

The background of the cover is a vibrant space scene. At the top right, a large, reddish-orange planet, likely Mars, is partially visible. Below it, the Milky Way galaxy stretches across the dark sky, showing colorful nebulae in shades of purple, pink, and blue. In the center, a bright sun or star is rising or setting, creating a lens flare effect. At the bottom, the blue and white horizon of Earth is visible, showing clouds and the curvature of the planet.

asu magazine

March 2016 volume 19 number 3


Designing sustainable buildings for the long run

Students seek careers with social impact

Forecasting the future of the book

SUN DEVILS IN SPACE

UNIVERSITY
SKYROCKETS TO
LEADERSHIP
POSITION IN
SPACE
EXPLORATION



As a graduate of ASU, you could receive exclusive savings on auto and home insurance from Liberty Mutual.¹

Join thousands of satisfied customers with Liberty Mutual Insurance.²



Discounted Rates—You could save up to \$427.96 a year³ on auto insurance and receive additional discounts on home insurance.



Exceptional Service—Whether you're in an accident or just need some advice, know we'll always be on call for you.



Superior Benefits—Enjoy a number of superior benefits, such as 24-Hour Claims Assistance, Accident Forgiveness⁴, Roadside Assistance⁵ and Better Car Replacement.^{TM6}



Liberty Mutual
INSURANCE

ASU ALUMNI
ARIZONA STATE UNIVERSITY

For a free quote, call 800-867-5512
or visit libertymutual.com/asualumni
Client # 9697

This organization receives financial support for offering this auto and home benefits program.

¹ Discounts and savings are available where state laws and regulations allow, and may vary by state. To the extent permitted by law, applicants are individually underwritten; not all applicants may qualify. ² Based on Liberty Mutual Insurance Company's 2013 Customer Satisfaction Survey in which more than 85% of policyholders reported their interaction with Liberty Mutual service representatives to be "among the best experiences" and "better than average." ³ Figure reflects average national savings for customers who switched to Liberty Mutual's group auto and home program. Based on data collected between 9/1/12 and 8/31/13. Individual premiums and savings will vary. ⁴ For qualifying customers only. Accident Forgiveness is subject to terms and conditions of Liberty Mutual's underwriting guidelines. Not available in CA and may vary by state. ⁵ With the purchase of optional Towing & Labor coverage. Applies to mechanical breakdowns and disablements only. Towing related to accidents would be covered under your Collision or Other Than Collision coverage. ⁶ Optional coverage. Applies to a covered total loss. Deductible applies. Does not apply to leased vehicles and motorcycles. Not available in NC. Coverage provided and underwritten by Liberty Mutual Insurance and its affiliates, 175 Berkeley Street, Boston, MA 02116.

©2015 Liberty Mutual Insurance

PUBLISHER
Christine K. Wilkinson '66, '76 Ph.D.

EDITOR-IN-CHIEF
Tracy Scott '88 B.A.

MANAGING EDITOR
Liz Massey

CONTRIBUTING EDITOR
Jan Stanley '86 Ph.D.

ART & DESIGN DIRECTOR
Boyd Erickson

SENIOR GRAPHIC DESIGNER
Kendra Pelofske

SALES & MARKETING COORDINATOR
Robin Hawkins
480-965-4631

ADVERTISING SALES,
DIRECTOR OF BUSINESS DEVELOPMENT
John Davis
480-965-5051

PRINCIPAL PHOTOGRAPHY
Tom Story Tim Trumble
Andy DeLisle

ASU Magazine is printed on paper that is certified
to the Forest Stewardship Council® (FSC®) Standards.



ASU Magazine
PO Box 873702
Tempe, AZ 85287-3702
(480) 965-2586
alumni@asu.edu
www.asumagazine.com

ASU Magazine (USPS 024-438; ISSN 1940-2929) is published quarterly by the Arizona State University Alumni Association, PO Box 873702, Tempe, AZ 85287-3702, (480) 965-2586, FAX (480) 965-0225. Subscriptions are sent to all ASU alumni. You may become a friend of the Alumni Association regardless of university affiliation. Annual dues to become an active member or friend are \$50 for individuals and \$60 for couples. Gold Devil Life member dues are \$650 for individuals and \$800 for couples. Periodicals Postage is paid at Tempe, AZ and additional mailing offices. Postmaster: Please send address changes to ASU Magazine, Attention: Circulation, PO Box 873702, Tempe, AZ 85287-3702. Permissions: Portions of this publication may be reprinted with the written permission and proper attribution by contacting the ASU Magazine editor. ASU Magazine can be accessed online at asumagazine.com.



President's Letter

Late last year, Arizona State University topped a list of "Most Innovative Universities" published by U.S. News & World Report. This put them ahead of such iconic institutions as Stanford University (#2) and MIT (#3) in this category. ASU President Michael M. Crow's leadership and initiatives have transformed Arizona State into a New American University,

a forward thinking, globally engaged knowledge enterprise that educates all qualified students to become master learners who can adapt and capitalize on their education to overcome any type of challenge that may come their way.

This ranking is important, and something alumni can take pride in, because it signals that Sun Devils are willing to think well outside of the box to resolve the greatest challenges of our times. We are finding new ways to provide access to all students prepared for college, as exemplified by the recent launches of the Global Freshman Academy and the Starbucks College Achievement Plan. ASU is also exploring better ways to teach. Several hundred freshmen are participating in a new project-based learning pilot this year called ProMod, which combines instruction in general education and students' focused areas of study while they tackle real-life problems.

We've also adapted our degree programs to reflect the evolving reality of the workplace. For example, the W. P. Carey School of Business was among the first to create a master's degree in business analytics. The program, which was started in response to industry demand, has tripled its enrollment in the two years it has been offered.

The university's innovation ranking is a harbinger of what the future of ASU will look like, and in this issue, we present three features that focus on where ASU is headed as an institution.

- Our "Sun Devils in Space" story explains ASU's role in the exciting field of space exploration and research.
- We're also publishing a feature on the ways in which ASU is blending commitment to traditional post-graduate service opportunities such as the Peace Corps with the nurturance of student-led social entrepreneurship ventures.
- Finally, we have a report on how the university's focus on sustainability has impacted how it builds its own new structures, and how it educates students to design and construct them.

While much of this issue discusses ASU's impact on our shared long-term future, we'd also like to you to consider joining us in the near future for some very special events. We will host the Sun Devil 100 business awards for the first time in April, and in May we will welcome the class of 2016 to the alumni family at Commencement, as well as help the class of 1966 celebrate their Golden Reunion. Please join us as we celebrate the achievements of all the participants in both these events!

Christine K. Wilkinson, '66, '76 Ph.D.
President & CEO of the ASU Alumni Association
Senior Vice President and Secretary of the University

20 Sun Devils in Space

A vast network of ASU scientists are engaged in research that considers questions best answered outside of Earth's atmosphere – questions of geology, physics, materials science, even biology. The university is now one of a few elite institutions in the nation that plans and builds space missions for NASA. It has its own clean rooms for constructing space vehicles, has a mission control room, and in the near future whole space missions may be run from campus. Learn more about ASU's impact on national and international space exploration, in both the public and private sectors.



26



Building up sustainability

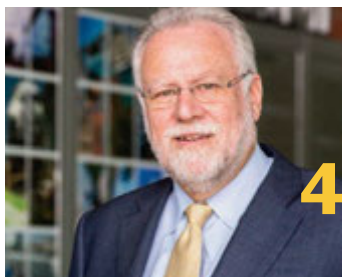
ASU's Julie Ann Wrigley Global Institute of Sustainability is known widely as a preeminent center for research on sustainable practices. What is less recognized is that ASU's campus buildings themselves serve as research subjects in the quest for sustainability. University researchers are not only pushing forward new ideas about how to create structures in which humans can live and work in a way that doesn't put future generations at risk, they also are changing the nature of the field itself.

ASU Alumni Events:
alumni.asu.edu/events

Facebook
ASU: facebook.com/arizonastateuniversity
Alumni: facebook.com/asualumni
Athletics: facebook.com/arizonastatesundevils

Foursquare:
foursquare.com/asu

iTunes:
itunes.asu.edu



1 President's Letter

Alumni Association President Christine K. Wilkinson discusses why ASU's innovation ranking matters.

University News

Mark Searle becomes University Provost; Cronkite student documentary wins EPPY Award; ProMod program aims to boost freshman retention rate.



Sports

Sports is now a \$498 billion industry. Faculty in ASU's journalism, business and law programs are combining their talents to provide unique interdisciplinary academic offerings that help students forge exciting careers in athletics. Plus: Updates from Sun Devil sports teams and clubs.

38 Arts & Culture

With books available on a variety of digital devices, how are authors and publishers adapting? ASU faculty and students are participating in creating the future of the book. Plus: New books by alumni, staff and faculty in Shelf Improvement.



Alumni News

Alumni Association activities showcase access, excellence and impact; getting the most out of career mixers; learn about the alumni names behind some of ASU's most iconic structures and centers.

48 Sun Devil Network

Reports from around the Sun Devil nation.

54 Class Notes

Alumni news, notes and milestones.

64 Sun Devil Snapshot

ASU's Center for Meteorite Studies has been untangling questions related to meteorites for more than 50 years, and in the process has become the world's largest university-based meteorite collection.

32



Social Service

Today's students are on a quest for meaning in their emerging careers – they want to see results and make a difference. ASU provides Sun Devil students with access to traditional service ventures such as the Peace Corps, Teach For America, and AmeriCorps, as well as providing exciting new opportunities such as the ASU Public Service Academy.

ASU ALUMNI ASSOCIATION BOARD AND NATIONAL COUNCIL 2015–2016

OFFICERS

CHAIR

Kathleen Duffy Ybarra '81 B.A.

CHAIR-ELECT

Brian LaCorte '85 B.S.

TREASURER

Ryan Abbott '01 B.S., '08 M.B.A.

PAST CHAIR

Bob Boschee '83 B.S., '85 M.B.A.

PRESIDENT

Christine Wilkinson '66 B.A.E., '76 Ph.D.

BOARD OF DIRECTORS

Jason Alberts '97 B.S., '03 J.D.

Steven Balthazor '91 B.S.E.

Michelle Bolton '93 B.A.

Bob Boscamp '69 B.A.E.

Teresa Clement '02 B.S.E., '07 Ph.D.

Malissia Clinton '90 B.A.

Glenn Crawford '78 B.S.

Bret Giles '87 B.S.

Trish Gulbranson '88 B.S.

Chris Hill '86 B.S.

