cooking with chemistry
welcome

The College of Liberal Arts and Sciences, with its dynamic range of academic majors and research centers, is at the crossroads of the humanities, social sciences, life sciences and natural sciences at ASU. These intellectual disciplines examine and probe a myriad of complex questions, debates and puzzles across nearly any topic students can imagine.

Did you know we provide fundamental and critical education in the sciences, humanities and social sciences to more than 20,000 majors and more than 100,000 students every semester? Our impact is meaningful and broad, and on any given day, we can write a story about the successes and adventures of thousands of outstanding students. In fact, deciding who should be the focus of the stories in this magazine is always a challenge.

A significant number of our students overcome a number of personal and financial challenges to study at ASU. Finding the time and resources to pursue a college degree is increasingly difficult; yet, people like Elizabeth Barnes, Patrick Mulvaney and Junive Gill Vega are pursuing their dreams amidst barriers and roadblocks. They have persevered and are achieving impressive successes resonating with their dreams and aspirations.

Elizabeth Barnes grew up poor. She was forced to drop out of high school and unfortunately needed to sever ties with her family in order to support herself. Against this challenging backdrop, though, she enrolled in college and is now working on a Ph.D. in evolutionary biology in the School of Life Sciences.

Patrick Mulvaney, who began a career at a bar and restaurant, worried he could not compete in a challenging science program when he enrolled in CLAS. Yet, he finished his chemistry degree and opened his own restaurant in California including an Edible School Garden project. His work has been recognized by First Lady Michelle Obama’s Let’s Move program.

Junive Gill Vega is an undocumented immigrant student who is interested in studying medicine. She is currently a senior pursuing a major in biochemistry and transborder community development and health and one of a few students at ASU who are considered DREAMers — students who are allowed to focus on their college degrees because they came to the United States with their families as young children. She is simultaneously working on a project called “Undocumented Voices.” The goal of this project is to change the way people think about undocumented immigrants.

We also want to recognize three student interns, Sarah Anderson, Paulina Iracka and Michael Close, who worked to help produce this issue of the CLAS Magazine. It has a new look and layout, and includes updates from our schools, departments, centers and institutes to showcase the amazing work our diverse units are doing.

Lastly, we need your support to carry on our mission of graduating talented students. You can learn more about impacting our students’ dreams at clas.asu.edu/impact.

Patrick J. Kenney
Vice Provost and Dean
College of Liberal Arts and Sciences

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From high school dropout to Ph.D. candidate, ASU alumna follows her dream

By Jason Krell

High school students are told if they want to go to college, they must earn a high school diploma or at least a high school equivalency certificate. For Elizabeth Barnes, finishing school wasn’t a choice.

“I grew up in poverty, and the need to support myself became greater than my need to finish high school,” Barnes said. At age 16 and in her sophomore year, difficult circumstances forced Barnes to cut ties with her family and drop out. She found full-time work as a server at a local restaurant and has taken care of herself ever since.

After working three years, Barnes said she recognized that her natural intellectual curiosity would never be satisfied staying in the same job, which drove her to make a change.

“I realized I wanted to do more,” Barnes said. “I knew that I wanted to be a difference maker, and I wasn’t going to do that being a server at Denny’s.”

She enrolled in community college courses by testing into beginning classes, such as algebra and English 101. Barnes only learned such a route existed after calling to see what her options were.

After spending four more years working, taking classes and figuring out what undergraduate degree to pursue, Barnes was finally ready to transfer to ASU. With an eventual goal of earning a doctorate, she settled on evolutionary biology, which landed her in ASU’s School of Life Sciences.

Barnes credits Regents’ professor Jane Maienschein with both acculturating her to academia and connecting her to associate professor Sarah Brem with the School of Social and Family Dynamics, the only faculty member studying evolutionary education at ASU during that time.

The connection to Brem proved crucial to Barnes’ success. When she struggled to juggle it all — working full-time and trying to earn good grades, it was Brem who offered a paid undergraduate research position.

“That was a seminal moment for me because that was when I was able to quit the customer service industry and focus full-time on my academic research,” Barnes said. “If you look at my transcript, you can identify the exact moment where things changed from mediocre to exceptional. I can never express enough gratitude for Sarah Brem.”

From then on, Barnes focused on her undergraduate thesis, researching why people of different backgrounds reject the theory of evolution. Her research propelled her through the rest of her undergraduate career and into the Biology and Society Master’s program within the School of Life Sciences. Barnes is now a first-year doctoral student in the biology and society program, working on her dissertation with the School of Life Sciences assistant professor Sara Brownell. According to Brownell, Barnes is unlike any student with whom she has ever worked.

“Liz exudes a level of passion for her research interests that I have never seen in a student,” Brownell said. “When she talks about her research, it’s the perfect combination of excitement and thoughtfulness.”

Despite fighting through her own challenges, Barnes insists it doesn’t make her any more special than other students. She adds that everyone has struggles to overcome.

“Taking an untraditional path has definitely taught me that I’m resilient and persistent,” Barnes said. “Those are things that I value about myself, but I don’t give myself extra credit for going the way that I did.”

Barnes said she credits her mentors, such as Maienschein, Brem and Brownell, for supporting her.

“I wasn’t always sure I fit in,” Barnes said. “But I had wonderful mentors and colleagues that really helped me feel like this was the place for me. If it wasn’t for them, I don’t think I’d be here today.”

What Barnes will agree to, however, is that everything she’s been through has solidified what she’s capable of and given her a confidence she never had before. Armed with that confidence, she said, she is almost ready to share what she’s learned with the world.
Country’s re-emergence on world stage sparks interest

By Michael Close

As Russia began to pick up international attention over the last two years with the Olympics and a conflict in Ukraine, a large contingent of ASU ROTC students changed their majors to Russian.

Several of the 10 students cited Russia’s military power and economic influences as major factors in their decision to enroll in those courses.

“The benefits are vast,” Cadet Oleksandr Bakuta said. “With Russian, it’s a specialized field with plenty of opportunities in the government and big companies.”

Russian language professor Don Livingston said when Russia invaded Ukraine and began military action in Crimea, the world noticed, and these actions reinforced the student’s opinion that Russia is not a power that can be ignored.

“Russia is making themselves visible on the world stage again,” Bakuta said.

In late February 2014, Russia began to send troops and military equipment into Ukraine. Russian soldiers have continued to seize Ukrainian military bases and the Crimean parliament. While the situation in Crimea as well as Russia’s military and economic power influenced the students’ decision, encouragement from local ROTC officers and student John Kuttner had a big impact on their final decisions. Kuttner said that officers are very invested in the success of cadets and will show them the benefits of any major.

Kuttner, who was already working on advanced Russian coursework during the time of the events in Ukraine and Crimea, was the first ROTC student to win the Post-Secondary Russian Scholar Laureate award. He won the award by demonstrating an active dedication in coursework, outside activities and attitude to the study of Russian language and culture.

“I was definitely more vocal and proactive about my Russian studies,” Kuttner said. “People would come up to me and say they were changing their major to Russian because I seemed to really enjoy it.”

The students have many opportunities to test their multilingual skills. Last spring, ASU ROTC students participated in a multistate Ranger Challenge simulating an American deployment in a non-English speaking location. ASU hosted the challenge, and Kuttner played a key role as a translator for his team.

“I was asked to be a foreign national, I would speak English but also Russian,” Kuttner said.

This was to teach cadets how to interact with foreign nationals in a deployed environment and get them culturally accustomed to going into different locations. Opportunities in business, military and political fields become available by specializing in Russian, Kuttner said. Students who graduate from this program plan to become intelligence officers and translators for the U.S. military.

“There are certain skills that a business will look at and say, ‘we can teach you how to do this but we can’t teach you Russian, you learned that on your own,’ “Kuttner said. “You have a specialized field to yourself. Taking that step to just diversify yourself and taking that step to make yourself more attractive on a resume, you definitely give yourself some value.”
In 2014, a controversy over online journalism ethics dubbed “#GamerGate” on Twitter led to the harassment of several women who received threats of assault, rape and death. Video game developers Zoe Quinn and Brianna Wu and feminist critic Anita Sarkeesian were forced from their homes and into hiding when their addresses and personal information were published, or “doxxed,” along with specific, graphic threats to themselves and their families. Claims of impropriety in the gaming press that started the maelstrom have not held up, but the harassment continues.

"GamerGate is ostensibly about journalistic ethics," wrote Brianna Wu in an Oct. 20 blog for The Washington Post. “In reality, GamerGate is a group of gamers that are willing to destroy the women who have invaded their clubhouse.”

Cindy Tekobbe, an ASU alumna and doctoral candidate in English, studies gender dynamics and gender politics in online spaces. She says that although this is one of the most publicized instances, online mistreatment of women is nothing new. “Gamergate brought into the public discourse what many women have known for a long time: that being a woman on the Internet can make you a target," she said. Tekobbe provided some context for the ongoing controversy.

