots. Her range and agility were really unusual, too; I thought she would have more success as a singer. That's the case with so many of these honors kids – they have so many talents in so many directions, the hardest thing is to decide what talent they want to develop."

Her decision made, and the degree in flute completed, Mesko blossomed in her fifth year at the university. She won first place in the National Society of Arts and Letters Vocal Competition and the Franco-American Vocal Academy Grand Concours de Chant, the first of many national honors she has won in vocal performance.

Mesko's career has been on the fast track in the four years since she left campus. The first stop was Rice University in Houston, where she earned a master's degree in vocal performance. She has performed with the Santa Fe Opera, the Baltimore Symphony Orchestra, and made her European debut. She recently completed her second season with the Washington National Opera Domingo-Cafritz Young Artist Program, where she won praise from *The Washington Post* for her "consistently beautiful sound."

Throughout the journey, Mesko has carried with her the lessons

learned on the University of Arkansas campus. While singing with the Santa Fe Opera, she recalled, "the things Ms. Yoes told me finally clicked: emotional things about not getting in my own way, and not listening to myself while I'm singing." Mesko began recording her rehearsals, with the idea that she could listen critically afterwards, and noticed a big difference after she gave herself permission to just sing.

"I can hear myself being so careful in the early recordings, and that's not what thrills people! They want to hear people express joy through the music, pain through the music."

Based on the performance she presented on campus, Mesko has learned that lesson well. After the concert, meeting the applause of the audience waiting for her in the lobby, Mesko sought out Yoes and introduced her to the crowd. Then, turning to her teacher, she gestured from her mouth outward – "Open and go," she said with a smile for the woman who taught her to sing without selfconsciousness.

"You did that today," Yoes said, giving her a hug.



Mesko performs with Jegyung Yang and Plácido Domingo in Gluck's *Iphigénie en Tauride*. *Photo by Scott Suchman courtesy Washington National Opera*.



That's the case with so many of these honors kids – they have so many talents in so many directions, the hardest thing is to decide what talent they want to develop.

JANICE YOES associate professor of music

Alumni Updates

G racen Armendariz earned a B.S. in education, *magna cum laude*, in 2010 and completed her Master of Arts in Teaching in 2011. She is now working as a pre-kindergarten teacher for Fayetteville Public Schools.

Seth Barlow (B.A. in international relations and Russian, with minors in political science and business management, *cum laude*, 2010) recently completed a master's degree in tourism administration in sports management from the George Washington University.

A fter earning B.A. degrees in political science and communication and minors in Spanish, gender studies and legal studies, *cum laude*, 2007, **Dwayne Bensing** spent two years teaching science and social studies to middle school students in Philadelphia as a Teach for America corps member. He recently completed his J.D. at the University of Pennsylvania and is studying for the bar exam. He will begin work as an associate with Fried, Frank, Harris, Shriver, Jacobsen, LLP, in Washington, D.C. this fall.

E than Carter (B.S. in chemical engineering with minor in environmental, soil, and water science, *cum laude*, 2011) is working on a sustainable business MBA online through Marylhurst University and working as a health, safety and environmental coordinator for Southwestern Energy in Conway, Ark.

A fter earning his B.Arch. degree, *summa cum laude*, in 2006, Zack Cooley went on to earn his master's degree in architecture from Princeton University. He's now a junior architect at Diller Scofidio + Renfro, the MacArthur-Prize-winning New York City firm. His projects there have included design work on the new Broad Museum in downtown Los Angeles. **Clark Donat** (B.A. in history, *magna cum laude*, 2007) earned his J.D. from the University of Arkansas School of Law and is now an attorney at Bracewell & Giuliani LLP in Dallas, Texas.

A fter earning her B.S. in business administration, *cum laude*, 2010 and a master's degree in accounting, 2011, from the University of Arkansas, **Cassaundra Drake** is working as an audit associate for Deloitte & Touche, LLP in Dallas, Texas.