Fred Reish '67 B.S.

Darren Skarecky '94 B.S.

Anthony Valencia '91 B.S., '13 M.B.A.

Jeff van Raaphorst, '87 B.S., '97 M.B.A.

NATIONAL ALUMNI COUNCIL

Yesenia Barraza '08 B.A., '13 M.Tax.

Jeff Daniel '06 B.S.

Eddie DeVall '93 B.S.

Margaret Dunn '10 B.A., '12 M.B.A.

Michelle Gettinger '90 B.S.

John Gibson '05 B.S., '10 M.B.A.

Michael Grosso '97 B.S.

Andy Hanshaw '87 B.S.

Luis Heredia '98 B.S.

Kristine Kassel '91 B.S.

Danelle Kelling '00 B.A., '04 J.D.

Nick Kieffer, '00 B.A.

Tere LeBarron '82 B.S., '92 M.H.S.A.

Jeff Mirasola '90 B.S.

Caleb Navarro '05 B.S., '08 M.S.

Alberto Pino '06 B.A., '06 B.S.

Guy Patrick Roll '90 B.S.

Graham Rossini '02 B.S., '11 M.B.A.

Travis Snell '00 M.P.A.

Michael Tully '87 B.S., '91 M.B.A.

Note: Members of the Board of Directors are also members of the National Alumni Council.

LinkedIn:
alumni.asu.edu/linkedin

Pinterest:
pinterest.com/arizonastate

Soundcloud:
soundcloud.com/asualumni

Twitter
ASU: twitter.com/asu
Alumni: twitter.com/asu_alumni
Athletics: twitter.com/thesundevils
Young Alumni: twitter.com/asuyoungalumni

Vimeo (Alumni):
vimeo.com/asualumni

YouTube (ASU):
youtube.com/asu

Saluting excellence

Magazine guide highlights ASU's military education contributions



Photo by: ASU News

ASU's Navy ROTC program participates in a change of command ceremony. ASU was named as a "Top School" for military education by Military Advanced Education & Transition magazine.

Military Advanced Education & Transition (MAE&T) magazine has awarded Arizona State University the designation of a Top School in its 2016 MAE&T Guide to Colleges & Universities, which measures best practices in military and veteran education.

MAE&T is a journal of higher education for servicemembers and veterans making the transition from military to the civilian sector. Its guide presents results of a questionnaire regarding the military-supportive policies enacted at more than 600 institutions. Universities and colleges were evaluated on their military culture, financial aid, flexibility, general support, on-campus support and online support services. The guide enables prospective students to target schools quickly that follow best practices in military education, and then put these in context with other academic or career considerations.

"Our goal is to be a dynamic resource for active servicemembers and those who have moved from the military to their civilian careers, helping them

find the school that best fits their plans for the future," said Kelly Fodel, editor of MAE&T.

Not only was the 2016 Guide printed in the December issue of Military Advanced Education & Transition, but it also has been published in a searchable database online. Students will have access to all the survey questions and answers provided by the schools, as well as explanations about critical issues like activation and deployment policies, withdrawal policies, scholarship and financial aid information and important support information.

Visit www.mae-kmi.com for online access to MAE&T's 2016 Guide to Colleges and Universities.

Photo by: Charlie Leight/ASU News.



Mark Searle, who came to ASU as the founding dean of the College of Human Services, was recently named as executive vice president and university provost.

Retaining excellence

Mark Searle named university provost

Mark Searle, an accomplished university administrator, distinguished scholar, and founding dean of Arizona State University's College of Human Services, has been named executive vice president and university provost.

ASU President Michael Crow promoted Searle to the post, which Searle has held in an interim capacity since June 2015, and charged him with mapping out a three-year plan to raise student retention and graduation rates, increase tenure track faculty and increase access to higher education for qualified students. The Arizona Board of Regents approved Searle's appointment in November.

"Mark has served ASU with distinction for decades in increasingly complex roles," said ASU President Michael M. Crow. "His experience, skill, commitment to a modernized and innovative ASU and work ethic have proven to be invaluable to ASU and all that the institution is achieving. In addition he is well regarded by faculty, students and leaders throughout and around the institution."

Searle said ASU must raise its student retention rate, the percentage of students who return for the next year of school. And while ASU's graduation rate has more than doubled over the past two decades, the goal is to see 75 to 80 percent graduating by the year 2020.

"The first and foremost measure of having successful students," he said, "is keeping successful students."

Searle advanced through the ranks at ASU since joining the university as founding dean of the College of Human Services in 1995. He served as a faculty member and as provost of West campus, vice provost for academic affairs, vice president for academic personnel and deputy provost and chief of staff to the provost.

A native of Winnipeg, Manitoba, Canada, Searle received his bachelor's degree in psychology and political science from the University of Winnipeg and master's in physical education from the University of North Dakota. He earned his doctorate in recreation administration from the University of Maryland. He held a series of academic leadership positions with increasing responsibility at the University of Manitoba before moving to ASU.

Excellence unveiled

Cronkite School's 'Hooked' heroin documentary wins EPPY Award

For the fourth consecutive year, a major multimedia investigation led by Arizona State University's Walter Cronkite School of Journalism and Mass Communication has received a prestigious EPPY Award from Editor & Publisher magazine.

"Hooked: Tracking Heroin's Hold on Arizona" won an EPPY in the category of "Best College/University Investigative or Documentary Feature." Produced in partnership with the Arizona Broadcasters Association, the documentary, which traces the growing perils of heroin use in Arizona, reached more than 1 million Arizonans in January 2015.

The EPPY Awards recognize the best media-affiliated websites across 31 diverse categories, including three honoring excellence in college and university journalism. "Hooked" beat out five other university journalism project finalists in its category.

The documentary, which aired on all 33 broadcast TV stations and 93 radio stations throughout the state, features a multimedia-rich website, including videos, infographics, data visualizations, a downloadable graphic novel and a statewide resource guide for addicts and families. The documentary has been viewed and shared more than 100,000 times online since its original airing.

"We have been amazed by the outpouring of support and recognition from the journalism community for this project," said Cronkite School Dean Christopher Calahan. "To be recognized by Editor & Publisher, one of journalism's leading publications, is a tremendous honor for our outstanding students and faculty."

More than 70 students and eight faculty members at the Cronkite School worked on the project under the direction of Cronkite professor Jacquie Petchel, a Pulitzer Prize-winning investigative journalist.

In the past four years, the Cronkite School has ranked atop the university investigative reporting category of the EPPYs. Last year, the school's Carnegie-Knight

Photo by: ASU News.



Recent ASU graduate Erin Patrick O'Connor conducts an interview for the documentary "Hooked: Tracking Heroin's Hold on Arizona."

News21 investigation “Gun Wars,” examining gun rights and regulations, took the honor. News21 also won EPPY Awards in the same category for its national investigations into the battles facing post-9/11 veterans back home in 2013 and voting rights in 2012. Headquartered at the Cronkite School, News21 is a national multimedia reporting initiative that engages top journalism students in investigating an issue of national significance.

The EPPY Award is the latest honor for “Hooked.” The documentary has made history at several journalism contests,

taking awards typically reserved for professional media organizations. In October 2015, the documentary received two of the region’s top professional honors at the Rocky Mountain Emmy Awards, an Emmy in the category of “Societal Concerns – Program/Special,” as well as the Governors Award. In May, students who worked on “Hooked” took first place in video storytelling at the Arizona Press Club Awards.

To view the documentary, visit its website at <http://hookedaz.cronkitenewsonline.com/>.

Pulling it all together

ProMod program aims to streamline education, increase freshmen retention

Many freshmen come to college excited to learn about their majors — but sometimes less enthusiastic about all the first-year courses they’re required to take.

That’s one of the reasons why Arizona State University is trying an innovative model that could transform the way college students take classes by combining three courses and allowing them to produce real work.

The method, called ProMod stands for “project-based modular learning”, was piloted by several hundred students during the fall 2015 semester. It streamlines the curriculum by combining general-education courses with classes in the students’ majors. There are fewer lectures and more teamwork. At the end of the year, the students have a tangible product — such as an artwork or a treatment plan.

“I think one thing that hurts the kids is a lack of coherence in the curriculum,” said Elizabeth Capaldi Phillips, ASU provost emerita, University Professor and co-director of the Obesity Solutions Initiative at ASU, as well as a professor of psychology in the College of Liberal Arts and Sciences. “Project-based learning is one way of making things coherent and getting them to see the connections and care about what they’re learning.”

While project-based learning in a course is not new to ASU, combining courses and asking students to solve a problem is a reinvention. For example, kinesiology students take Kinesiology 101, Psychology 101 and English 101 in their module, in which they are developing an evidence-based treatment plan for lower-back pain. They learn about anatomy and treatment in the kinesiology part, how to get patients to comply in the psychology portion, and



Photo by: Deanna Dent/ASU News

Joshua Bowser and fellow students work on their heat island reduction project in the ProMod program at Cesar Chavez High School. The ASU ProMod High School Program allows Phoenix Union High School District students to earn up to 13 ASU credits during their senior year.

how to write concisely and coherently about their work in the English part.

More than 300 students in 14 ASU programs are participating in the modules, taught by faculty teams, and the goal is for their entire degree to be project-based. ASU developed ProMod after receiving a \$4 million “First in the World” grant from the U.S. Department of Education in 2014. The competition, launched that year by President Barack Obama, was intended to find new ways to increase retention for students who are at higher risk of not completing

their degrees — such as first-generation college-goers and teenagers from low-income families.

ASU also has partnered with Phoenix Union High School District to place ProMods into three high schools. Seniors at Cesar Chavez, Bioscience and Metrotech high schools take a module that combines English, communications, a science class and a sustainability class. If they matriculate at ASU this coming fall, they will start with 13 credits earned from the ProMod.



Photo by: Garrett Mitchell

Members of LORKAS, ASU's student-run laptop orchestra, bridge the gap between the worlds of computer programming and performance art.

Press play

Laptop orchestra pushes buttons and boundaries

Laptop computers have become such an essential part of our lives that it's almost odd to consider doing things like paying bills or buying a book without one. But conducting an orchestra?

That's the idea behind the Laptop Orchestra of Arizona State, or LORKAS, a student-run experimental "laptop orchestra" at Arizona State University that's bridging the gap between the worlds of computer programming and performance art.

The ensemble, which is comprised of 10 core members, includes instrumentalists, programmers, composers, audio engineers, designers, singers and fabrication specialists.