“In January 2014, [journalist] Amanda Hess wrote an article detailing the experiences of some female journalists with rape and death threats,” she said. “As for my work in this area, I’ve received some tweets and social media posts and messages that were offensive and harassing. These have all been gendered. This is what it’s like to be a woman who puts herself in the public eye.”

A self-described “career internet technologist,” Tekobbe is a former computer programmer, database designer and network administrator. And as part of a tech team, she was recognized for her work by several prominent industry...
psychology professor John Suler discussed this characterization. Rider University

“An English Ph.D. had always been a personal goal of mine, and I’m really gratified to be so close to completing it,” Tekobbe says. “I don’t really feel I’ve left technology. I teach humanities courses, but technology literacies and practices are an important component of those courses.”

Also a faculty associate for the ASU Herberger Institute’s School of Arts, Media and Engineering, Tekobbe now writes about technology and gender, publishing her work in journals such as Information, Communication & Society, and in the collection Collaborative Learning and Writing: Essays on Using Small Groups in Teaching English and Composition (2012). She is not simply an observer of the trends, but an active computer gamer and games critic. Tekobbe has taken precautions.

Gender Identity
“I am sorry to say that I feel the need to conceal my gender and identity when I’m gaming online to minimize the ugliness I encounter,” she said. “I’ve had my share of ‘stalkers.’”

In the gaming world, people — not always women — who are perceived as “SJWs” (social justice warriors) are often the victims of harassment. Tekobbe defines SJWs as “gamers, games developers, gaming critics and academics, and gaming journalists who support and advocate for women, ethnic minorities and LGBTQ-identifying voices and identities in video games.”

Although she conceals her gender and identity, Tekobbe says she is banned in some online forums “because my work makes me an SJW.” She believes that abuses are amplified and concentrated online because of the relative anonymity the Internet affords, “where like-minded people are able to locate each other quickly and congregate in dark corners.”

Other research on online anonymity backs up this characterization. Rider University psychology professor John Suler discussed the dark underbelly of the Internet back in 2004, calling the phenomenon of anonymous harassment the “online disinhibition effect.”

“When people have the opportunity to separate their actions from their real world and identity, they feel less vulnerable about opening up,” Suler said. “When acting out hostile feelings, the person doesn’t have to take responsibility for those actions.”

Whatever the perpetrators’ motivations for threatening — some say they do it for “fun” — their victims are terrorized. The eventual outcome of much virtual harassment is that those bullied feel unsafe online. Tekobbe has noted this trend, saying that the abuses tend to drive women out of public spaces and discourage them from speaking about women’s issues in public.”

“Some number of female developers and journalists are said to have left the industry entirely rather than face continual harassment and threat,” Tekobbe said.

The male-dominated gaming world provides a petri-dish example of these kinds of dynamics, according to Tekobbe. Women and minorities are still under-represented as both developers and players of online games, and this has been slow to change — though it is changing.

“I think GamerGate demonstrates that there are more female characters in games, and more people of color and more LGBTQ-identifying people. I think the pushback of GamerGate is a reaction to the presence, however small, of these new faces and voices,” Tekobbe said.

She cautions that simply equalizing the gender ratio won’t address the underlying assumptions driving certain behaviors.

Cultural Belief
“Seeing more women in these roles won’t change the cultural gendered assumptions that underpin harassment,” Tekobbe said. “For example, there is a cultural belief that computer nerds — people who are especially competent and innovative with technologies — must be singularly and obsessively focused on their work.

“And there is a cultural belief that women — as caregivers, as social creatures and as fulfilling the needs of others — cannot be singularly or obsessively focused. Then these cultural beliefs serve to eliminate women from consideration for prominent roles in tech because it is believed that social, caregiving, needs-meeting women are unsuitable for the obsessive tech culture. So, I think we need more women in tech and tech leadership, but we also need to challenge cultural assumptions about women and their gender roles.”

Humanities Scholar
Tekobbe believes that her role as a humanities scholar is to begin public conversations about these challenging subjects and to shed light on the overarching themes involved.

“GamerGate and other controversies like it are opportunities for those in the humanities to provide some insight into these broader cultural issues,” Tekobbe said.

In her work — in journal articles, in her classes, in her online interactions — Tekobbe is beginning these conversations, one hashtag at a time.
Critical Language Institute

gives students specialized international opportunities
An intense program in Slavic languages is preparing ASU students for international careers in business and development.

ASU’s Critical Languages Institute, as part of the Melikian Center, trains students and sends them off to specialized programs in and around the Balkans, offering the opportunity to learn critical languages and study abroad in locations of high strategic significance to the United States.

“The program is standard-based, outcome-based and proficiency-based,” said Kathleen Evans-Romaine, the institute’s director. “It’s a fast and effective way to learn a new language.”

The institute is open to anyone, including non-ASU students. It specializes in intensive training for Eastern European and Euroasian languages including Albanian, Armenian, Russian or Turkish.

Zachary Yentzer, an ASU honors alumnus who graduated with a bachelor’s degree in political science, joined the program in 2010.

Yentzer decided to learn Albanian, and after eight weeks of intense classes in Tempe, he traveled to Albania for three weeks to get the international experience, he said.

After he came back and won a scholarship, he traveled to Kosovo for 10 months and served as Albanian language project developer for Future Voters of Kosovo, an ASU-run U.S. Agency for International Development project to foster civic engagement.

Yentzer said learning a critical language is a great way to start working with business partners around the world, maintain international relationships and be compatible.

“When you speak to someone in another language you speak to their heart,” Yentzer said.

Steve Gillen also graduated ASU in 1993 with three separate bachelor’s degrees in political science, history and Russian, and he acquired a position at the Russian and East European Studies Consortium.

Gillen decided to broaden his Slavic languages knowledge and took the institute’s courses in Macedonian and Serbo-Croatian. After receiving a Fulbright Scholarship, Gillen traveled to Macedonia to research issues of local self-government.

Gillen said the program was critical because it improved relations between ethnic Macedonian and ethnic Albanian populations and prevented the crisis in Kosovo from spreading into Macedonia. After the fellowship, Gillen was contracted by the U.S. embassy in Skopje, Macedonia as an adviser on Macedonian politics and public diplomacy in connection with the Kosovo war of 1999 where he could directly speak with victims of atrocities.

Currently, Gillen is the chief of the political section in the U.S. Department of State’s Office of Iraq Affairs.

After the 2011 attack on the American Embassy in Sarajevo, the leader of Banja Luka’s Islamic community invited Gillen to deliver an address on American tradition of inter-religious dialogue and freedom of religions to 50 of his imams, where Gillen answered all questions in Bosnian.

“That opportunity to engage directly with the community at a key moment would have, so to speak, been lost in translation,” he said.

The program offered in Arizona is intense because students attend the course and engage in cultural activities for four hours a day, five days a week, said Odilbek Kattaev, who has been the Uzbek instructor at the institute since 2008.

The institute is trying to maintain a critical language deficit, Evans-Romaine said. The knowledge of different languages not only allows you to work as a translator or interpreter but also can help you to get almost any job, and future employers appreciate the hard work that someone puts to learn a new language, Evans-Romaine said.

“When you speak to someone in another language you speak to their heart.”
By Sarah Anderson

ASU alumna Lindsey Burnett will soon finish up medical school and help women combat infertility, but it was her time as a Sun Devil that solidified her base in science and research.

Burnett’s efforts secured her a Distinguished Alumni Award from Barrett, the Honors College, in 2014 for her work in the fields of women’s health issues. “College was sort of the time to become an adult and become independent,” she said.

While she is currently finishing up her medical schooling at the University of Illinois, Burnett said that ASU was her first exposure to basic science, research, teaching others and pioneering new ways of thinking, all of which provided solid foundations for her medical career.

Burnett’s past research has included studying the estrogen in cell invasion, which has implications for estrogen-responsive cancers such as breast cancer, and characterizing a protein, allurin, in a new species of frogs and its effects on mammals and their sperm. Currently, she is studying polycystic ovarian syndrome, a cause of infertility in women.

In addition to medical schooling and research, Burnett directs and volunteers at a free student-run clinic that is open to the public. Her duties revolve around staffing and funding the clinic, as well as expanding its services. At her behest, the clinic now offers reproductive health services.

When she was informed of the award, Burnett was not only working on her last year of medical school but was interviewing for residencies.

Her next goal is four more years of OB/GYN training with sub-specialty training to become a reproductive endocrinologist, which is a specialist that helps people with infertility.

ASU life sciences professor Douglas Chandler, Burnett’s former teacher, nominated her for the award. “I have had the pleasure of being a mentor and colleague of hers for 14 years and have watched her tackle an exciting career in clinical research and become an informed advocate of women’s medicine and women’s reproductive welfare,” Chandler wrote in his nomination letter for Burnett.

Chandler said Burnett had an interest in medicine and reproductive sciences even before coming to his lab, with a father in the medical field and a mother who worked for Planned Parenthood.