A kihiro Eguchi (B.S. in computer science, 2011, and B.A. in psychology, 2012, both *summa cum laude*), will continue to explore his interest in programming artificial intelligence this fall, when he will begin doctoral studies in the field of computational neuroscience at Oxford University.

Trenton Ellis (B.S. in civil engineering with minor in



DANIEL ALLEN completed B.S. (*cum laude*, 2008) and M.S. (2010) degrees in geology at the U of A, and is now a senior geologist with Core Laboratories in Houston. He's excited about the Honors College's new home: "As a geology major and then a graduate student in geology, I spent A LOT of time in historic Ozark Hall. It was like a second home to me in grad school! I'm sure it will be a pleasure for the geosciences department to soon share the building with the Honors College when the extensive renovation and expansion are complete."

Image left: Daniel Allen on a field trip to the Guadalupe Mountains in West Texas last summer.





EMILY BAKER (B.Arch., *summa cum laude*, 2004) recently completed her master's degree in architecture at Cranbrook Academy in Bloomfield Hills, Mich. She writes: "I spent my time at Cranbrook experimenting with innovative structural and construction techniques, and I developed a system called Spin-Valence that uses digital fabrication techniques to turn a sheet of steel into a light-diffusing space frame. I am moving to the United Arab Emirates at the end of August to teach architecture and digital design at the American University of Sharjah."

Emily Baker's thesis installation, *Study in Spin-Valence* (shown at left and above), was purchased by the Cranbrook Art Museum as the second piece of architecture in the permanent collection along with Eliel Saarinen's Saarinen House. The same research will be on display at ACADIA's Synthetic Digital Ecologies Conference in October.

mathematics, magna cum laude, 2008) is currently pursuing a Ph.D. in engineering at the University of Texas at Austin. He focuses on geotechnical engineering with emphases on reliabilitybased design, risk analysis and earthquake engineering. He hopes to return to Arkansas after completing his degree: "The New Madrid Seismic Zone [a major fault system that threatens seven states] contains uncertainties on so many levels ... it makes the design of infrastructure very difficult in northeast Arkansas. I would enjoy spending my career helping with that."

Drew Fleming (B.S. in mechanical engineering with minors in mathematics and physics, *magna cum laude*, 2009), is pursuing a Ph.D. in mechanical engineering at the University of Arkansas, funded by an NSF Graduate Research Fellowship.

A fter earning a bachelor of social work degree with a combined major in African and African-American studies and a minor in Spanish, *summa cum laude*, 2011, Elena (Hampton-Stover) Froelich completed an M.S.W. degree at the University of Kansas. She is now a therapeutic case manager with KVC, a contract foster care provider in Kansas City, Kan.

S arah Griffis (B.A. in classical studies and English literature with a minor in religious

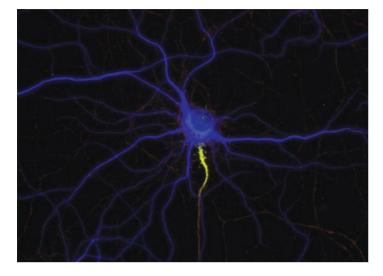
studies, *summa cum laude*, 2011) is completing a Master of Theological Studies in New Testament and Early Christianity at Harvard University. She plans to obtain a Ph.D. in religion and teach at a research university.

Meé (Salois) Hennig (B.S. in physics and English, *summa cum laude*, 2012) raised awareness of light pollution while on campus (pp. 8-10) and continues her work to preserve our connection with the night sky as a program manager with the International Dark-Sky Association in Tucson, Ariz.

William Hogan (B.A. in political science/European

Alumni continued on page 30

Alumni Updates



SHELLY BUFFINGTON (B.S. in biophysical chemistry with minor in biology, *summa cum laude*, 2007) is currently a Ph.D. candidate in the department of neuroscience at Baylor College of Medicine (BCM) and a National Institutes of Health predoctoral fellow. Her research focuses on the structural plasticity and molecular diversity of the axon initial segment, a part of the neuron that plays a central role in cell-to-cell communication. Following her defense in early September, she will begin postdoctoral work at BCM, studying molecular mechanisms of learning and memory.