Last fall, the group participated in the annual School of Music's Prisms Contemporary Music Festival, and hosted a workshop featuring Diemo Schwarz, an artist and executive with Paris-based Ircam, considered one of the more cutting-edge, nonprofit research centers in the field of music technology and the media arts. At the end of the year, the group saw the release of its first album, "Nodes," which includes 60 minutes of original compositions.

Founded in 2010, LORKAS was inspired by other laptop orchestras that began popping up after Stanford University debuted the concept a decade ago. The orchestra uses spe-

cialty-software equipped laptops to create original compositions in an improvisational manner, enhanced by gestural controls, eyesight cameras and wireless DMX lighting to create a one-of-a-kind sonic and aesthetic experience.

Each "instrument" consists of a laptop, an individual speaker, and a variety of control devices such as keyboards, graphic tablets and sensors which are run by Chuck, a music programming language that allows participants to code both in preparation for and during an actual performance.

Students who participate in the orchestra tend to be boundary crossers, according to leaders of the group.

"Half the people are into digital media while the other half are coming from the School of Music. We are all looking for something new, weird and different," said LORKAS co-director Althea Pergakis, a digital culture major in the School of Arts, Media and Engineering, which is a collaborative initiative between the Herberger Institute for Design and the Arts and the Ira A. Fulton Schools of Engineering. "Essentially, LORKAS is a sandbox that allows us to go to a special place and explore."

For more information on the LORKAS laptop orchestra, visit <http://www.lorkas.org/>.

U.S. Navy awards ASU \$1.5M for energy research, military engagement

Six Arizona State University energy-related research projects that will engage veterans or active-duty military are getting support from the Navy in the form of \$1.5 million in seed grants over two years.

ASU LightWorks, a unit that pulls all light-inspired research at ASU under one strategic framework at the Julie Ann Wrigley Global Institute of Sustainability, announced the funding commitment, which is provided by the Office of Naval Research's Naval Enterprise Partnership Teaming with Universities for National Excellence (NEPTUNE) pilot program.

Energy issues are both technology and people challenges, and the newly funded projects recognize that. There will be program engagement designed to impact the ASU veteran community and — to the greatest extent possible — local bases with active-duty military personnel. The program will work with the Pat Tillman Veterans Center to reach out to the more than 4,000 veterans enrolled at ASU, as well as military personnel from local bases.

The six NEPTUNE-funded research projects at ASU will include research into:

- Self-organizing electric power microgrids
- Remote sensing for smart renewable power
- Energy leadership informatics
- Case studies illustrating positive resilience in energy infrastructure
- Monitoring underwater conditions
- Cyber threats to critical infrastructure

"People are an important part of alternative energy systems," said Bill Brandt, director of strategic integration for ASU LightWorks and lead principal investigator of the projects. "Practical input from veterans with hands-on experience in military operations is critical to use-inspired energy innovation for the U.S. Navy."

In exchange for participation in various meetings and workshops, veteran students will have the opportunity for independent-study credit hours, co-authorship of publications and other resume-building experiences. Engagement will include critical skills training in entrepreneurship, project management, leadership, technology to market and engineering problem solving.



ASU will receive funding from the U.S. Navy for six energy-research projects through the Naval Enterprise Partnership Teaming with Universities for National Excellence (NEPTUNE) pilot program.



Anna Barker, professor of practice within the School of Life Sciences, will be the project director for GBM AGILE, which seeks to vanquish glioblastoma multiforme (GBM), the most common adult brain tumor.

ASU to lead global alliance seeking response to deadliest brain tumor

This year, tens of thousands of people around the globe — including about 12,000 in the United States — will be diagnosed with glioblastoma multiforme (GBM), the most common adult brain tumor. GBM is highly aggressive: 50 percent of patients survive for a year or less and the five-year survival is less than 2 percent, and these dismal statistics have not changed for decades.

A broad coalition of physicians, investigators and representatives from the GBM advocacy communities recently announced the design and plan of a new-generation clinical trial for GBM. ASU's Anna Barker, who is director of the National Biomarker Development Alliance and professor in the School of Life Sciences, will act as project director for the initiative, known as GBM AGILE (Adaptive, Global, Innovative Learning Environment), as well as its executive committee chair.

Hundreds of clinical trials have tested numerous therapies for GBM, but treatment options and patient outcomes have not changed for several decades. Molecular biomarkers will be employed to assign specific patients to matching therapies (arms) of the trial. As observed in other types of cancers, GBM patients are likely to benefit most by receiving therapies that may be effective only in subsets of patients with a specific molecular alteration.

More than 100 neurosurgeons, neuro-oncologists, pathologists, imagers, neuroscientists and patient advocates make up 10 major committees that are participating in planning and designing how the initiative will operate. The GBM AGILE global team has an ambitious goal to begin enrolling patients by mid-2016. Arizona State University, the ASU Foundation For A New American University, the Cure Brain Cancer Foundation and National Foundation for Cancer Research are providing resources to execute the planning and design phase of the trial.

"None of us are willing to continue to tolerate the tragic and costly loss of life inflicted on patients who are stricken with GBM," said Barker. GBM AGILE is truly a "coalition of the willing, and it's always humbling to see the power of a group this committed to changing the world."



Photo by: Courtney Pedroza/ASU

ASU is a top producer of faculty Fulbright scholars, and ranks fifth in the number of Fulbright scholarships awarded to current students.

Worldwide learning

ASU is top American producer of Fulbright scholars

Arizona State University was the top producer of prestigious Fulbright scholars among research institutions for 2015-2016, with 10 awards to faculty members. Additionally, the university was in fifth place among research institutions in producing the highest number of Fulbright scholarships to students, with 22.

The Fulbright program is the U.S. government's flagship international educational exchange program. The top producers of Fulbright students were Harvard University, with 31, the University of Michigan, 29; and Northwestern and Yale universities, with 26 each.

"The tremendous number of Fulbrights awarded to our students and scholars spotlights the success of ASU's top quality faculty nurturing high caliber students, regardless of their backgrounds before they arrived at ASU," said Mark Searle, executive vice president and university provost. "Their research and service around the world further expands the university's global engagement."

The Fulbright program, created in 1946 to increase mutual understanding between Americans and the people of other countries, provides the opportunity to study, teach and conduct research abroad. The program awards about 1,900 grants annually in all fields of study and operates in more than 160 countries. The sponsor is the U.S. Department of State's Bureau of Educational and Cultural Affairs.

Faculty generally stay abroad anywhere from two months to a full academic year. This award is often taken in conjunction with research, development or sabbatical leave options. ASU faculty Fulbright scholars have canvassed the world, serving in different countries and institutions.

Photo by Deanna Dent/ASU News



Native women find path to success with Project DreamCatcher

A group of Native American women gathered last fall to find a path to their dreams.

The women were selected to be part of the first Project DreamCatcher, a new program at the Thunderbird School of Global Management that is designed to launch them as entrepreneurs. They spent the week at Thunderbird's campus in Glendale learning about business planning, accounting and marketing while making site visits and connecting with experienced mentors who can help guide them to success.

"The ripple effect of empowering women is great," said Steven Stralser, an emeritus professor of entrepreneurship at Thunderbird,

(from left to right) Camille Nighthorse, Wynona Larson and Cheryl Antone laugh before the start of Project DreamCatcher, a business education program that aims to build the entrepreneurial skills of high-potential American Indian businesswomen.

ASU travel&tours

Treasures of Peru

Sept. 5 - 15, 2016

From \$4,249

Discover the treasures of Peru on this special trip offered by ASU Travel & Tours.

Adventures in Lima, Cuzco, Lake Titicaca and Machu Picchu await you on this amazing journey.



Sun Devils enjoying an ASU Travel & Tours trip in 2015



ASU ALUMNI
ARIZONA STATE UNIVERSITY

who taught the women. Thunderbird is part of Arizona State University.

"We're helping them navigate the uncertainties of starting a business in a place where entrepreneurship is not well represented so far."

Project DreamCatcher was fully funded by the Freeport-McMoRan Foundation and sponsored by Thunderbird for Good, which teaches non-traditional students business and management skills to fight poverty and improve living conditions in their communities. Project DreamCatcher was the first Thunderbird for Good program that trained U.S. citizens.

The 17 women were members of four tribes in Arizona — Hualapai, San Carlos Apache, Tohono O'odham and White Mountain Apache. Some of the women have been running businesses for years and others are just starting.

One of the most important parts of Project DreamCatcher was the mentorship. Each participant was assigned a mentor, and the pairs spent an afternoon going over "elevator pitches" and "action items." Stralser said the intent is for the women not only to stay in touch with each other as a sort of entrepreneurial support group, but also with their mentors.

Eileen Pike, a member of the White Mountain Apache tribe who wants to create a start-up to improve the health of her community, was mentored by Laura Libman, a Thunderbird graduate who also is a faculty associate at the ASU Lodestar Center for Philanthropy and Nonprofit Innovation, as well as president and CEO of the Tia Foundation, which trains community-health workers in remote areas of Mexico.

"I was foggy when I came here but after talking to her I'm a lot more foggy because she's opened my eyes to so many possibilities," Pike said of Libman. "This entire training has been like a roadmap."

We welcome the following individuals, who joined the ASU Alumni Association at the Gold Devil Life or Life level between Sept. 10 and Dec. 2, 2015.

New Gold Devil Life Members

Ryan A. Abbott '01 B.S., '08 M.B.A.
Omar A. Alotaibi
Brandon T. Andersen '11 B.S.
Lance E. Ausmus '01 B.I.S.
David N. Bickel '88 B.S.
Adam D. Bradley '15 B.A.
Willis E. Cowell
Dee A. Cowell '89 B.S.
Gini E. Gutierrez '86 B.A., '96 M.P.A.
Scott P. Hatlen '99 B.A.
Jessica L. Irwin '03 B.A., '03 B.A.
Forest A. Klumph '64 B.S., '72 M.S.
Robert M. Menzies II '67 B.S.
Angela M. Rodriguez
Laurie Gail Senko '77 B.S.
Donovan M. Sipe '94 B.S.
Brian E. Speed '14 B.S.
Gary Splittberger '78 B.S.
Lisa Ulibarri-Hatlen '03 M.C.
Anthony D. Vicente '77 B.S.
Sanjay Vidyadharan '93 M.S., '96 J.D.
David W. Wallace '95 B.S.
Anna M. Wallace '91 B.A., '96 M.Ed.