What his lab helped her realize was that she would like to become involved in research, Chandler said. “She sees the interplay between serving people and research.”

She also “does three times as much as a normal person does,” Chandler said, citing the four roles she acts in at the University of Illinois: medical student, instructor, researcher and administrator of a clinic for underserved people.

“I can see that she’s going places... it’s still an ongoing story,” he said.
ASU recognizes Jenny Norton ’93 for alumni achievement

By Jill DeMichele

The Rev. Jenny L. Norton was honored with the Alumni Achievement Award at the 2015 ASU Founders’ Day for her advocacy on behalf of sustainability and social justice issues, and for her concern with the impact of environmental challenges upon the most vulnerable populations within our society.

At ASU, Norton established five scholarship endowments, including four in the College of Liberal Arts and Sciences and one in the School of Sustainability. The scholarships assist undergraduate and graduate students who are interested in justice studies, religious studies, sustainability and women and gender studies.

The sustainability scholarship focus is for students to research how populations facing poverty and social justice issues may be more likely to benefit from sustainability practices. She also has endowed a program fund for the Institute for Humanities Research related to the environmental humanities.

While serving as an Arizona state representative from District 27 in the 1980s, Norton co-sponsored legislation to mandate the use of clean fuels and to re-write the state’s energy policy. She worked with U.S. Representative Jay Rhodes to draft a bill that authorized the Central Arizona Project to recapture two million acre-feet of clean water per year. She was also an early adopter of the electric car during this era.

Norton earned her bachelor’s degree in justice studies at ASU in 1993. She completed a theology degree at Fuller Theological Seminary. She has served as auxiliary chaplain at St. Luke’s Hospital locations in Tempe and Phoenix, as well as for the Arizona State Department of Corrections. She recently retired as associate minister for social justice within her denomination, the International Church of the Foursquare Gospel.

Norton and her spouse Bob Ramsey were key supporters of Habitat for Humanity of Central Arizona, building the first LEED-certified Habitat home in Glendale, Ariz. Since that time, they have contributed to the construction of more than 50 additional affordable LEED-certified homes by the organization.

She is collaborating with ASU’s Walton Sustainability Solutions Initiatives, Habitat for Humanity, and the City of Tempe on a current project that will create entire neighborhoods of sustainable, affordable houses in Tempe and in Guatemala.

Norton and Ramsey have been recognized throughout the community with many awards for advocacy and service work, including the Cesar Chavez Legacy Award, ASU’s MLK Servant-Leadership Award, and a Lifetime Achievement Award from the Tempe Chamber of Commerce. She was inducted into the College of Liberal Arts and Sciences’ Alumni Hall of Fame in 2007.

“I am always so grateful to my university for creating who I am, and my gratitude is now exploding that my university is honoring me for whom I have become, because of my learning experience at ASU.” —Rev. Jenny Norton ‘93

Invest in our students today by making a gift to one of the CLAS scholarship funds. Learn how you can invest:

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call: 480.965.1441
The 2005 Atlantic Coast hurricane season was the most devastating to the region in recorded history. Despite sophisticated storm tracking and warning systems, the predictions missed the mark with tragic consequences—an estimated 3,913 deaths and more than $159 billion in property damage.

With all of the ways that information is circulated—TV, radio, social media, word of mouth—getting the right information to the right people at the right time can be a logistical nightmare.

“What sounds like a relatively straightforward process—assess, predict, inform the public—is actually complicated by all the different ways information is spread and what people choose to heed or ignore,” said complex adaptive systems modeler Michael Barton, an archaeologist in the College of Liberal Arts and Science’s School of Human Evolution and Social Change.

The way such information flows is beyond intuitive comprehension, Barton said. “But computational science provides us with powerful tools to model and simulate how people react to hurricane warnings,” he said. “We also have the data of what actually happened in past storms that we can use to test and improve the models.”

As the lead ASU investigator, Barton is working on a project aimed at preparing the nation for natural disasters. The project, funded by the National Science Foundation, aims to better understand how people respond to these types of warnings.

According to Josh Watts, another ASU archaeologist on the project, hurricanes are categorized based on wind speed, but much of the damage is caused by flooding from the storm surge.

Wind speed alone does not predict the storm surge—so a Category 3 hurricane can be a really windy day or a massive flood, depending on the way the tides, wind and landfall all come together, Watts said. “We’re working on new models to both predict the storm surge and provide accurate warnings for evacuation planning,” Watts said.

The team, which is led by the National Center for Atmospheric Research and includes researchers from the
University of Colorado at Boulder, is sifting through data that at first glance resembles a tangled ball of string.

“We are not just looking at the networks, but also the quality of the information and its impact,” Barton said. “What kinds of messages work for what kinds of people? Who relies on social media or looks to their neighbors? What roles do past or recent experience play? How do news agencies figure out which information to broadcast? You don’t want to cause massive panic every time there is a storm and have millions evacuating who are not in danger.

“It’s complicated, but not impossible to figure out using the kinds of complex adaptive systems models we are perfecting at ASU,” Barton said. He now laughs about scientists in the desert working on hurricane issues.

“It probably sounds strange that archaeologists at Arizona State University got a big grant to study hurricanes in Florida,” he said. “But the fact is, we have some of the best expertise in the country for modeling complex social behavior.”

Learn more about Complex Adaptive Systems science at ASU at complexity.asu.edu.
CSL student Lillian discovers vessels, ornaments, and effigy figures from medieval Arizona’s past. Photo by Anne Küpler.
The odyssey of teachers’ workshops

By Dr. Sharonah Fredrick and Kendra TerBeek

An ASU College of Liberal Arts and Sciences center is filling a need for medieval and Renaissance education in Arizona schools with workshops for teachers. ASU’s Arizona Center for Medieval and Renaissance Studies’ teachers workshops, led by Sharonah Fredrick and Kendra TerBeek, not only expand the knowledge base of teachers, but make the information accessible to them and applicable to their students.

Through legends and pictures, the workshops illustrate the interaction of pre-modern peoples encompassing the globe.

Recently, the center partnered with the Child Study Laboratory for a successful teachers’ workshop. The laboratory is a community preschool sponsored by the ASU Department of Psychology and serves children from 15 months through five years.

The theme was the Hopi and Navajo civilization of Arizona’s Middle Ages. This collaboration showcased Hopi Kachina art, Navajo sand-painting and iconography and tales of southwest origins. It spanned the 10th through the 15th centuries, including connections between the southwest and Aztec Mexico.

“There they saw replicas of Native American art, kachina masks and sculpted life-sized pithouses in the sandbox; they were thrilled,” Kupfer said. “Our teachers would never have been as prepared if we had not attended the workshops. We gained understanding of the peoples, and their breadth of existence and passed this experience to our children.”

In addition to the Laboratory and Tempe Teachers of Gifted Children, the center has worked with the International School of Arizona in Scottsdale, surveying folklore from French, Hindu, African and Hopi traditions.

Center director Robert Bjork said they hope to not only spread ideas about Middle Ages and Renaissance, but also to “to impact education in Arizona one teacher at a time.”

“This program will have far-reaching benefits for years to come,” Bjork said.

The center works with teachers of local public and private schools, grades pre-kindergarten through 12th grade. For more information, visit: acmrs.org/public-programs/teachertraining.
Beyond the montage

By Britt Lewis

Writing ‘beyond the montage’
Tara Ison’s house never looks cleaner than when she has an impending deadline. “I would rather clean my toilet than write,” said the associate professor of creative writing at Arizona State University.

That’s because writing does not always come easily — even to a successful writer such as Ison, who has penned dozens of screenplays, including the Hollywood cult classic “Don’t Tell Mom the Babysitter’s Dead,” and is the author of three novels, a short story collection and a collection of essays.

Not only is writing hard, she says, but teaching someone to write is nearly impossible, although Ison appears to excel at both.

“You can teach craft, but you can’t teach anything more,” Ison said. “I can help a writer find what the story is, but I can’t tell you if you’re a writer. In order to be a writer, you must keep writing.”

The typing montage
Long before she arrived at ASU’s Department of English, before any of her critical or commercial success, Ison knew she wanted to be a writer but knew little about writing itself.

Early in her life, Ison was attracted to what she calls the “cinematic image of the writer.”

It was an image she saw in the movies: elegantly dressed artists wandering through Europe, gazing out windows and fervently pounding away on a keyboard in a seemingly optimistic, action-driven “typing montage” — a cigarette and drink always close by. When she looked back on how this cinematic archetype had captivated her imagination and helped steer her toward becoming a writer, Ison discovered other aspects of her identity that she believes have been shaped by film as well.

She explores these cinematic moments and what they have meant to her life and career in her new memoir, “Reeling Through Life: How I Learned to Live, Love and Die at the Movies” (Soft Skull Press, 2015).

“Films have a huge impact on me and how I view the world, and who I want to be in the world,” said Ison, who writes in the introduction to her book that she often catches herself thinking: “Did I actually do that? Say that? Or did I just see it in a movie?”