The image to the left is an immunostaining of a cultured hippocampal neuron that reveals proteins specifically enriched at the axon initial segment (yellow) that are excluded from dendrites (blue). The image, taken by Shelly Buffington during her research, was featured on the cover of the November 2011 *European Journal of Neuroscience* in which Buffington published a review on the axon initial segment in nervous system disease and injury.

studies with minors in Spanish and Latin American studies, *cum laude*, 2011) continues to explore his interest in the Basque region of Spain, the subject of his honors thesis. Now pursuing a master's degree in geography with an emphasis in political geography, he will be conducting fieldwork in Bilbao, Spain this fall.

A imee Jones (B.S. in biology with minor in music, *magna cum laude*, 2007) plans to complete a master's degree in speechlanguage pathology at the U of A next May, followed by a nine-month clinical fellowship. She hopes to promote literacy by working in public schools.

D awn Koltes (B.S. in agricultural, food and life sciences, *cum laude*, 2006) is pursuing a doctoral degree in genetics at Iowa State University.

Example 2 Example 2 Example 3 Example 3 Constant of Constant and Constant of Second Second

Bethany Larson (B.A. in history, cum laude, 2009) completed a master's degree in journalism at the Newhouse School of Public Communications at Syracuse University, and is now assistant editor for Newmarket Press & It Books, part of HarperCollins Publishers.

Jundergraduate degrees (B.S. in food science and B.A. in Spanish, with a minor in global studies in agricultural, food, and life sciences, *summa cum laude*, 2008)

After completing a bachelors of fine art degree in studio art (ceramics) with a second major in German, *cum laude*, in 2008, MARY ELKINS earned a master's degree in craft/ material studies - ceramics at Virginia Commonwealth University in Richmond, Va. She is now teaching ceramics at the Visual Arts Center of Richmond.

The image at the right is a detail of Mary Elkins' M.F.A. thesis work, *Based on a True Story*, $2 \frac{1}{2} \times 6^{2} \times 9^{2}$, low fire clay, glaze, slip, paste wax, gouache, 2011.



and recently completed a Ph.D. in food science from the University of Arkansas. She is currently seeking a job as a sensory science consultant.

achel Lee (B.S. degrees **N**in physics and chemical engineering with a minor in mathematics, summa cum laude, 2010) is now a doctoral student in the physics program at the University of Maryland-College Park. She writes: "I have started working with Dr. Wolfgang Losert at the University of Maryland in collaboration with Dr. Carole Parent at the National Institutes of Health on a project to determine the forces that are responsible for the motion of cells. It is a very interesting project and has applications in fields such as wound healing and cancer treatment."

C amila Maldonado (B.S. in civil engineering, *magna cum laude*, 2011) is an intern at the Department of Transportation (CALTRANS) in San Diego, Calif. This fall she will begin work on a master's degree in engineering and project management at the University of California, Berkeley. **Russell Moore** (B.S. in financefinancial management/ investments, with a minor in economics, *magna cum laude*, 2008) is a national bank examiner in the

Office of the Comptroller of the Currency in Oklahoma City, Okla.

Alumni continued on page 32



MEGAN GARNER (B.A. in graphic design, *magna cum laude*, 2008) earned a master's degree in multimedia journalism from the University of Miami and is now an online news producer with *Education Week*. Past projects have sent her to Kenya, Greece and Ecuador.

Image above: Megan Garner traveled to Athens in 2011 as part of the Special Olympics Documentary Team. Here, she is filming with members of team Ecuador.