New Life Members

Mark A. Alvarez '13 B.A.
Mindy L. Bainbridge
Shaun A. Bainbridge '00 B.I.S.
Bridget C. Becerra '12 B.I.S.
Jennifer L. Beck-Schmidt '93 B.S.
Christina E. Bilbrey '02 B.A., '02 B.S.
Robert J. Blazewicz
Mary E. Bredimus '14 M.L.St.
Tiaya J. Brody '13 M.Ed.
Leonel Chacon '07 B.S.
Griselda Chacon '07 B.S.
Jessica R. Corman '13 M.S., '15 Ph.D.
Taylor C. Costello '14 B.A.
Sharon A. Denny '81 B.S.W., '14 M.S.W.
Kyle G. Donnelly '97 B.S.
Eric E. Donzella '13 B.I.S.
Abby L. Dugan '14 B.A.
Kris M. Ewing '99 Ed.D.
Samuel M. Greenberg '88 B.S.D
Windlan E. Hall
Anita J. Hansen '15 B.S.
David Hart
Felipe A. Hernandez '09 B.S.E., '14 M.S.

Eugenia A. Herskovits '02 B.S.
Michael Herskovits '82 B.S.
Charles W. Hyde II '96 B.S.
Lindsey N. Ivison '14 B.S.
T'Shaka M. Jackson '14 B.S.
Matthew C. Johnston '14 B.I.S.
Andrew D. Knochel '07 B.S.P., '13 M.M.C.
Melisa B. Konderik
Brian D. Konderik '03 B.I.S.
Tiffany A. Kong '06 B.A., '11 M.A.
Robin J. Kunkle '14 B.S.N.
Ray A. Lopez '94 B.S.E., '07 B.S.
Nicolette R. Malone '12 B.A.
Nicholas C. Markavage '13 B.A.
Apryl R. Melancon '09 B.I.S.
Ashley L. Miller '14 M.B.A.
Carl A. Montgomery
Barbara Jean K. Montgomery
Holly E. Moore '94 B.S.E.
Theodore Morfonios '13 B.S.
Carter J. Moriarity '14 B.A.E.
Thomas V. Naeger '80 B.S.
Laura L. Neal '00 B.S.
Anthony T. Pappas '15 B.S.
Goran Pejic '05 B.S.
Bianca M. Pena '13 B.A.
Katrina L. Pendleton '13 B.A.E.
Tyler O. Post '13 B.S.
Michelle N. Post '13 B.S.
Susan K. Risley '79 B.S.
Melissa B. Rivers '06 M.Ed., '11 Ph.D.
Richard J. Schimberg '51 B.S.
Andrew J. Schofield '89 B.S.
Brian R. Schumacher '04 B.S., '07 M.R.D.
Madeline F. Schwartz '14 B.S.
Laurita F. Senter '13 M.Ed.
Christopher M. Simone '13 B.A.
Amber J. Smith '14 B.S.
Eric W. Spargo '14 B.S.
Cher Stevens '15 M.Ed.
Henrietta J. Stremmel '74 B.F.A.
Eric M. Strennen '13 M.S.E.
Art N. Tad-y '14 B.A.E
Benjamin A. Tolmachoff '13 B.A.
Joshua R. Turley '14 B.S.
Talyssa Vito '11 B.A.
Philip A. Wall '13 B.S.
Gail A. Weart '14 MS.
Jeanna Wong '71 B.S.

Show your Sun Devil pride for life. Become a life member at alumni.asu.edu, or by calling 1-800-ALUMNUS.

A Gold Devil Life membership costs \$650 individual/\$800 per couple, and is a \$150 upgrade from an existing life membership. Life memberships are \$500 for an individual and \$650 per couple.

Batter up!

ASU Baseball Club seeks to knock season out of the park



The Sun Devil Baseball Club hopes to improve on its second-place national finish from last season.

Arizona State's baseball excellence is not limited to its much-decorated NCAA team.

The Sun Devils also field a top-notch club baseball team, which plays some games in the fall, but the bulk of its schedule falls between late February and May.

According to team president Collin Casey, the ASU club roster is made up of 33 full-time students, with Rob Stephens serving as head coach and Kyle Smyrski as the assistant. There are about two dozen players from Arizona, and the team has an international player, from Japan. There also is a "B" team.

Casey, a pitcher from Michigan, said the players enjoy the game.

"These guys have played in high school or junior college, and they don't want to quit," he said. "We still have that hunger. We are very competitive."

Funding comes from a few donations, but most of the money is obtained through player dues, which cover equipment, field rental and umpires. A small amount of equipment is provided by the National Club Baseball Association, which has 150 teams across the nation.

The Sun Devils finished second nationally last season, trailing only the University of Oregon, and play in the Southern Pacific Region along with Arizona, Northern Arizona, the University of California-San Diego, Long Beach State, Cal State-Fullerton and USC.

ASU played many games last season at the now-closed Packard Stadium, and in 2016 hopes to play at area parks, or perhaps side fields at spring-training complexes.

R Boys

Men's golf salutes senior season for two standouts

Arizona State men's golf coach Tim Mickelson laments that he won't have stars Jon Rahm and Max Rottluff on his team after this spring season.

"That's why I want to enjoy this year as much as possible," Mickelson said.

The "R Boys," Rahm and Rottluff, are among the best golfers in a long ASU history that includes Mickelson's brother, Phil, who continues to dominate in the PGA.

Rahm, from Barrika, Spain, has won numerous national and international tournaments, and earned the prestigious Ben Hogan Award in May 2015.

Rottluff, from Dusseldorf, Germany, had two victories in the 2014-15 season and finished in the top 10 in nine of 14 events.

Mickelson said Rahm "believes he is the best player and is comfortable with people feeling the same way. He likes being the No. 1 amateur in the world, having that target on his back.

"He has no weaknesses. Every year since he's been here, his driving, putting and wedge shots have gotten better. I do not hesitate to let him take any shot at any time he wants."

Rottluff, Mickelson asserts, "Is a workhorse. He works for everything he gets. He has accomplished a lot of great things for us and if you take Jon out of the equation, Max would certainly have a lot more publicity."

Kraft-ing success

Track coach celebrates 20 years at ASU

When Greg Kraft, Arizona State's director for track and field and cross country, goes on recruiting trips, he tells athletes, "To judge your future, look at the history (of the program) and how it relates not only to just track, but in the community and the classroom."

As Kraft guides the Sun Devils for his 20th year in Tempe, he has developed a rich tradition. ASU track athletes have won numerous academic awards, national championships and even earned Olympic gold medals.

Kraft and his wife, Maggie, grew up in the San Francisco Bay Area and jumped at the chance to return to the West from the University of South Carolina after then-ASU athletic director Kevin White offered Kraft the job. The offer was complicated by the fact that there were NCAA sanctions against the Sun Devils at the time.

"A lot of people said we were crazy, but we took the leap of faith," said Kraft, who turns 61 in April. "Scholarships had been cut and recruiting was pretty limited, but we felt we could turn things around."

It took time, but that dream became a reality, as ASU won its first Pac-10 title in 2006, its first national championship in 2007 (women) and a sweep of the men's and women's titles in 2008. Kraft earned several national honors, and he and ASU athletes even got to go to the White House to meet then-President George W. Bush.

"That was surreal," Kraft said.



Seniors Jon Rahm (top) and Max Rottluff (bottom) are finishing up their amazing careers with ASU men's golf.



Greg Kraft, Arizona State's director for track and field.

Pitch perfect

Softball hurler perfects her delivery

Back in the day, when she was a bat girl for the Arizona State softball team, Bre Macha wanted to wear No. 99.

"It was different, kind of made me stand out from the other numbers," she said.

Macha has become an outstanding athlete, not only because of the number on her jersey, but because of the numbers she has put up on the field.

After winning four state championships at Red Mountain High in Mesa, Macha recorded an impressive 15 victories and a 3.75 earned-run average as a freshman pitcher for ASU in 2015, and is looking to improve this spring when the Sun Devils play at Farrington Stadium.

"We have a fresh lineup and we are excited about the season," Macha said.

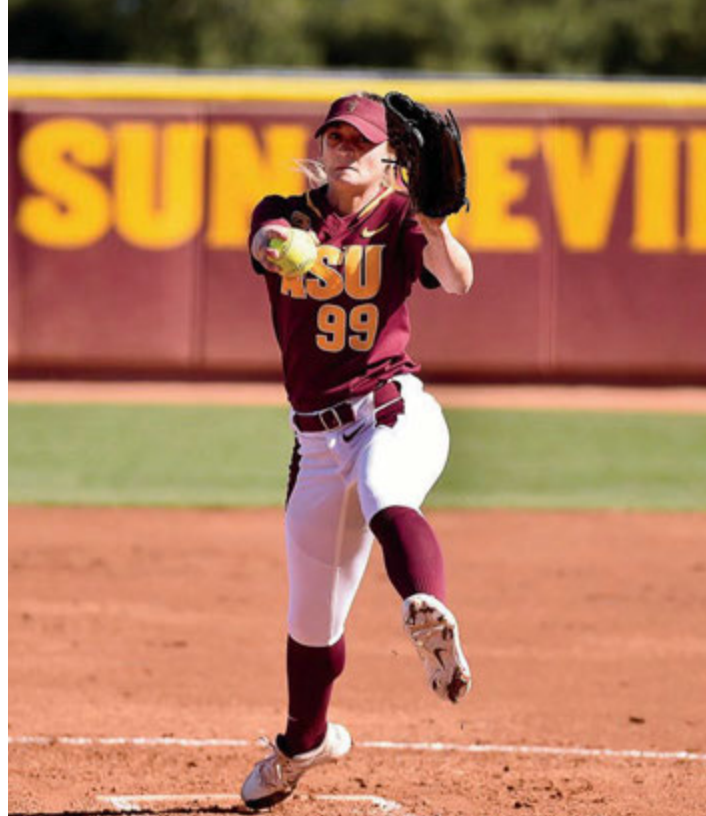
Macha worked throughout fall ball with new Sun Devils pitching coach Letty Olivarez, adjusting her windup and her grip on the ball. Known until now for her power, Macha says she wants to become a more complete pitcher.

"You can take a little speed off sometimes and get more movement," she said.

She quickly learned the difference between high school and college ball.

"In high school, the first four batters (in the order) are really strong, but in college, they're all good and you can't afford to take any pitches off."

Sports updates are contributed by Don Ketchum, a Tempe-based sportswriter.



Sophomore softball pitcher Bre Macha

Are you heading back to your ASU campus or Arizona?

Whether it's vacationing with the family or catching up with friends, be sure to check our travel portal for exclusive hotel deals.

Visit alumni.asu.edu/travel-portal today!