Moviegoing, according to Ison, offers the viewer much more than an escape. It offers the opportunity to be highly engaged and even introspective. From the first movie she saw, Ison says she felt an instinctive, subconscious link between film and the forming of her identity.

“All of us who love to watch movies experience those universal points of connection,” writes Ison in her book. “We all have our own subjective, idiosyncratic collection of indelible cinematic moments.”
From screenwriting to teaching

Just two months after she graduated from college, Ison got a huge break in her career. She and her writing partner sold a script to 20th Century Fox titled “The Real World.” (The title was later changed to “Don’t Tell Mom the Babysitter’s Dead.”)

Ison said it was an ideal time to start a career as a screenwriter in Hollywood. “Studios were looking to hire new, young writers,” she said. “They were willing to take chances — not like the box office blitz of today.”

Her success only took her so far though, and she gradually became frustrated with the often incomplete process of screenwriting that ended abruptly with a finished script but no film.

As a result, Ison turned her attention to a story she knew would work better in a different medium than film – an intimate story of a mother and daughter living inside the most famous prison in America.

“Child Out of Alcatraz” was Ison’s first novel. It was a finalist in the Los Angeles Times 1997 Book Awards for Best First Fiction.

Writing her first novel led her even further from Hollywood and back to school to earn her Master of Fine Arts degree. For the first time, she considered a career in teaching.

Ison, who has received numerous awards and prestigious fellowships, has taught creative writing at seven universities, including Northwestern University and Ohio State University.

“It is not always the case that an excellent writer is an excellent teacher, but Tara is just that,” said Courtney Fowler, one of Ison’s former graduate students at Arizona State University. Fowler, who also served as Ison’s teaching assistant, now teaches a variety of writing courses herself for ASU Writing Programs.

“In a fiction workshop or screenplay class, she gets invested in your story,” said Fowler. “She interrogates plot lines and character motivation. She crystallizes intention. It’s an amazing feeling to be a fledgling writer and to have someone read a bad draft and get what you were trying to do… there is a warmth to even her toughest critique.”

The (real) writer

In addition to her most recent book, Ison has written two other novels while balancing a teaching career. Still, she admits to feeling some discomfort when calling herself a writer.

As she explains in her new book, she has long learned that the real work of writing is a far cry from that typing montage à la 20th Century Fox’s 1977 film “Julia” — the film that helped burn into her brain those “abbreviated moments of typing that magically create art.”

The real writer, according to Ison, “is simply the one who writes. Who keeps writing. Who keeps at it, beyond the montage — for whom the writing is the story, not the musical interlude.”

our student investment

1,036
student scholarships
(2013-14)

$2.5
million awarded
Long before Patrick Mulvaney graduated with a bachelor’s degree in chemistry from ASU and started nationally recognized work on an edible high school garden, he was a waiter and bartender at the Bungalow Bar in Rockaway Beach, N.J.

But Hurricane Sandy destroyed the bar, and the bar all but destroyed Mulvaney; it was the location where he said he voted himself “least likely to succeed in the industry.” Mulvaney packed up and moved in 1988 to Phoenix, where he began his degree at ASU and his cooking career.

“Cooking is both an art and a science,” Mulvaney explained. “The discipline I learned at Arizona State University in the classroom, lab and library has served me well not only in the kitchen but in all facets of our business.”

ASU’s Department of Chemistry and Biochemistry allowed him to investigate the physical and chemical transformations of ingredients that occur in cooking.

While cooking at Roxsand’s restaurant in Phoenix he was named “the rising star of the southwest” by the American Institute of Wine and Food.

In the mid ‘90s Mulvaney moved to California and fell in love with the Central Valley, he said.

Mulvaney decided to make Sacramento his home, working at some of Sacramento’s finest establishments, including Paragary’s and The Kitchen. In 2005, he opened Mulvaney’s Building and Loan named after the James Stewart movie “It’s a Wonderful Life.” B & L has a menu that features local, fresh and organic ingredients.

Mulvaney’s commitment to showcasing local products has helped grow a large following. But it is what he does in the cooking of these ingredients that is really special — the combination of science and art, he said.

“Think of Mulvaney’s style as ‘slow food’ in action,” said Chris Macias, the Sacramento Bee’s food and wine writer since 2008. “This culinary movement celebrates locally grown foods and eco-friendly farming, a way of bringing the food chain closer to the community.”

Mulvaney has received many honors during his career. Sam Kass, former White House chef and current head of the “Let’s Move” program developed by First Lady
Michelle Obama, recently visited Sacramento to recognize Mulvaney’s work on the Edible School Garden at Edible Sac High.

“Edible Sac High is the integrated nutrition program at Sacramento Charter High School that involves students in all aspects of the food cycle, from the school garden, through the kitchen classroom and into the student-run cafeteria,” Mulvaney said.

The program was initiated by Kevin Johnson, former Phoenix Suns star and later Sacramento mayor, and Alice Waters of Chez Panisse fame in Berkeley, Calif. It will serve as a model for similar projects across the country.

In March of last year, Mulvaney received one of the culinary world’s highest honors — an invitation to prepare a meal for the famed James Beard House dinner in New York. He and his staff went to the James Beard kitchen in New York on March 13, whipping up a one-night-only menu titled “A Promise of Spring: Savoring Sacramento.”

“The education I worked for at ASU helped prepare me for the real world and all of its challenges,” Mulvaney said.
Writing Trouble: Further adventures in the ASU Novel Year
By Karen Odden

A few months ago, a writer friend said to me that she had a fundamental problem with “Something Better than Vanilla”, the contemporary YA novel that I’ve been working on since the beginning of the ASU course.

As I braced myself for her critique, she continued: “I love how you take care of people. You’re the one who cooks people meals when they’re sick and makes sure no one feels left out.” She paused. “The problem is, this nurturing instinct does not serve you well as a writer.”

As often happens (to me, at least), the universe delivered the message twice to make sure I heard it.

In June, Jewell Parker Rhodes had just read a draft of my full manuscript and warned me that “the action [and] character needs all resolve too pleasantly and easily… there’s no sense of urgency.”

She also felt strongly that the father/daughter relationship was the primary arc. So when the trouble between my characters Mitch and Claire began to be resolved in chapter seven, it shut down the book; most of the tension vanished, and she lost interest.

While one part of me wished that Jewell had written, “It’s fabulous just the way it is! I’m going to send it straight off to my publisher,” there was another part of me that realized I needed to look at this carefully because both my friend and Jewell had told me a hard truth (and, let’s face it, telling hard truths is not the easy way out) to help me. What is it in me, I wondered, that is unwilling to let Claire and her father’s unhappiness, misunderstandings and mistrust play out across the narrative? Why do I resist writing Trouble for my character?

By Trouble, I mean Trouble with a capital T — not just a problem to be solved, or even a psychological issue. I think of Trouble as the crucial narrative

The historic President's Cottage is the home of the Virginia G. Piper Center for Creative Writing. Located on the corner of Palm Walk and Tyler Mall, the house was constructed in 1907 and served as the home of the university presidents until 1959. It now provides essential space for classes, seminars, an archive for ASU literary history and a writers garden.
As a child, I often felt troubled and anxious, and this was in part a reflection of the stress my parents felt. Looking back, I marvel at what they accomplished, raising four children on less than $30,000 a year, with both of them working full time. But they were so overwhelmed simply managing their everyday lives and the household that many conflicts had to be swept under the rug, and I often felt there was no one available to help when things went wrong for me. So I turned to books as reliable and reassuring companions. I read to escape; I read to learn; I read to live in places where Trouble was always, always resolved by the last page. Of course, all that reading gave me a sense for what a good story looks like — and the possibilities for plots and characters and resolutions.

But some of the patterns in my family instilled a high level of anxiety about conflicts and problems. In my experience, things would not turn out well if I didn’t take them in hand and make them better. Fast. My inner monologue went something like this: Smooth out the edges. Make the best of it. Hurry. Because otherwise, things will go from bad to worse, and no one will be there to help you out of it then either. I have come to see the implications of my childhood experience vis-à-vis my writing. On the one hand, it helped me, for when it came to writing Claire, a girl who was desperately lonely and anxious, I knew her down to her bones. On the other hand, I didn’t want to hurt Claire; I wanted to take care of her; I wanted to end her Trouble fast.

But when the Trouble ends, the book ends. And what publisher is going to buy a YA book that ends on page 44 because the author wants to hug her heroine and make it all better instead of building the plot arc, developing the suspense and raising the stakes from chapter to chapter?

This is why I needed the Novel Year class. The one-on-one mentoring and steady feedback I’ve received from published writers, most recently Varian Johnson (My Life as a Rhombus, among others), has helped me see how my own psychological truth, the story that’s deep in my bones, can both fuel my writing and stall it.