BLANCA CECILIA GONZALEZ (B.S. in agricultural, food and life sciences, *cum laude*, 2005) and her husband Nate Tarter recently returned from a year in Haiti, where they worked with World Relief Haiti and partner churches to serve the most vulnerable. As a project manager in the agriculture livelihoods program, she helped to establish a demonstration farm, produce grafted fruit trees and distribute goats, all "with the purpose of helping rural communities and farmer groups increase their production and income." Gonzalez continues to support socio-economic development programs in Haiti as a liaison between the field office and World Relief's headquarters in Baltimore, Md.

The image at left shows Gonzalez and her husband in Haiti, with Port-au-Prince in the background.

Alumni Updates

KATHERINE SHREVES (B.A. in international relations, French and European studies with a minor in economics, *summa cum laude*, 2010) is team-teaching English classes to elementary and junior high school students in Ogawa, a scenic village of 3,000 people in the foothills of the Japanese Northern Alps. This opportunity came through the Japanese Exchange and Teaching Program. She writes: "I intended to stay in Japan for only one year, but I've enjoyed the experience so much that I'll be starting my third year this August. I owe a debt of gratitude to several of my former Honors College professors for helping me successfully apply to the program, but Dr. Hoyt Purvis was especially important in the process."

At right, Shreves addresses students at an assembly.

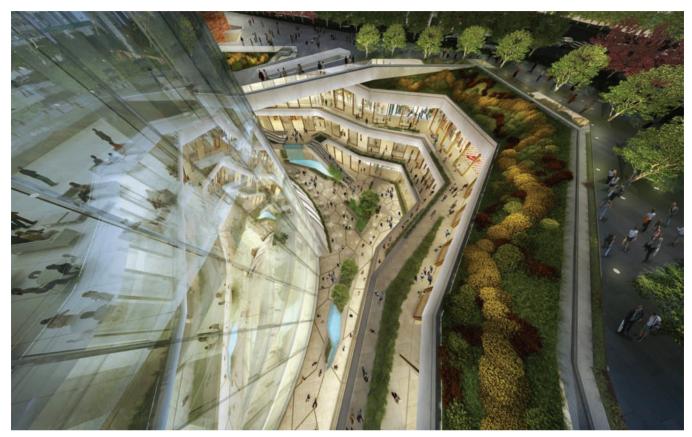


David Norris (B.S. in physics, summa cum laude, 2003) recently completed his Ph.D. in physics at the University of Maryland and is now a National Research Council postdoctoral research associate at the National Institute of Standards and Technology in Gaithersburg, Md. He writes: "I work in the research group of Nobel Prize winner Bill Phillips on experiments involving ultra-cold atomic gases and quantum computing. Prior to this, I spent a brief stint in the corporate world at a Facebook partner company, applying math skills to social media data mining problems; but soon realized that my heart was really still in the lab. Turns out that once you do science for long enough, you will never want to do anything else..." A fter serving two years in Cameroon with the Peace Corps, Jessica Rogers (B.A. in history and French, *magna cum laude*, 2006) has worked in administration and finance at the Peace Corps' headquarters in Washington, D.C. Currently a budget analyst in the Office of the CFO, she writes: "I support Peace Corps Response (a short-term, high-impact program for returned



Since earning his B.A. in Spanish and B.S. in business administration-economics, *magna cum laude*, 2009, **BLAKE STRODE** has pursued a career in professional tennis that took him to more than ten countries on five different continents. He writes: "One of my proudest accomplishments is having played in the U.S. Open in New York for the last three years in a row." Strode begins studies at Harvard Law School this fall.

At left, Blake Strode competes in the 2010 U.S. Open. *Photo courtesy U.S. Tennis Association*.



CASEY WORRELL (B.Arch., *cum laude*, 2010) is an architectural designer in the Los Angeles office of Gensler, a global architecture, design, planning and consulting firm. He writes: "I am in the mixed use/entertainment studio, and have worked mostly on large-scale shopping centers. Right now, a lot of our work is in Asia."

Image above: Worrell helped to design the Yongsan World Cross Zone, an underground retail area linking four major office towers located in Seoul, South Korea. *Image courtesy Gensler*.