ASU ALUMNI
ARIZONA STATE UNIVERSITY

Getting in the game

ASU's sports-related academic programs a hit with students

By Joe Healey

When an institution with the reputation of an academic pioneer encounters the challenge of a field of study with unique industrial demands and an ever-changing landscape, the right game plan and collaborative execution can produce results capable of setting new academic and professional standards. Sports – a field viewed decades ago as mostly an entertainment or a novelty from the business, journalism or legal perspective – is now a \$498 billion industry, according to marketing intelligence resource Plunkett Research. Organizations involved in both the professional and amateur facets of the sports industry face high demand, nationwide and globally, and place a premium on forward thinking trailblazers when hiring.

As it is on the field of play, teamwork and cohesive collaboration are integral to the success of ASU's sports programs. Faculty and staff at the W. P. Carey School of Business, the Sandra Day O'Connor College of Law and the Walter Cronkite School of Journalism and Mass Communication combine their talents to provide unique and interdisciplinary academic offerings unlike any found across the country that help create careers in athletics.



Valley proves to be a haven for sports

One of the greatest advantages for all of ASU's sports-focused degree programs is the university's setting in the Valley of the Sun, one of just a dozen metropolitan areas in the nation with representation in all five major professional sports leagues. The area also leverages its mild winter weather and its reputation as a travel destination to host marquee annual events such as the Fiesta and Cactus Bowls, the Waste Management Phoenix Open for golf and Major League Baseball's (MLB's) Cactus League spring training, as well as three Super Bowls within the past 20 years, and an assortment of college football playoff bowl games.

These leagues and events often work in close affiliation with ASU and its sports-based programs across the different disciplines to provide access and training to ASU students in the various areas of staging, supporting and covering major athletic events.

"Arizona is such a vibrant and cooperative sports community," stated Michael Mokwa, the Pat Tillman Foundation Professor of Marketing and Leadership for the Carey school. "You can pull together all of our major sports organizations into cooperative ventures, and overall we have such a diverse set of opportunities for our students to study hands-on that it gives us a tremendous advantage that is difficult to replicate any other place in the United States."

ABOVE:
Michael Mokwa,
Pat Tillman
Foundation
Professor of
Marketing, W. P.
Carey School of
Business



Laying down the law

A joint effort sports law and business program was introduced at the law college in fall 2014. Degree tracks include a master of legal studies (MLS) program for students without a legal background, and a master of laws (LLM) version for law school graduates. One year later, the Cronkite school debuted sports journalism degrees at both the bachelor's and master's degree levels. Not to be outdone, the Carey School also offers certificate and degree programs in sports and media studies that approach the topic with a business tilt.

"Our programs are very problem and project based," detailed Rodney K. Smith, professor of practice at the law college. "The projects and problems are real-world issues that arise within the sports industry, so our students are trained to solve problems by looking at multiple dimensions. There are no other programs in the country that do that for this type of study."

The training Sun Devil students receive can prepare them for high-level front office roles in a professional sports

ABOVE: Rodney K. Smith, professor of practice, Sandra Day O'Connor College of Law

league, hosting positions on sports shows in the media, or behind the scenes in any number of contexts. According to those teaching it, ASU's advanced and integrated curriculum serves as a catalyst to propel graduates to the forefront of their field of choice.

"A key objective we promote is to prepare the next generation of sports executives and entrepreneurs," said marketing professor Michael Mokwa. "We teach our students to think strategically and innovatively, in order to tackle the specific challenges faced in sports professions."

The sports law and business degrees intertwine instruction on the regulatory aspects of athletics with exercises that assist students in learning how to spark revenue growth, build corporate relationships and develop brand recognition. The business school programs emphasize a strategic orientation, built around a fan focus and delivering a comprehensive skill set in marketing, finance and other vital traits.



ABOVE: Mark Lotado, assistant dean, Walter Cronkite School of Journalism and Mass Communications

Learning how to succeed, play by play

Journalism students with sports ambitions can receive instruction from the nationally acclaimed Cronkite faculty, and also now have the opportunity to develop their craft with on-the-job style training in Cronkite News' sports bureaus in Phoenix or Los Angeles. The latter unit is housed at ASU's California Center in Santa Monica.

As they work for the sports bureaus, students cover high school, college and professional teams, with the final products often published by prominent broadcast affiliates and online sports hubs, providing a priceless boost to their portfolios. Students also will have the chance to travel to Rio de Janeiro to cover the 2016 Summer Olympic Games.

Students with the Phoenix bureau to cover Cactus League Spring Training, using all-access MLB press credentials during the league's six-week lifespan to produce multimedia reports for major outlets, which have included the Arizona Republic, Milwaukee Journal Sentinel, San Diego Union-Tribune and Denver Post, among others.

"The sports journalism students have great enthusiasm, they're getting wonderful experiences that really mirror our objectives within the Cronkite School," said Mark Lodato, an assistant dean for the Cronkite school. "It's a great atmosphere in which to give them excellent training, so you combine all those resources and things happening here in the Valley and it's a no-brainer for prospective students as to why they should come to ASU."

Never content to just be portrayed as pioneers on paper, ASU leads through action to challenge the status quo in the studies of sports business, law and journalism.

"Some institutions speak of being 'interdisciplinary,' but are very slow to change because faculty and others become comfortable with what exists," commented Smith. "In most industries you can't get a disruptive innovation unless you have the leadership to support it, and Arizona State is better at that than any other university – not just in the country, but in the world."

Joe Healey '06 B.I.S. is a freelance sportswriter based in Tempe. Photography by Dave Tevis

Hot. Cold. Maroon. Gold.

PICK UP THE LATEST SUN DEVIL SWAG
AT STARBUCKS OR STARBUCKS.COM



College and coffee go together. Officially.

June 2014 brought the creation of an unprecedented partnership between a trailblazing corporate citizen and the country's most innovative university. Starbucks wanted to offer its partners (employees) the chance to create a bright future without being weighed down by student debt. Arizona State University saw a groundbreaking route toward its goal of helping people find their way to a better life. Together, they created the Starbucks College Achievement Plan (SCAP). And nearly two years later more than 5,000 Starbucks partners are pursuing their dreams of a college education.

For Starbucks, the plan represents a minimum \$250 million investment in its partners' education, a promise unmatched by any company anywhere. For ASU, it is another example of an approach to higher education that earned it the No. 1 ranking among America's "Most Innovative Schools" from U.S. News & World Report.

Consider these program partners:

Veterans experience

It's unlikely Christopher Schmidt and 16-year-old daughter Morgan will be classmates, but there's a good chance they'll both be ASU alumni in the not-too-distant future. Schmidt is currently enrolled in ASU's online program, which in November



was expanded to include family members of the U.S. Armed Forces and veterans. A six-year Starbucks partner who served in the U.S. Army and Army National Guard and is now on the Starbucks Military Talent Acquisition team recruiting veterans to join the company, he has gifted his tuition benefit to Morgan, who plans to enroll at ASU when she completes high school – a year after her father expects to get his bachelor's degree in organizational leadership.

Working mother

More than 60 percent of the 5,000-plus Starbucks students enrolled in the program are women – many are working moms. District Manager Akeisha Walker turned a summer job into a 20-year career at Starbucks, and in that time was married and started a family. The Starbucks-ASU partnership prompted her return to college: "I no longer had an excuse; I had to finish my degree." Her family provided further inspiration – "My

children see me going to school and know how important education is to me," she says. "I want them to see I was able to complete my degree and that someday they will as well."

ASU graduate

Jessica Andrews seized the program opportunity while already a student at ASU; the plan helped her avoid costly student loans and made her pursuit of a degree a slam dunk. "I was able to finance the first year at ASU through different types of help and financial aid, but I realized if I wanted to continue, it was going to be tough.

'The Starbucks plan was announced, with full tuition reimbursement, and it was an easy decision for me.'

A two-year Starbucks partner, Andrews learned to take advantage of ASU resources. Her drive, the rich support of ASU and the Starbucks plan set her on a path to earning her B.A. in organizational leadership at ASU.

Show your pride for ASU with cup in hand. Visit Starbucks stores or [starbucks.com/asucollection](https://www.starbucks.com/asucollection)

STARBUCKS IS PROUD TO PARTNER WITH ASU AND OFFER FULL TUITION REIMBURSEMENT FOR ELIGIBLE PARTNERS (EMPLOYEES).

Learn more at [Starbucks.com/collegeplan](https://www.starbucks.com/collegeplan)





SUN DEVILS IN SPACE

FROM THE MOON TO MARS AND BEYOND,
ASU HAS ASTRONOMICAL IMPACT ON SPACE EXPLORATION

BY CHRISTOPHER VAUGHAN

At the dawn of his career as a space scientist, Phil Christensen had an inspired idea. NASA was soliciting proposals for instruments that would be included on a Mars orbiter. Christensen, then a faculty research associate at the university, saw a lot of utility in having the satellite include a thermal emissions spectrometer, which could tell a lot about the composition of the Martian surface and atmosphere by analyzing the electromagnetic radiation they emitted.

In 1985, Christensen spent a year researching and writing the proposal, putting everything else in his career on hold. It was a risky move; this sort of instrument had never been put on a planetary orbiter. Also, at the time, ASU was a smallish southwestern university not known as a major research center in space, and he would be competing with the likes of MIT, Caltech, the Jet Propulsion Laboratory and other heavyweights. If the proposal wasn't accepted, the downside was daunting.

"I hadn't published anything in a while, so if this didn't work, my career was done," he says.

Few expected Christensen's proposal to win the competition and receive valuable space on the satellite. But it did,

and when it did, the \$9 million government grant was the largest ASU had ever received, in any field.

"The university had no idea what to do with it," Christensen says. "They didn't have mechanisms for writing the contracts or administering an award that big."

Although the spacecraft that held Christensen's instrument was fated to blow up just as it was about to enter into orbit around Mars, since that time space science at ASU has experienced explosive expansion of a far healthier sort. Christensen, who is now a Regents Professor in the School of Earth and Space Exploration (SESE), is part of a vast network of ASU scientists engaged in research on extraterrestrial geology, physics, materials science, even biology.

The university is now one of a few elite institutions in the nation that plans and builds space missions for NASA. It competes for space contracts worth hundreds of millions of dollars, and may soon be awarded projects costing more than a billion dollars. The university has its own clean rooms for constructing space vehicles. It even has a mission control room, and in the near future whole space missions may be run from campus. It also partners with private companies that have space exploration as part of their business plan.