I need both to identify with Claire in her Trouble and to manage my own (unconscious) anxiety on her behalf. Put simply, I need to separate my childhood experience from my novel’s plot line. And you’d think it would be easy after 30 years out of my parents’ house. But the deepest and oldest pains, the ones that drive our stories, are often also the most insidious.

So I went back to the manuscript again. This time, I let the problems develop. From the first chapter, Claire swears that she is going to be “straight vanilla” with her father — polite, civil and keeping him at a distance.

Then, instead of Claire and her father having a nice “things-are-going-to-be-okay” dinner at page 44, she sits sullen and silent until he says, “I was hoping we’d be more than roommates.”

She snaps back: “Well, roommates is more than I got for fifteen years.” It’s the first true thing she says to him — and it’s just the beginning. The “vanilla” that she swore she was going to maintain is gone. In its place is a furious, painful resentment. They begin to fight about her staying out late and him vanishing for hours.

They keep secrets; they pretend; they lie. One night he catches her on his computer and assumes she’s snooping (though she isn’t).

The resentment and misunderstandings build until one night Claire breaks down, and finally her father says what she’s needed to hear all along: “I am trying to do something right here, okay? Something that’s right for you.” He takes a deep breath in, blows it out. “You’re miserable. And I don’t know what to do. Can you help me? Please, Claire. Just tell me what to do.”

It’s in this moment of his vulnerability that she finds her first glimpse of what might exist between the two of them: something better than vanilla. And this has been my journey, too — toward something better than a vanilla novel, a novel that is a big, melty, messy ice cream sundae with too many nuts and the chocolate sauce spilling out of the bowl.

This is what many of us are striving toward in our books, that moment when our characters and our readers will feel that, yes, life and love and relationships are often a mess, but the mess is not only tolerable; it’s what we share, what binds us together. And it’s the very imperfection, the sloppiness of the mess that feels like not just like Trouble but truth.

Karen Odden is a writer in the Your Novel Year program, an 18-month intensive writing program from ASU’s Virginia G. Piper Center for Creative Writing. For more information on how to make this your novel year, go to piper.asu.edu/novel. Her first novel, an historical mystery, is forthcoming from Alibi in fall 2015.

Editors note: Find Part 1 of the ASU Novel Year in the previous edition of the CLAS Magazine at clas.asu.edu.
Documenting the undocumented

Students talk with immigrant youths

By Beatriz Kravetz

An ASU humanities project will record the history of the undocumented immigrant youth movement to create a new conversation on the meaning of being American and to pioneer new approaches to collecting and archiving.

Undergraduate students record history as it unfolds as they work with faculty in their research.

“This is a new approach to oral history methods and digital archiving,” said Dr. Mark Tebeau, director of public history at ASU. “The research team will develop a community-based, community-sourced oral history project that will include building a prototype of a digital tool and archive that indexes the interviews by segments, making oral history more accessible to researchers and the public.”

ASU’s School of Historical, Philosophical and Religious Studies has partnered with the UCLA Center for Labor Research and the California Historical Society. This partnership brings together a team of nationally recognized oral historians, public humanists and social activists to collect and archive the undocumented immigrant youth movement.

“Transforming how we collect and archive oral history contributes to the creation of ‘citizen humanities’ by which the actors in any given historical event are empowered to see themselves as archivists and historians, too,” said Dr. Matt Garcia, director of the school.

Junive Gill Vega, a pre-med student, is an undergraduate on the research team and said she’s happy to be part of a transdisciplinary project.

A DREAMer, or an undocumented immigrant who was brought across the border at a young age, Vega is one of only a handful of undocumented students at ASU.

Last year, the research team participated in UCLA’s Dream Summer, a workshop for undocumented youth where they learned about their rights and met others in the same situation. The workshop was a portion of the team’s training, along with training specific to conducting and collecting oral histories.

“We are talking with DREAMers and family members whose experiences are a part of this nation’s history, regardless of legal status,” Vega said. “In the end, we will create a traveling exhibit that will make it all the way to the Smithsonian.”

While Vega said she was excited about the prospect of her work being in the Smithsonian, she doesn’t count that as the highest honor.

“It’s not as exciting as bringing DREAMers out of the shadows,” she said. “I want people to know who we are, to know that we are real people with real families; we are not just a stereotype or a statistic.”
As a pre-med senior majoring in biochemistry and transborder community development and health, Junive Gill Vega knows she doesn’t fit the stereotypical image of an undocumented immigrant.

Her desire to educate others to look beyond the perceived notion is what caused her to join the Undocumented Voices project.

“I want to put a face to it and let individuals share our stories and how it started,” Vega said. “When I tell people that I’m undocumented, they’re like ‘what?’ They don’t believe it because I’m not the stereotype of what an undocumented person is for them.”

Vega was born in Mexico and brought to the states when she was 3 years old. She doesn’t remember anything at that time, but she said she grew up with a constant fear that her or someone in her family could be deported.

Vega currently is protected by the Deferred Action for Childhood Arrivals (DACA), a policy that allows undocumented immigrants to have a two-year work permit and protection from deportation. However, the policy doesn’t affect her parents. Her mom has been jailed before. “There’s always this fear that they’re not protected,” Vega said.

Vega receives privately funded scholarships and works a job to pay for school. She’s also uses a website that allows people to donate toward her college fund.

Kristine Navarro-McElhaney, the School of Historical, Philosophical, and Religious Studies public history program manager, said Vega’s past has helped her to be proactive in college and in the Undocumented Voices project.

“She is one very strong young lady,” Navarro-McElhaney said. “If there’s a problem or situation, it’s not, ‘What are we going to do? Woe is me.’ It’s, ‘What are we going to do to handle it?’”

Vega heard about Undocumented Voices in a class taught by Matthew Garcia, director at the school. She approached him after class and brought up that she was a DREAMer and joined the project.

Garcia said Vega’s experiences have helped them come up with ideas on how to present the interview questions or design the website.

“She’s an essential component in this project,” Garcia said. “She’s also has just a great spirit about her that generates camaraderie.”

Vega said she hopes this project will go against “the negative images in the media.”

“People think undocumented people come here and we’re here to steal their jobs or we’re here just to be on welfare and to leech off the government, which isn’t true,” Vega said. “There’s a large majority of undocumented people who don’t qualify for government help.”
CLAS Academic Unit Updates

Find out what’s happening in your academic unit in the College of Liberal Arts and Sciences. With 12 schools, seven departments, two programs and more than 40 centers, CLAS has the most choice and diversity of studies at ASU.
U.S. Army Reserves 2LT and ASU Army ROTC alumna Matilde Muñoz gives an inside look at what it’s like to be an Army ROTC cadet and college student:

“ASU Army ROTC is the most challenging training I have ever experienced. ROTC has furthered my career in the military, from my enlistment to paving the path to become an officer. The program gave me the tools needed to grow and develop as a leader and gain the experience within the military.

One of the best advantages I gained with ROTC was the ability to travel. All of the seniors are given the chance to go train for a week with the 25th Infantry Division in Hawaii. That was one of the best trips I have ever taken, not just for the sandy beaches but also for the chance to be mentored by other officers for the branches we were about to commission into. Not every program in the country affords their cadets such great opportunities for cadet development.

In contrast to the training environments, volunteering within the community teaches cadets to not only give their time freely but to learn how to lead others. I am very proud to be a graduate of the Sun Devil Battalion and will take that pride with me throughout my life.”

The American Indian Studies Master’s program is entering its fourth year of operation as we currently accept applications for the fall 2015 cohort. While the program is still small, we are nonetheless seeing our stature grow. In addition to faculty accomplishments in research, publications and service, our graduate students are distinguishing themselves as young academics and as servants to their communities.

We have students participating in various roles at national conferences, such as the annual meetings of the American Indian Studies Association, Western Social Sciences Association and the Native American and Indigenous Studies Association. We also have students employed at the Inter-Tribal Council of Arizona and Native Connections. Justin Hongeva (Hopi) — who was the first to graduate through the thesis option — is doing an admirable job assisting Jacob Moore (Tohono O’odham) on American Indian Initiatives. Emery Tahy, who’s finishing a thesis on Navajo Nation governance, was the American Indian Studies section coordinator for this year’s WSSA Portland meeting.

Lastly, the master’s program is growing in exciting new ways. There is a concurrent master’s degree with public administration, which enables students to earn two master’s degrees in 60 credits, instead of 72 (if obtained separately). We have also established a 4+1 accelerated degree program, which will allow qualified undergraduates to start earning an AIS Master’s degree during their senior year. For more information, contact Dr. David Martínez, graduate studies director, at either David.Martinez.3@asu.edu or 480-727-9818.
Center for Film, Media & Popular Culture

Discussing current films with a diverse group of interested, articulate people from different generations and backgrounds is intellectually challenging and insightful.

Every academic year, members of the Center for Film, Media and Popular Culture Advisory Board host three film salons in their homes or clubs. The salons bring together a mix of community members including ASU alumni with current film students, visiting international scholars and interns in the center.