Peace Corps Volunteers and qualified professionals) and the programming and training office."

Noel Runyan (B.A. in history and classical studies, with minor in medieval and renaissance studies, *magna cum laude*, 2010) is currently attending the U.S. Navy Nuclear Power Training Command in Goose Creek, S.C., where he is studying to become a nuclear propulsion electronics technician. Upon completion of his curriculum and receiving orders to the fleet, Runyan will be responsible for the maintenance and safe operation of a nuclear reactor aboard a Virginia-class fastattack submarine.

Summer Scott (B.S. in chemical engineering, *cum laude*, 2008) heads a Freeport, Texas plant for Dow Chemical that is the world's largest producer of epichlorohydrin, a key ingredient in epoxy resins that are used in adhesives, paints and other materials.

Kelly Toner, who graduated in May with a B.S. in nursing, *summa cum laude*, will participate in college ministry mission work in Addis Ababa, Ethiopia for one to two years. Following her internship, she plans to work as a nurse and possibly earn a master's degree in public health, then work overseas. "I would love to be a refugee camp nurse someday," she writes.

Zach Wagner (B.A. in history, summa cum laude, 2007) completed his J.D. at the University of Colorado and is now an attorney with the Bendinelli Law Firm, P.C. in Denver, Colo.

Alumni continued on page 34

Alumni Updates

D aniel Weatherall (B. S. in biology, *summa cum laude*, 2010) will begin his third year at the University of Texas Southwestern Medical School this fall. He's considering practice in the fields of emergency medicine, internal medicine or general surgery.

Andrew Wehrman (B.A. in history with minor in education, *magna cum laude*, 2003) earned an M.A.T. at the U of A, then master's and doctoral degrees in history at Northwestern University. He is now an assistant professor of early American history at Marietta College in Marietta, Ohio.

A fter earning a B.S. in chemistry with a minor in mathematics, *magna cum laude*, in 2008, **Blake Williams** earned a medical degree at the University of Arkansas for Medical Sciences. He is now a resident physician in dermatology at UAMS.

Greg Ziser (B.A. in political science with minors in legal studies and Spanish, *summa cum laude*, 2007) recently completed his J.D. at Gonzaga University School of Law in Spokane, Wash. He began work as an assistant attorney general for the Washington State Attorney General's office in August.



A LITTLE ROMANCE ...

ELIZABETH ST. JOHN and **CHRIS SERVEN** first met in Pomfret Honors Quarters as freshmen, but lost touch as they pursued degrees (hers: B.A. in journalism, *magna cum laude*, 2007; his: B.S. in business administration-finance, *cum laude*, 2007). When she moved to Charlotte, N.C. to work in the marketing department for the largest independent Coca-Cola bottler, she contacted the local chapter of the Arkansas Alumni Association to make some new friends – and made a lasting connection. She writes:

"Within a few days, one of the members of the chapter emailed me telling me that he remembered me from freshman year when we both lived in the honors quarters in Pomfret Hall. We got together for coffee to catch up, which turned into dinner, drinks, and a romantic dessert at the Melting Pot. Within eight months, we were engaged, and we got married last July in Charleston, S.C. Since we re-met, we've enjoyed traveling together to fantastic places, as well as making our home in North Carolina. It's such a small world that 1,000 miles from Stadium Drive, two Razorbacks can get reacquainted talking about their college days and start new lives together."

Image above: St. John and Serven were married in Charleston, S.C. in "low country style," complete with a horse and carriage, reception in a historic building, and shrimp and grits.



Postcard from Mexico

In this excerpt from the Honors College blog, honors architecture student Lucky McMahon shares her take on the architectural riches of Mexico, which she is exploring further in her honors thesis under the direction of Kim Sexton, honors program director for the Fay Jones School of Architecture. McMahon's thesis will focus on the ways in which Mexico City's Church of San Francisco, the first built by missionary Franciscans, functions as a site of memory and myth.