Jim Bell

Lindy Elkins-Tanton

Phi Christensen

Aditi Chattopadhyay

Cheryl Nickerson

Scott Parazynski

“THE TEAM OF ENGINEERS AND SCIENTISTS WE HAVE PUT TOGETHER HERE IS PHENOMENAL.”

A PROUD PAST

Space science at ASU actually traces its origins back to the 1960s, when ASU researchers helped NASA select landing spots for the Apollo missions to the moon. Christensen’s spectrometer was a giant leap (to borrow a famous phrase) for ASU space science, but that was only the beginning of the journey. Christensen was able to make another spectrometer for the next Mars orbiter, which did not blow up, and he has gone on to work on four other instruments for flights into outer space. He is enthusiastic about the team that has been assembled at ASU over the decades for monitoring these missions and mining the data they produce for research insights.

“I jokingly say that I wish that I were 35 again, because I wish I could do this for another 30 years,” Christensen said. “The team of engineers and scientists we have put together here is phenomenal. This thing has a tremendous future.”

ASU researchers have taken part in many space-flight missions in addition to those Mars missions. They have done image processing and analysis for the Cassini-Huygens mission, which launched in 1997 and has been getting data about Saturn and its moons since it arrived there in 2004. They have been part of the team working on the data from the Dawn mission, which began to orbit the asteroid Vesta in 2011. “We continue to tease out information from data going back 20 years or more,” says Jim Bell, a professor in the School of Earth and Space Exploration.

Phil Christensen,
Regents
Professor,
School of Earth
and Space
Exploration

RIDING TO THE MOON ON A COUPLE LOAVES OF BREAD


While ASU researchers are proud of past accomplishments, their eyes are definitely on future prizes. In the past year, ASU researchers have won contracts to build a camera for a satellite that will orbit around Europa, an icy moon of Jupiter. They also will build a panoramic color camera for the next Mars rover, which is slated to launch in 2020.

Recently, faculty members have been interested in doing work related to Earth’s closest celestial neighbor – the Moon. In August 2015, ASU researchers won a contract to build a very small spacecraft for a Moon mission, called a Cube Sat.

“The spacecraft is not much larger than a couple loaves of bread,” Bell explained. “It will go into lunar orbit and measure the abundance and distribution of water ice at the poles of the moon.” Although researchers at ASU have built many instruments for space missions, this will be the first spacecraft that will be built completely at ASU. “This is our mission,” Bell said.

The researchers are interested in finding out if the water really did come from comets crashing into the moon from all over the galaxy, as they suspect. But they also want to know how much water is on the moon and where it is because any extended stay on the moon in the future will require water to drink, to shield lunar residents from radiation and to provide oxygen and hydrogen.

The mission, officially called the Lunar Polar Hydrogen Mapper—or LunaH-Map—is part of a trend toward space exploration assignments that are smaller, smarter and cheaper than the multi-billion dollar Apollo missions that took us to the moon in the ‘60s and ‘70s. “The cost of a Cube Sat mission is one percent of the cost of a big mission,” Bell said. “We are trying to do missions on a shoestring budget and see if we can do good science that way. There are risks because it is such a low cost mission, but you have to take risks.”



"IT WILL GO INTO LUNAR ORBIT AND MEASURE THE ABUNDANCE AND DISTRIBUTION OF WATER ICE AT THE POLES OF THE MOON."

WELCOME TO MISSION CONTROL

Although students may sense the future in small private companies, ASU faculty are excited about upcoming NASA missions – big ones, the kind that cost hundreds of millions or even more than a billion dollars.

In the past year, a big mission proposed by SESE director Lindy Elkins-Tanton and her colleagues became a finalist in NASA's Discovery Program. The orbiting spacecraft, called Psyche, will survey an asteroid that is composed of a very large hunk of iron. It's likely that this asteroid was the iron core of a planet that was blasted into bits by another large object about 4.5 billion years ago, when the solar system was very young.

"We can't see into planetary cores now, so it would be very interesting to find out more about them by looking at Psyche," Elkins-Tanton said.

Out of 27 Discovery Program proposals from across the country, only five proposals have made it to the finalist stage. Elkin's-Tanton's proposal is the only one of the bunch from a university. The other four finalist proposals are from such space luminaries as the Jet Propulsion Laboratory, Goddard Space Flight Center and the Southwest Research Institute. Even more impressive, according to Elkins-Tanton, ASU has team members on four of the five competition finalists.

If ASU gets the Psyche mission, it likely will be run entirely from a mission control room in ISTB4, and the camera would be built at ASU, the researchers say. "The university would get tens of millions for science operations," Elkins-Tanton says.

The solid success in being among the Discovery Program finalists is a sign of ASU's continued upward trajectory in space exploration and research. "If we get this mission, we will really hit the big time," Elkins-Tanton says. "This is a boom time."

SPACE FOR SALE

In addition to participating in exploratory missions that are small and lithe, Bell is also taking part in pushing the frontiers of space exploration in another way: he is the director of the NewSpace Initiative, which is dedicated to helping establish partnerships between the university and private companies doing space exploration and research.

For an example of where a for-profit company might fit in the extraterrestrial picture, Bell says, he has been talking to one company interested in mining asteroids.

"Before they do mining they need to find out what's there with Cube Sats," Bell says. "That's prospecting, but it's also exploration, and we have ASU professors and students working with them."

Government programs like NASA are risk averse, so they are less likely to be able to seize the opportunities that a business entity could, Bell said.

"They don't want to risk taxpayer money, so they seldom take the risks that can reap big rewards," he says. "But small companies take risks all the time."

Bell teaches a class on campus called Commercial Opportunities in Space, and he says he sees a shift in the career aspirations of his students that is telling: "What I've seen in the past five years is that students don't want to just work for NASA, they also want to work for Elon Musk at SpaceX and other new space companies."

(left) Jim Bell, director of ASU's NewSpace Initiative; (right) Lindy Elkins-Tanton, director of the School of Earth and Space Exploration



STRONGER STRUCTURES, SAFER MISSIONS

Not all space-related research at ASU directly contributes to a planned or existing mission. Aditi Chattopadhyay, a Regents Professor with the School of Energy, Matter, Transport and Energy Engineering, has won awards from NASA for her research on smart materials and structural health monitoring (SHM) techniques that can monitor the presence and progression of defects/damage in real time.

“Spacecrafts operate in a harsh environment,” Chattopadhyay says. “The structural degradation of the components can be caused by various sources such as micrometeoroid impact, extreme temperature limits, UV radiation, and thermal cycling. We have developed smart sensor-based SHM technology to diagnose structural anomalies, estimate the severity, determine the status of components, and predict the remaining useful life and operation risk in the future.”

One of the things that Chattopadhyay is working on is developing multi-functional nanocomposite materials with self-sensing and self-healing capabilities and improved properties. Her group is exploiting the piezo-resistive properties of carbon nanotubes to monitor damage in composites. She is also collaborating with Lenore Dai, a professor of chemical engineering and the interim director of the School for Engineering of Matter, Transport and Energy, on materials that have the unique ability of producing a visible color change upon stress, allowing for damage sensing at the molecular level.

“The idea is that if there is loading or deformation, the color change acts as a ‘damage precursor’ indicating the possibility of damage initiation,” Chattopadhyay says.

In a recently funded project, Chattopadhyay and Dai used high-performance polymers to build chemically cross-linked microstructures that make self-sensing and self-healing materials possible.

“This work is at the intersection of chemistry and mechanical engineering; we need to understand the interplay between chemistry, structure, and properties for this novel development,” Chattopadhyay says.

(left) Aditi Chattopadhyay, Regents Professor, School of Matter, Transport and Energy Engineering; (right) Cheryl Nickerson, professor in the School of Life Sciences

KEEPING ASTRONAUTS HEALTHIER

While many missions to space have been unmanned, there is a continued need to send humans into space, as human activities and capabilities are astronomically more flexible than robotic missions. Any manned missions to Mars, or even a trip back to the Moon, will require a keen understanding of how human beings can be kept healthy during long journeys in space. Cheryl Nickerson, a Biodesign Institute microbiologist and professor in the School of Life Sciences, has been studying how microbes behave in space since the late 1990s. Nickerson’s efforts have resulted in her receiving a NASA Exceptional Scientific Achievement Medal, and she is the editor-in-chief of the new Nature journal, npj Microgravity, which is sponsored by ASU.

“It’s well established that spaceflight alters cellular and physiological processes in astronauts, but very little was known about how the behavior of pathogens might be different in space, and how this knowledge might be useful for crew health, as well as advancing our understanding of infectious disease on Earth,” she explained.

In multiple experiments conducted on the Space Shuttle and the International Space Station, Nickerson found that Salmonella, a common cause of food poisoning, became more virulent, induced unique changes in gene expression, and increased biofilm production when cultured in space. Nickerson’s work identified a possible molecular mechanism as to how these bacteria were uniquely changing their disease causing potential. Perhaps equally important, these changes were not observed when the bacteria were cultured under traditional experimental conditions in the laboratory. Her spaceflight research has since been extended to working with other pathogens as well, and holds the potential to both help protect the crew during a spaceflight mission, and for development of novel strategies to combat infectious disease for the general public.

EXPLORING THE HUMAN FACTOR IN SPACE FLIGHT

The astronauts themselves, who are some of the best and the brightest the human race has to offer the universe, undergo years of elite training to journey out into the foreign environment of space and return with vast reservoirs of personal insight and experience. With the appointment of astronaut Scott Parazynski as ASU's first University Explorer, the university hopes to tap some of that human knowledge to improve space exploration.

"IF WE CAN STUDY ELITE PERFORMERS LIKE CONCERT PIANISTS AND NAVY SEALS, WE CAN START TO UNDERSTAND HIGH-LEVEL HUMAN PERFORMANCE."

In addition to participating in five American space shuttle missions, Parazynski is a medical doctor, an engineer, and an experienced mountaineer who has climbed Mount Everest. He holds appointments in the Ira A. Fulton Schools of Engineering and the School of Earth and Space Exploration.

At SESE, Parazynski collaborates with others on the development of robot platforms that can survey environments dangerous for humans to explore, such as the icy moons of other planets or the polar regions here on Earth. He also will be working on medical devices and connecting with private space companies that may partner with ASU in this area in the future.

Another research interest of Parazynski's focuses on elevating human potential, something astronauts have in abundance. One of his projects is the Ascend Institute, which studies how to elevate human potential.