Dr. Edwin and Phyllis Manning hosted this year's first salon on Gone Girl in October 2014 at their residence. Dr. Joel and Paula Corman hosted a salon in March 2015 on Clint Eastwood's film American Sniper at Gainey Ranch Golf Club. Center Director Peter Lehman introduced the film placing it within the context of Eastwood's late-period work and the political controversies surrounding it. Jack Hirsch and Bonnie Price will host the third salon near the end of the Spring semester. Following the formal discussions, the conversations continue informally over coffee and dessert.

The past two years salons have included guest filmmakers such as legendary special effects artist Michael Tric (Jurassic Park), and film and television actor Todd Susman (Orange Is the New Black) whose career has spanned decades. Both have joined the center as distinguished filmmakers and lectured on Tempe campus.

The salons have proven to be one of the center's most popular programs and fulfill ASU's goal of integrating knowledge, creativity and students with members of the community. Listening to the feedback, it is hard to tell who loves it more: students or community members.

Center for Nanotechnology in Society

One of the primary goals of the Center for Nanotechnology in Society (CNS) at ASU is fostering innovative collaborations that enable new avenues of scholarship in the social studies of emerging technologies that would not be possible working in one field alone. This interdisciplinary approach has produced several recent notable achievements:

- CNS Director David Guston founded the Journal of Responsible Innovation, an interdisciplinary, peer-reviewed journal devoted to examining ethics, sustainability, culture, justice and politics as they relate to research and emerging technologies. The inaugural issue was released last March.

- CNS teamed up with the ASU Quantum Energy and Sustainable Solar Technologies (QESST) Engineering Research Center, industry and government to develop a new anticipatory approach to Life Cycle Assessment, a process typically conducted after a new technology is already implemented. By using probability and modeling, researchers explored best- and worst-case scenarios to anticipate the environmental impact of various emerging photovoltaic technologies, prior to their use in solar panels. The project was featured in the Sept. 16 issue of the Environmental Science and Technology.

- While focused on emerging nanotechnologies specifically, CNS has advanced work in public engagement, anticipatory governance, ethics and philosophy as they relate to the social studies of any emerging technology. As a result, CNS, together with Caltech, was awarded $150,000 by the National Science Foundation (NSF) to conduct a workshop on the societal aspects of synthetic biology. More than 100 participants representing academia, industry, government and nonprofits from eight countries came together in November to participate.

- CNS, together with the Herberger Institute, the School of Sustainable Engineering and the Department of English, all at ASU, received a nearly $200,000 NSF grant to develop a new undergraduate course offered this past fall that uses Lego Serious Play to foster reflection and deliberation about ethical issues related to emerging nanotechnologies.

- In collaboration with the Design School at ASU’s Herberger Institute for Design and the Arts, CNS developed visualization scenarios as a new way to anticipate urban futures. The innovative tool was presented to policymakers in Washington, D.C., last February.
The most recent publication in the journal *Science* from ASU’s Department of Chemistry and Biochemistry comes from professor Petra Fromme’s research group. They have caught a light-sensitive biomolecule at work using an X-ray laser. Their study proves that high-speed X-ray lasers can capture the fast dynamics of biomolecules in ultra slow motion, revealing subtle processes with unprecedented clarity. It paves the way for movies at atomic resolution.

Unfortunately, many biomolecules, such as proteins found in cell membranes, do not grow into crystals large enough to produce a usable diffraction pattern. Yet they will often form nanocrystals a few dozen molecules across. Because the beams from synchrotrons are not bright enough to get usable diffraction patterns from such tiny structures, researchers have turned to X-Ray Free Electron Lasers (XFELs), which are at least a billion times brighter than synchrotrons.

The ASU researchers have been central to the use of this new technique, which has led to a stream of exciting discoveries on protein structures. In the latest study, the researchers used the photoactive yellow protein (PYP) as a model system. PYP is a receptor for blue light that is part of the photosynthetic machinery in certain bacteria.

“This is a huge breakthrough toward the ultimate goal of producing molecular movies that reveal the dynamics of biomolecules with unparalleled speed and precision,” Fromme said.

In November CSPO launched the Center for Engagement & Training in Science & Society (CENTSS) a new interdisciplinary research center that aims to “change the way we think, learn and talk about science and technology.” CENTSS consists of nine program areas that focus on the enhancement of communication and learning about science and technology and the interaction between scientists, government, industry and the public. Ira Bennett of CSPO and Jamey Wetmore of CSPO and SHESC co-direct the Center that has eight other faculty associated with the research. Meet them at cspo.org/centss.

One of CENTSS’ goals — reducing barriers between the multiple stakeholders involved in science and technology decision-making — was illustrated by the recent “Informing NASA’s Asteroid Initiative” project in which CSPO and its collaborators in ECAST (Expert and Citizen Assessment of Science and Technology) hosted forums this fall to engage citizens in a deliberative dialogue on NASA’s Asteroid Initiative.

The citizen forums engaged diverse publics in reflective and informed conversations enabling participants to learn about issues, develop their own questions and make recommendations based on their own values and interests.

Discussion covered an array of topics including planetary defense strategies, asteroid detection and how missions to asteroids are part of the future of human space exploration. Data and opinions from the forums were included by NASA administrators in the decision-making process on future exploration projects.
In an ongoing effort to address the needs of students and community, the Department of English has launched several new programs of study and enhanced its successful internship and career programs.

**Programs of study**
The Bachelor of Arts (BA) in rhetoric, writing and literacies explores how words work in the world — from all sorts of perspectives. The degree is useful for students interested in how language works to frame larger issues like climate change, social justice, race relations, privacy policy or human rights. The new BA may also appeal to students in other majors wanting to complement their degrees, or for those wanting a sequenced path into a writing career.

A 4+1 program in MTESOL (Master of Teaching English to Speakers of Other Languages) enrolls students in a fast-track curriculum to complete a bachelor's degree in English (linguistics) and then earn a 12-credit master's degree one year from their graduation date. One of the most popular degrees in humanities, the MTESOL is a professional qualification for building a career in English language teaching, nationally or internationally.

**Career initiatives**
Internships can be instrumental in future professional success, and English continues to build its offerings for both undergraduate and graduate students. In fall 2014, 86 English and film and media studies majors were placed in 58 internships across the globe. Current partners range from publishers to tech companies, nonprofits to sports enterprises, and include placements with Hearst magazines, Apple, the Sundance Film Festival and even a pending contract with a Major League Baseball team.

For graduate students in October 2014, the Graduate Scholars of English Association (GSEA) hosted an “Alt-Ac” (alternative to academic) career panel featuring several accomplished alumni (Laura Bush, Ph.D. ’00; Laura Waugh, Ph.D. ’13; Sydney Lines, BA ’11, MA ’13; and Michelle Iwen, BA ’03, MFA ’06). The event attracted more than 30 attendees and is archived for viewing on Google hangout at hangout.google.com.

**Geographical Sciences & Urban Planning**
Sustainability is a focus at ASU, and the School of Geographical Sciences & Urban Planning is a leading participant. Several SGSUP faculty work within sustainability themes:

- **Human-environment interactions:** Daniel D. Arreola, Netra Chhetri, Matei Georgescu, Patricia Gober, Kelli Larson, Wei Li, Kevin McHugh, Martin Pasqualetti, B. L. Turner II
- **Physical geography:** Robert C. Balling, Jr., Randy Cerveny, Ronald Dorn, Janet Franklin, Mark Schmeeckle, Nancy Selover
- **Urban form:** Joochul Kim, Katherine Crewe, Deirdre Pfeiffer, David Pijawka, Emily Talen, Douglas Webster
- **Transportation:** Aaron Golub, Jason Kelley, Michael Kuby, Deborah Salon
- **Spatial and economic analysis:** Luc Anselin, Stephanie Deitrick, Stewart Fotheringham, Julia Koschinsky, Wenwen Li, Elizabeth Mack, Soe Myint, Breandán Ó Huallacháin, Sergio Rey, Elizabeth Wentz

Urban form refers to design and specification of urban spaces. One project in this area is Reinvent Phoenix, a multi-agency collaboration to re-envision five neighborhoods around the Light Rail based on sustainable principles. The project team, co-led by Golub and including Pfeiffer, examined affordability, health, recreation and climate in lower-income areas along the Light Rail. One outcome was the creation of neighborhood steering committees that can remain informed and active long after the grant has ended.

Several researchers in the human interaction group are taking a deep look at biomass energy crops. Perennial grasses potentially provide biofuels to offset fossil fuel usage — but increased cultivation may result in water and climate impacts.

The research team, led by Georgescu and including Chhetri, and funded by the National Science Foundation, is using state-of-the-art models and high performance computing to examine the complex feedbacks to biofuel agriculture. The team is also working towards identifying the most suitable locations for biofuel agriculture and its sustainable economic potential.
The Bilingual Press at the ASU Hispanic Research Center will publish a book in 2015 entitled Bandits and Revolutionaries in Literature, Folklore and Film: The Good, the Bad, the Beautiful.