Mexico City was founded by Cortes atop the razed Aztec capital of Tenochtitlán and much of the valley lay beneath the waters of Lake Texcoco, a system of interconnected saline and freshwater lakes. As a result, many of the oldest structures are warped and unstable, which adds to the perceptual surreality in which Baroque curvilinearity, indigenous craftsmanship, and multiple spiritualties collide and paradoxically coexist. This metaphorical and literal layering of histories, from pre-Hispanic to colonial to the Revolution and to modern, creates a sense of halting continuity in which the desire for progress and the recognition of the significance of history are inextricably linked.

Without a doubt, the most exhilarating aspect of this summer was the relentless travel and intense drawing. I have never felt as alive as when I was scaling a pyramid at Uxmal or riding a horse through the mountains of San Cristóbal. A summer of study and sketching throughout Mexico inspired Lucky McMahon's thesis topic, which will focus on Mexico City's first church as a site of embodied memory.



Generally we would spend at least two days in a city; one day for a walking tour that covered the large urban landmarks like plazas and cathedrals and one day for focused and layered on-site drawing of urban lacunas (small-scale urban interventions for pedestrian traffic and small community gathering). After our first few days in the city, we departed for the Yucatán Peninsula in the south of Mexico, near the Guatemala border. The first stop was Tlacotalpan, a tiny port town with brightly-painted, porticoed houses as far as the eye could see. Organized around two squares that touched at a corner, the town's main Baroque cathedral was intended

for the upper-class Spanish, while the simplified cathedral of the other square was for the indigenous citizens.

Our first pre-Hispanic site, Uxmal, is probably my favorite. Built of a little tan-pink stone, the Mayan site is amazingly well-preserved, with grand plazas and open corner conditions in which the forest and mountains leak into the space, directing views and creating axial alignments. Mérida, a much larger town in the Yucatán Peninsula, has varied and intimate urban plazas and some of the most emotionally charged cathedrals I've ever

Road Trip continued on page 36

Road Trip



McMahon's sketches of Uxmal; (below) the temple at Uxmal.

This is something that I only noticed for the first time in Mexico: the contradiction and coexistence of the most painful sadness and the most exhilarating beauty.



LUCKY MCMAHON honors architecture student

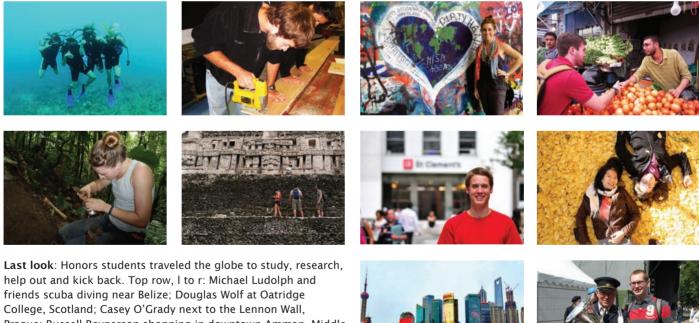
experienced; the elderly women crumpled by the entrance to the door with cups for change and the infinitely benevolent light in the space brought me to tears. This is something that I only noticed for the first time in Mexico: the contradiction and coexistence of the most painful sadness and the most exhilarating beauty.

To hear more from McMahon, and read other student accounts of research and study abroad, visit honorsblog.uark.edu.





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Last look: Honors students traveled the globe to study, research, help out and kick back. Top row, I to r: Michael Ludolph and friends scuba diving near Belize; Douglas Wolf at Oatridge College, Scotland; Casey O'Grady next to the Lennon Wall, Prague; Russell Reynerson shopping in downtown Amman. Middle row, I to r: Jordan Burns studies Costa Rican cloud forest; Devon Hill-Larson and friends visit an archeological site in Belize; Mike Norton at the London School of Economics; Lydia Thompson and friend enjoy the fall leaves in Cambridge. Bottom row, I to r: Bryan Loyd and friends in Shanghai; Taylor Gohman and a fellow euphonium player, Stockholm.

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