"If we can study elite performers like concert pianists and Navy SEALs, we can start to understand high-level human performance on everything from the molecular to behavioral level," Parazynski said. "An interesting element is that we will be studying people with disabilities who have developed extraordinary countermeasures, like blind people who use echolocation to navigate." By studying "outlier" performance, the Ascend Institute aims to leverage those lessons learned for all who aspire to improve their capabilities, including those with some form of disability.

TRAVELING TOWARD NEW FRONTIERS

Parazynski sees the return on investment in space exploration as another way to elevate our nation, as well as our planet. In purely economic terms, the United States spends only half of one percent of its budget on aerospace endeavors, but the benefits are estimated to be three to seven times as great as the expenditures. Space exploration also exemplifies our spirit as a nation, he says, part of our historic drive to push toward new frontiers and take new risks.

"Those are the things that led to our nation's birth and expansion. They are truly at the heart of our innovation engine as a country," Parazynski asserted.

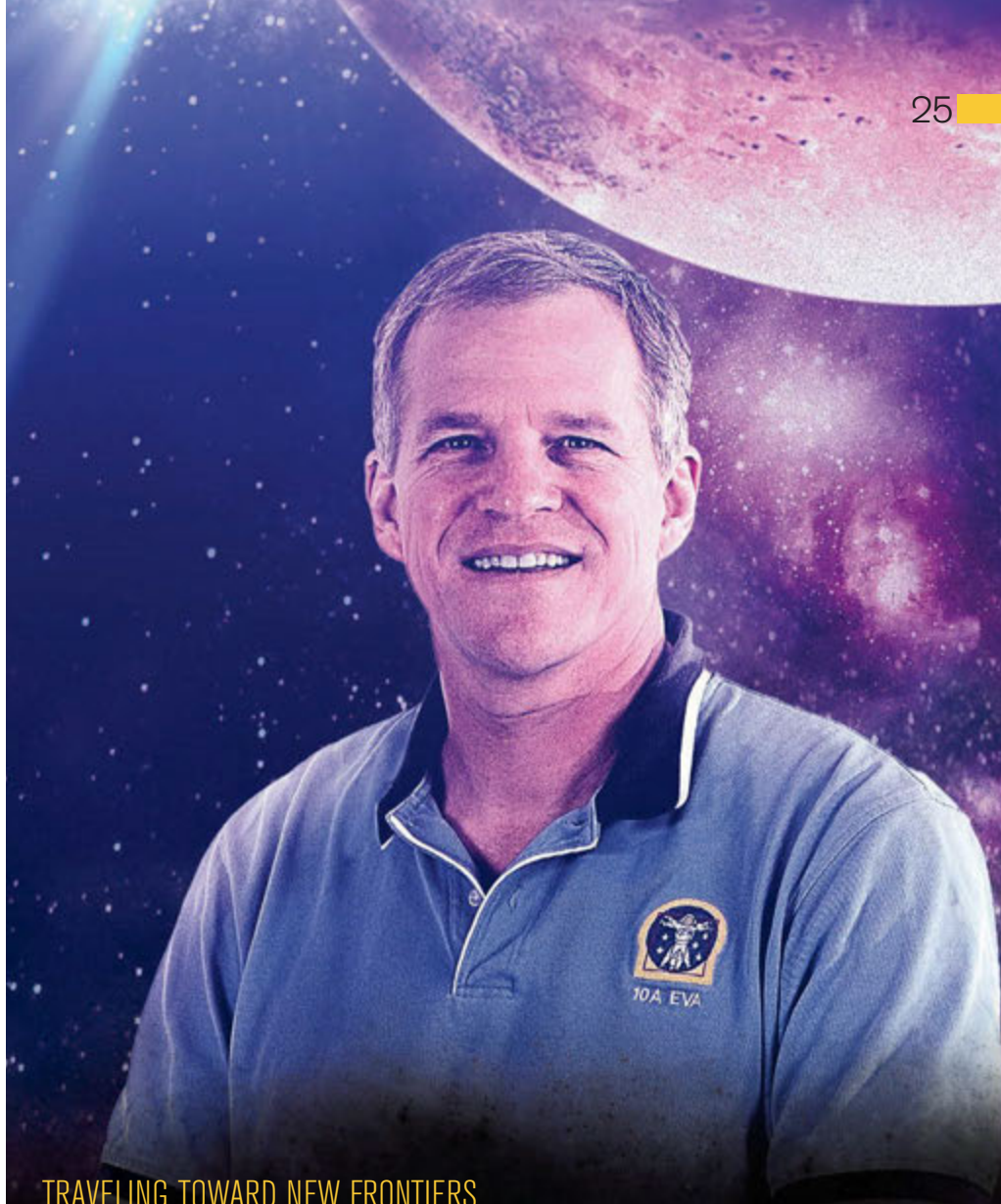
Other ASU researchers agree. "We are brought out of ourselves and made better through space exploration," says Elkins-Tanton. "Doing something so fundamentally human as the challenge of exploration can actually take the place of competition between countries. It can make us squabble with each other less, and think more of humanity."

"We can understand more about Earth and how it relates to other planets," Elkins-Tanton concludes.

"There's even a small chance that life could have been spread between planets via meteorites thrown off by impacts. In one 'out-there' scenario, life might have started on Mars and traveled to Earth. We might all be Martian! Answering questions like that is beautifully mind-expanding."

*Christopher Vaghan is a freelance science writer based in Palo Alto, Calif.
Photography by Andy DeLisle*

Scott Parazynski,
ASU's University
Explorer





BUILDING UP

SUSTAINABILITY

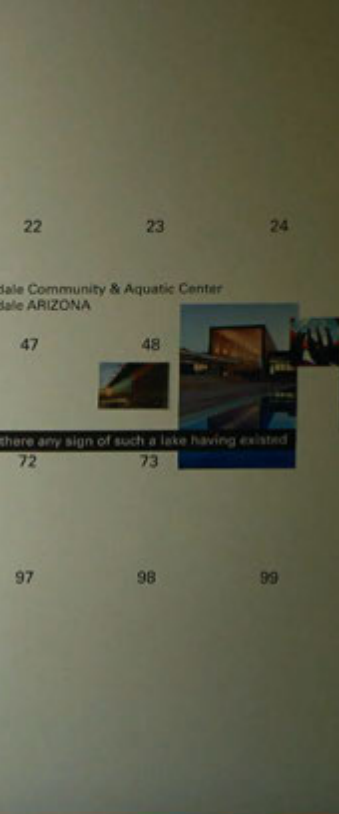
ASU
researchers
study how
to design
structures for
the long run

By Christopher Vaughan

ASU's Julie Ann Wrigley Global Institute of Sustainability is known widely as a preeminent center for research on sustainable practices. From the Food Systems Transformation Initiative to the Kyl Center for Water Policy, the institute's offerings are celebrated as forward thinking.

What is less recognized is that ASU's campus buildings themselves serve as research subjects in the quest for sustainability. University researchers from an array of disciplines are not only pushing forward new ideas about how to create structures in which humans can live and work in a way that doesn't put future generations at risk, they are also changing the nature of the field itself.

For example, at the Arizona Center for Law and Society (ACLS) being built for the Sandra Day O'Connor College of Law on the Downtown Phoenix campus, at the new student pavilion that will replace the Undergraduate Academic Services Building on the Tempe campus and in many other buildings planned or being built, the university is going far beyond common sustainability standards in order to push the envelope in energy conservation, says Ed Soltero, ASU assistant vice president and the university's chief architect. An extensive amount of computational simulation is done for each facility before construction is ever contemplated.



(above) Ed Soltero, ASU assistant vice president and University Architect says new ASU buildings such as the Student Pavilion on the Tempe campus (top) and the Arizona Center for Law and Society on the Downtown Phoenix campus (bottom) incorporate numerous features designed to enhance sustainability.

"We are not building iconic buildings per se, we are building 'laboratories' which we will use to teach and understand how buildings can be built and operated more sustainably, and to educate future designers," he said.

Soltero points out that the ACLS, for instance, was designed to respond to the climatic particularities of the Phoenix environment. "We analyzed the climate and designed cooling systems which incorporate a better understanding of physics and also result in energy savings," Soltero says. Vertical shade projections, which project out of the building on certain façades, work with particular angles of the sun's path found at this latitude and will essentially reduce heat gain inside the new facility under construction, he says. "This building would make no sense in Toronto."

The new student pavilion in Tempe is being designed to be ASU's first net-zero building. In essence, it will only consume as much electric-

ity as it can produce on site. Metering devices will garner energy use data and feature such in a monitor displayed in a prominent location. The larger goal here is to influence responsible occupant use of energy. "Designing a sustainable facility is only the first step, the larger challenge is influencing occupant behavior," Soltero states.

In the case of the College Avenue Commons facility at the Tempe campus, completed in 2014, it has been outfitted with sensors at each layer of the building's exterior envelope so that thermal energy flows, in essence heat gain, can be monitored in real time. Soltero has worked closely with faculty and graduate students also to install an alternative cooling system known as a "chilled beam" which has a proven track record of cooling spaces with considerably less energy consumption.

"We are striving to reach well beyond common green building certifications," Soltero says.

Discovering buildings that LEED the way in practice

Harvey Bryan, a professor in the Herberger Institute for Design and the Arts, is one of the people who helped set green building standards such as LEED (Leadership in Energy and Environmental Design), which is probably the best known of the certification systems. He is also one of many ASU researchers who are now doing work that is challenging and changing those standards.

The early building standards were descriptive and aspirational, Bryan says. They defined, for instance, the thermal transmissibility of glass that could be used in a building. Now, the focus is shifting from building composition to its execution of energy-consuming activities. "We are moving more towards performance-based targets, looking not at how buildings are designed, but how they actually do once in use," Bryan says.

That kind of analysis is precisely what Mounir El Asmar specializes in. El Asmar, an assistant professor in the Del E. Webb School of Construction and the School of Sustainable Engineering and the Built Environment, which are units within the Ira A. Fulton Schools of Engineering, says, "We are thinking in terms of the whole life cycle of a building rather than the typical two to three years related to design and construction. The type of work we do is to try and understand whether ratings systems like LEED are really doing their job, whether they are really related to performance when the building is in use."

El Asmar and his colleagues perform studies comparing the energy usage in LEED-certified buildings with the performance of similar buildings that are not certified.

"Every building is unique. There are so many variables at play here and it is difficult to compare two different buildings, but if we study large numbers of buildings, some of the noise cancels out and trends start to emerge," El Asmar says. What they have found is that while many of the buildings with higher ratings do indeed have better performance, the ratings in some areas did not relate back to the intended sustainability improvements. These findings already are helping to improve the ratings systems, he says.