The book grew out of an international conference on good bandits, warrior women, revolutionaries and the cultural legacy of the Mexican Revolution of 1910. The conference was held in Tempe in November 2010 and is part of the HRC's ongoing research project on the concept of noble bandits in Hispanic culture. The book is edited by Gary Francisco Keller, ASU Regents' Professor and Director of the Hispanic Research Center.

The concept of the noble bandit, both female and male, is part of Hispanic cultural identity as it is for the entire world. Hero worship stirs our innermost need to identify the liberators whom we can follow. In the 1960s, social scientist Eric Hobsbawm created a new field of social history dedicated to the study of noble bandits in virtually all cultures of the world.

The HRC's Noble Bandits project focuses on the good-bad heroes and heroines of Latino culture. These are the Hispanic Robin Hoods, Lone Rangers and Cisco Kids. Several of them have joined the internationally established firmament.

Hispanic culture has been inspired by and enamored with the good-bad savior. During the Mexican Revolution of 1910, the people of Mexico identified those saviors in romanticized notions of the rebels Pancho Villa and Emiliano Zapata and several female rebels such as La Negra Angustias, La Adelita and La Valentina. These figures have become the stuff of story and myth.

The upcoming book will include analyses of classic novels and films, discussions of the intersection between politics and literature and studies of the phenomena of Pancho Villa, Emilio Zapata and other Latino noble bandits.

The Hugh Downs School of Human Communication unveiled its Hugh Downs Collection on Dec. 1, 2014. Consisting of more than 650 personal and professional items, the collection celebrates one of the most familiar figures in American history of television. Hugh Downs holds the Guinness world record of 10,637 hours of 20th century network TV airtime.

“Hugh reflects the school's vision to explore communication in everyday life, from families to work and from religion to culture,” said Linda Lederman, the school's director.

The school has also launched two new initiatives: the I-4C Collective and the Transformation Project. The I-4C Collective mobilizes resources from rhetoric, performance and critical-cultural studies to explore the intersections of civil, critical and creative communication. Faculty members and graduate students generate collaborative research that illuminates understanding of the human experience in its cultural, contextual and sociopolitical dimensions. Participants engage with communities and catalyze social change through innovative, inquiry and presentation.

The project communicatively transforms lives and relationships. Faculty, students and community members seek to discover and promote creative change that encourages healthy communication, collaborative behavior and equitable social organizations. Work centers on harnessing energy and urgency from problematic situations to empower individuals, nurture relationships, enrich organizations and advance community.

The project is sponsoring a Conflict Transformation Summit on April 24, 2015 featuring panels and presentations on conflict resolution, leadership, facilitation, negotiation and civil dialogue bringing together academics, practitioners, professionals and members of the community.

Paul Mongeau, professor and associate director, is president-elect of the Western States Communication Association and the Primary Program Planner for the February 2015 convention in Spokane, Wash. The convention involves more than 600 students, faculty and practitioners experiencing close to 200 research papers, symposia, presentations, short-courses, debates and discussions.
Since its founding, the Institute for Humanities Research (IHR) has endeavored to produce socially engaged humanistic research, demonstrating the vital role that the field plays in the lives of everyone from physicists to environmental activists.

The scope and diversity of initiatives being advanced by the IHR throughout the 2014-2015 academic year is testament to this unyielding drive to promote the humanities. Through appeals to fundamental questions, IHR will transcend the rigid bounds of individual disciplines. In the spirit of its mission, the IHR is hosting renowned physicist and author Dr. Alan Lightman, who spoke on the intersection of physics and fiction as part of the IHR Distinguished Lecture series this February.

Furthermore, the IHR has launched an initiative to enhance research in the Medical Humanities, a burgeoning transdisciplinary field covering areas such as medical ethics, narrative medicine, health-care policy and development. The institute also has an initiative in the environmental humanities. It includes the international Mellon-funded Humanities for the Environment Project, with special emphasis on environmental sustainability and social justice, and a new interdisciplinary project on the future of desert cities.

The IHR’s Nexus Lab continues to promote the confluence of humanities and digital scholarship, developing new strategies for discovery based on data and computing, such as its Digital Humanities and Energy.

On Feb. 8, Jewish Studies co-hosted Limmud AZ at the Memorial Union (in Hebrew, “limmud” means “learning”). This full-day event delighted hundreds of Jewish community members of diverse backgrounds with a day of educational workshops, discussions and performances. The annual Albert and Liese Eckstein Scholar-in Residence program brings experts in the field of Jewish Studies to Arizona. This year’s scholar, Ken Frieden, B.G. Rudolph Chair in Judaic Studies at Syracuse University, presented “Travelling to Zion and Beyond: Sea Travel, Translation and the Rise of Modern Literature” on Feb. 23, on the Tempe campus. The same evening he spoke on “American Cinema and the Yiddish Tradition” to a large community audience at the Arizona Jewish Historical Society in Downtown Phoenix.

The Center for Jewish Studies and the Jewish Studies Program offer exciting programs to benefit the ASU community and to enhance cultural life in metropolitan Phoenix.

The center is home to the Judaism, Science and Medicine Group (JSMG), an international organization facilitating dialogue between scientists, health-care professionals and scholars of Judaism. October 2014 welcomed a prominent group of scholars and health practitioners to the seventh-annual JSMG conference “Healing: The Interplay of Science and Religion” at ASU. The two-day meeting focused on the process of healing, featuring the keynote address, “Healing as a Spiritual Experience” by Dan Sulmasy, of the University of Chicago.

Our Faculty

1,302 total faculty
752 tenured and tenure track
1 MacArthur Fellow
1 Noble Laureate
1 Pulitzer Prize
2 Royal Society Fellows
3 American Council of Learned Societies Fellows
4 Sloan Research Fellows
9 American Academy of Arts and Science Fellows
10 National Academy of Sciences Members
16 Ford Foundation Fellowships
18 Alexander Von Humboldt Foundation Research Prizes
24 Guggenheim Fellows
45 Regents' Professors
54 American Association for the Advancement of Science Fellows
77 Fulbright American Scholars
Math & Statistical Sciences

More: math.asu.edu

Thirteen students from the School of Mathematical and Statistical Sciences at ASU recently traveled to San Antonio to present their innovative research at the world’s largest gathering of mathematicians, the Joint Mathematics Meetings.

The students are part of the Mentoring through Critical Transition Points (MCTP) program, a mentoring partnership for mathematically talented students at the Maricopa Community Colleges District in collaboration with Barrett, the Honors College, at ASU.

MCTP pairs up students with mentoring faculty leaders in their fields who share their areas of scientific interest and expertise, including weather prediction and atmospheric dynamics, image processing and Fourier analysis, network dynamics and graph theory and mathematical models of brain and prostate cancer.

“I loved the research projects. It was exciting to be able to use math in creative context, free from the ‘right or wrong answer’ context of the classroom, but with an important end-goal in mind,” said Kody Holmes, a student from Scottsdale Community College who recently transferred to ASU to study math and biology.

MCTP is designed to provide opportunities to undergraduate mathematics majors to work as part of a team on an interdisciplinary problem, analyze open-ended problems, and present a talk or poster on their work at a research conference. MCTP is funded by the National Science Foundation and includes a three-week summer program for students at Scottsdale Community College and an eight-week summer research experience for math majors.

Origins Project

More: origins.asu.edu

The Origins Project kicked off its 2015 season with the inaugural dialogue event featuring stage and screen legend Alan Alda and Origins director Lawrence Krauss. The new dialogue series features an evening of intimate conversation between Krauss and some of the best-known intellectuals, scientists and communicators in the world.

Political Thought & Leadership

Facebook: Center4PTL

ASU and the College of Liberal Arts and Sciences celebrated the launch of a new research center on Jan. 22. The Center for Political Thought and Leadership is training a new generation of leaders well-versed in the principles of democracy. The center’s mission is to impart a deeper understanding of the meaning of political liberty and economic well-being to the academic and larger public community through undergraduate education, scholarly research and public events.

Arizona Gov. Doug Ducey and ASU President Michael Crow gave opening remarks before the keynote address by Rich Lowry, editor of National Review and esteemed conservative columnist and commentator, titled “Abraham Lincoln and the American Idea.”

“Balance isn’t always easy, and people are free to have their own views and opinions, but as an institution we have to be diligent to make certain that all ideas are welcome and that all ideas matter,” Crow said.

The Center for Political Thought and Leadership provides a forum for national and international scholarship and research in political thought. The center brings together political, legal, academic community and business leaders involved in public affairs to exchange and develop ideas about leadership and the meaning of leadership in their respective fields.

Through the undergraduate certificate program in Political Thought and Leadership, students at ASU have opportunities to learn and build networks directly with community leaders, which provide them with vital connections for their future career paths. In this way, the center fulfills Thomas Jefferson’s admonition for universities to combine academic knowledge with public life.
The 1971 psychology building was the department's fourth ASU home, having before spent many years at Old Main before moving to Lyceum and then to the social sciences building in 1960. Psychology courses were first offered in 1890 — within five years of the Arizona Territory establishing the Territorial Normal School and only 15 years after Henry James introduced the discipline of psychology at Harvard. Not only was psychology one of ASU's first disciplines, but psychology's first professor, Dr. James McNaughton, established ASU's first football team in 1896 while he was the Normal School's fifth “principal,” a position now known as the university president. ASU's first Ph.D. “received in hand” was psychology doctoral student Montrose Wolf, who originated “timeout” for children.

Although psychology started in a corner of Old Main, the department now spans six buildings, averages 2,000 undergraduate majors and 121 doctoral students per year, has 65 federally-funded grants and almost $15 million in federal and foundation research funding and will be launching a new master’s of science program in applied behavior analysis this fall 2015.

Labs and offices of the members of the Psychology Department moved out last summer to make way for the building's year long renovation. Not only will infrastructure and safety upgrades be made, but the entire second floor will be gutted and rebuilt to reflect the growth and diversity of the department. Major work is also being done on the first and third floors to update research and teaching spaces to support the department’s programs. When completed, the building’s interior will essentially be all new with leading-edge technology and instructional support.

ASU’s Center for the Study of Religion and Conflict advances research and education on the dynamics of religion, conflict and peace in global affairs. Using a trans-disciplinary approach, our work addresses some of the world’s most pressing challenges, including projects on religion and asymmetric conflict, led by political scientist Carolyn Warner and social psychologist Steven Neuberg, and sectarianism and Shari’ah in Muslim discourse, directed by religious studies professor Mark Woodward and computer scientist Hasan Davulcu.

The center is also looking to the future and asking questions about what kind of world we want to have. To that end theenter has launched initiatives that examine religious change in the 21st century, create international partnership and advance the study of peace.

- Linell Cady, director of the center, and John Carlson, associate professor of religious studies, are co-directors of "Religion and Global Citizenship," which looks at how religious identity cooperates or conflicts with ideas of global citizenship.

- English professor and associate dean Deborah Clarke directs “Globalizing Research and Teaching of American Literature,” a three-year research and knowledge exchange between ASU and Kinnaird College (Lahore) that empowers women in Pakistani academia.

- History professor Yasmin Saikia continues to advance the center’s Hardt-Nickahos Peace Studies Initiative, including a conference on the experiences that everyday, ordinary people draw upon to become agents of peace.
The T. Denny Sanford School of Social and Family Dynamics is a national leader in social sciences with new human development and family studies rankings lauding the school's doctoral programs.

The school is ranked No. 3 overall (tied with Cornell University and Auburn University), No. 1 for adolescence/emerging adulthood programs and No. 2 in child development programs. Rankings were compiled for the Human Development and Family Science Report, compiled by the Ohio State University Human Development and Family Science Professor Claire Kamp Dush, who analyzed survey results compiled from peer faculty throughout the United States and Canada.

“These rankings confirm our belief that the Sanford School is a world-class force of excellence,” said Richard Fabes, Sanford School director and professor. “They reflect the hard work of our faculty and students, and our commitment to training the next generation of scholars, practitioners, policymakers and concerned adults who are interested in making a difference in the lives of children, youth and families. In a relatively short period of time, we have been able to harness the potential of the school, and it is great that this is being recognized. I’m even more excited to see what the future holds for our faculty and students, and for those who benefit from the work they do.”

ASU's School of Earth and Space Exploration (SESE) has been involved with NASA planetary exploration missions since the 1970s. Continuing the tradition of being at the leading edge of exploration, two missions on the horizon are generating excitement across campus.

A year and a half from now, an instrument designed by Professor Phil Christensen will lift off from Cape Canaveral on a rocket. The instrument, which is now being built in a cleanroom in ISTB 4 on Tempe campus, forms a key part of NASA's OSIRIS-REx mission, which will bring back to Earth the first samples from the surface of asteroid Bennu.

The instrument under construction at ASU is the OSIRIS-REx Thermal Emission Spectrometer, or OTES for short. Sensitive to long-wave infrared radiation, OTES will globally map the minerals on Bennu's surface, helping mission scientists choose the best places to sample.

In 2020, Professor Jim Bell will be overseeing an international science team responsible for creating and operating “the main eyes of NASA's next rover.” Bell was recently selected by NASA to design, deliver and oversee a pair of color panoramic zoom cameras on the Mars 2020 rover mission.
School of Human Evolution & Social Change

The School of Human Evolution and Social Change is a globally-leading academic unit that uses innovation in social-science research and training to address some of the major challenges we face for the next millennium, such as climate change, emerging diseases and growing global conflicts. We tackle these in innovative ways, looking long into the human history and across all cultures, to understand what makes humans as they are.

Our school offers a wide array of leading degree programs in such traditional areas of anthropology as paleoanthropology, cultural anthropology and archaeology. But we are also now known for our ground breaking work in newer areas like mathematical epidemiology, global health and environmental studies.

In 2014, we again broke previous records for the level of external funding awarded for our faculty research ($10 million) and the number of students completing degrees.

Other major investments are reflected in the 2015 launch of the Center for Archaeology and Society and ongoing expansion of the Institute of Human Origins and our research station at Teotihuacan, Mexico.

Keep up to date with the school’s latest advances and happenings by subscribing to the School of Human Evolution and Social Change News and Events Digest at bit.ly/SHESCnewsandevents.

School of Historical, Philosophical & Religious Studies

The School of Historical, Philosophical and Religious Studies has been increasingly expanding its research since online degrees have become available.

This is a source of pride for Penelope Moon, the director of the online history MA, as it caters to various non-traditional student communities that would not otherwise have the opportunity to further their studies.

“The wonderful thing about this online degree is that it serves the needs of multiple populations, from veterans to K-12 teachers, folks beginning their careers to those looking to enrich their retirement years,” Moon said.

Take Jess Rowley, an Arizona native who bravely served in the Marines for six years. Now, he works in Zion National Park, where he supervises a campground throughout the year and joins firefighting crews during fire season.

“My long-term goal is to supervise a visitor center at one of our nation’s many battlefields or other historical monuments,” Rowley said.

Like many online students, Rowley’s time is almost entirely consumed by his full-time job and family — he is married and a proud father of four. He is grateful that ASU provides a learning alternative for those who cannot attend classes on campus. Without this opportunity, he would have no chance for completing his education and studying a subject he loves: American military history.

The school has been raising funds to endow a scholarship for military veterans at ASU. Those who, like Rowley, have never wavered in their commitment to protect others deserve the gratitude and the commitment to their future.

More: shprs.clas.asu.edu
School of Politics & Global Studies

More: pgs.clas.asu.edu

This spring, the School of Politics and Global Studies hosted more than 30 scholars from around the world during two conferences that focused on human rights, ethnic and religious conflict.

Thanks to the generous estate gift of alumnus Brian A. Kopf, the school was able to provide funds for two conferences. First, the SPGS Working Group on Conflict and Human Rights and the Center on the Future of War co-organized a conference titled, “How Do We Know What We Know: Charting the Future for Human Rights Documentation and Analysis?” Second, the SPGS Working Group on Nationalism and Ethno-Religious Dynamics in conjunction with the Center for the Study of Religion and Conflict also hosted a conference on “Ethnic and Religious Conflict.”

SPGS was also the recipient of an estate gift from alumnus Victor Kramer. This gift provides for seminars and speakers for the school. The faculty, along with members of the political science honorary society, Pi Sigma Alpha, will work together to choose pre-eminent faculty to deliver those seminars and talks. SPGS intends to launch this seminar series in the fall.

School of Social Transformation

More: sst.asu.edu

The nation’s first School of Social Transformation will launch a new women and gender studies Master’s degree program in fall 2015.

The new, interdisciplinary program — one of just a few in the western region of the U.S. — will provide students a robust academic foundation in feminist theory and methodologies by offering advanced training and research on topics related to women, gender and sexuality.

“Students can expect to find fellow students and faculty who are interested in addressing larger challenges of society and who are interested in engaging and using inspired research to address those challenges,” said Bryan Brayboy, President’s Professor and acting director of the School of Social Transformation.

Students will work closely with a well-versed faculty that use an innovative approach to the study of gender while bringing together the theory and methods of feminist scholars who analyze gender in the social sciences, humanities, arts and physical sciences. Students pursuing the degree will have the option to develop an applied project or write a thesis, allowing them to tailor their program to best fit their own professional aspirations.

Graduates will be prepared to work in nonprofits, nongovernmental organizations or corporate fields, said Lisa Anderson, associate professor and head of faculty for women and gender studies. It will also provide them the proficiencies they need in the doctoral program of gender studies.

The new program will complement the justice studies and social and cultural pedagogy masters’ programs offered in the school.
Dream it. Do it.

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