"We are not recommending that we don't rate buildings until they have been



occupied, but the rating plaque that is shown at the entrance of every certified building should probably come with a screwdriver," El Asmar says. "If your green building isn't performing as promised after a number of years, perhaps we should rethink that rating."

Getting beyond the utility meter

Understanding how buildings are performing in actual use is the focus of a whole other area of research. Many buildings now have multiple sensors that track temperature, heat flows, building usage, and many other variables. "It used to be that the best data you could get was from the utility meter," Bryan says. "The difference between that and the data you can get now is like the difference between taking someone's temperature and getting an MRI."

Some building owners don't want to know all that information, Bryan says, but many do, and he has found that people in the building like know-



ing more about the building in which they are living or working. “Occupants we visit feel excited and engaged with a living building,” he says. “They have to manage the building in more creative ways.”

An example of this type of complex aggregation of sensor data is available for view at ASU’s Campus Metabolism site at <http://cm.asu.edu>. Visitors to the site can examine real-time energy and water use at the university – by individual building, building type, or the entire campus.

Adding humans to the engineering equation

While much of the work in building sustainability involves advancing technology, one ASU researcher is very much aware that in the end, people build and occupy buildings. “I focus on the non-technological issues that impact performance,” explained Kristen Parrish, an assistant professor in the Del E. Webb School of Construction and the School of Sustainable Engineering and the Built Environment. “I look at the stakeholders that we need



to engage and when we need to engage them in order that we have the most efficient processes.”

In a sense, Parrish is more interested in the problems of human engineering to increase sustainability. One area of research is the role of building contractors, who are often the ignored missing link between architects who design sustainable buildings and the building managers who operate them.

“A contractor picks up a set of building plans that say, ‘This chiller needs to be this part number or equivalent,’” Parrish said. “The problem is that ‘equivalent’ might mean very different things to the contractor than it does to the designer.”

Parrish also studies how much control over building environment should optimally be given to the individuals who occupy the building. For instance by having central control of residence hall room temperature, you might stop a student from turning down the cooling in his room to 65 degrees because he just got back from the gym, but at the same time you rob another student of the opportunity to set their room temperature at 83 degrees because he or she likes it warmer or is trying to be conscientious about saving energy. Parrish tries to discover under what conditions one model – central control or local control – might be better than the other.

(left) Harvey Bryan, professor, The Design School
(below) Mounir El Asmar, assistant professor, Del E. Webb School of Construction
(right) Kristin Parrish, assistant professor, School of Sustainable Engineering and the Built Environment



Making homes affordable and sustainable

Ernesto Fonseca, an urban planner and housing developer with the Julie Ann Wrigley Global Institute of Sustainability, is another one of those at ASU who is expanding the idea of what sustainability is about. Fonseca works with the Stardust Center for Affordable Housing and Family at the university to develop homes that work for families in ways that reach far beyond financial and energy considerations.

Years ago we talked about affordable homes just in terms of costs, and green homes just in terms of energy usage," Fonseca says. "Now we are making a transition to think of sustainable homes as 'healthy homes' that are not just affordable to buy, but are sustainable to maintain and operate." For Fonseca, that not only includes making a house energy efficient and water conserving, it also means creating a home that is well-lit, comfortable and located close to schools, work and shopping.

"The concept of stable and healthy homes has evolved over the last 50 years, and I'm proud to say that we have been leading the way in many cas-

es, leading the pack in terms of design changes," Fonseca says.

"So now we talk not just on the efficiency of the house, but concept of a healthy home was expanded to include all the things that will sponsor the well-being of an individual, both psychologically and physically," Fonseca says. Also important is the organization of a home's surrounding community, which for Fonseca and his colleagues is a word that means not just a collection of residences, but a place where people feel welcomed and supported.

Pushing out of the envelope

All of the sustainable design research being pursued at ASU easily can come full circle and be applied to the university itself, to create an institution that not only conserves energy and water, but which also provides a psychologically and physically nurturing environment for university students, faculty and staff. University architect Ed Soltero says ASU has big aspirations in this area, such as the idea of doubling the already impressive amount of solar energy generated on campus, and even-

tually perhaps even taking the campus completely off the grid. Already, the university has more than 81,000 solar panels installed throughout its campuses, which generate more than 24 megawatts of electricity, and continues to make progress toward its twin goals of eliminating 100 percent of its greenhouse gas emissions from building energy and waste-related sources by 2025, and 100 percent of its carbon emissions from transportation by 2035.

"In terms of sustainability, we are global leaders," Soltero says. "We are really pushing the envelope by developing sustainable place making at a campus level through architecture and planning which responds to the particularities of this region."

Christopher Vaughan is a freelance science writer based in Palo Alto, Calif. Photography by Dave Tevis & Dan Vermillion

(above) Ernesto Fonseca, an urban planner and housing developer, in front of an affordable, sustainable building he designed.

It's all about

Who you know

and you know everyone!

At least **436,000** people anyway.

Join today! alumni.asu.edu/join

for a free ASU luggage tag, use appeal code ASUMag16.

Advance your connections with a membership in the ASU Alumni Association. Get connected now with more than 436,000 Sun Devils and more than 140 active alumni chapters around the globe. In addition to the benefits of being connected, the ASU Alumni Association membership offers you a world of exclusive benefits. Learn more. [Join today.](#)

Call 1-800-ALUMNUS or go online at alumni.asu.edu/join.



ASU ALUMNI
ARIZONA STATE UNIVERSITY



Social Service

ASU students, alums
contribute to
community through
impact ventures

BY ERIC SWEDLUND

Contrary to their self-absorbed reputation, college students in the "Millennial Generation" at Arizona State University are moving in the direction of social-impact careers in greater numbers than in the past. The service initiatives available - which include traditional favorites such as the Peace Corps and newer options like Teach For America and ASU's Public Service Academy - dovetail perfectly with ASU's New American University design aspirations of social embeddedness and global impact.

ASU's Career Services has tracked closely the rise of this desire to make an impact. "There have been a lot of studies done about the Millennial Generation that have found when it comes to their work, it's vitally important they make some sort of an impact, that they can see the fruits of their labor," says Amy Michalenko, associate director of ASU Career Services at the Tempe campus.

ASU is a top producer of Peace Corps, Teach For America and AmeriCorps volunteers, ranking fourth this year among universities for Teach For America volunteers and 15th for Peace Corps. ASU has moved up consistently in the rankings because it has ramped up efforts to prepare its students to be competitive and it has placed a greater focus on campuswide education and engagement, Michalenko says.

"They're at a younger age identifying causes they feel strongly about," says Michalenko, who supervises the campus recruiters for service-oriented programs. "What we talk about is an opportunity for students to get amazing hands-on experience, to build their resume, but it's also something they can really see the impact they're making on a day-to-day basis, and ultimately that's what so many of our students are looking for."

One crucial aspect that Career Services emphasizes is the opportunities in these service organizations aren't limited to students majoring in fields like education or international studies.

"The key I always want to drive home to students is these opportunities are for anybody, from any major, any background," Michalenko says.

To provide an overview of how social impact programs are delivering opportunities for ASU students to both bolster their resumes and experience change-making at a global level, ASU Magazine checked in with recruiters and administrators with key programs at the university.

(right) Amy Michalenko, assistant director, ASU Career Services



ASU Public Service Academy: Majoring in social change

Launched earlier this academic year, the ASU Public Service Academy integrates the university's Army, Air Force and Navy/Marine Corps ROTC programs with the Next Generation Service Corps, which trains service-oriented students from all majors to become civilian leaders. The goal is to produce emerging leaders who can take on America's toughest challenges, says the academy's Executive Director Brett Hunt.

"This generation of young people overwhelmingly wants to serve something larger than themselves. They're very focused on having their lives have meaning beyond their professional career," Hunt says. "The Public Service Academy is an effort to align that desire to take on big, complex challenges with the skills they'll need to go out and do those things."

The inaugural class of students represents 49 different

majors. They will bring these particular academic interests to bear on the challenges they choose to resolve. For example, two of the students who are focusing on women's health in the developing world are majoring in engineering and biological sciences. They will be offered opportunities to formulate and test solutions both locally and more globally, Hunt said.

"Our students, right when they're 18 years old getting into our program, identify a social mission they will pursue alongside their major," Hunt says. "At the undergraduate level, we're able to expose them to opportunities with local nonprofits, companies and public agencies to find a way to align that desire to serve something larger with education while they're pursuing their degree."



Peace Corps: Integrating into a world community

As the Peace Corps campus recruiter, Breanne Lott draws upon her own experience volunteering for 27 months in Ethiopia to provide an understanding of how that type of opportunity can change a student's life.

Lott's interest in the Peace Corps began as an undergraduate at ASU, when she spent the summer after her sophomore year studying in Paraguay. There, she met a Peace Corps volunteer and began her own research into the program. ASU didn't have its own campus recruiter at the time, but there was one covering the Phoenix area, so she started preparing to make a strong application, volunteering regularly her last two years in school.

Lott graduated ASU in May 2012 with a degree in global health and by October had arrived in Ethiopia to begin her time as a community health volunteer focusing on HIV/AIDS education and prevention. The long-term engagement of the Peace Corps was the aspect she enjoyed the most.

"You get the opportunity to integrate into your community and really be a part of that for two years," Lott says. "When I was studying abroad, I was there for just six weeks and got just a glimpse of the culture. But with the Peace Corps, you get to become a part of that culture, and you don't get that opportunity with any other service organization."

After returning a little over a year ago, Lott took the newly created position as Peace Corps recruiter at ASU and established programs across campus to help students learn more about the Peace Corps and put themselves on the right path to being more competitive applicants. And she's found that students at a younger age than she did are looking into these opportunities and figuring out how they can get there.

"Millennials are definitely focused on the global community rather than just local. They're really thinking about more than the neighborhood they grew up in, and they're really determined to make a change and take control of their lives," Lott said. "Of course, with the Peace Corps you have this wonderful, unique experience, and you will come back with a different perspective, a different worldview, that will be valuable no matter what field you go into."



AmeriCorps VISTA: Gaining confidence and skills through service

Because they offer a unique set of experiences, service organizations can serve students as an additional training ground beyond their college classroom, says Marissa Fabel, an AmeriCorps VISTA alumna who works for the Alliance of Arizona Nonprofits as program coordinator recruiting on the ASU campuses. AmeriCorps VISTA participants make a full-time commitment for one year to serve on a specific project at a nonprofit organization or public agency, working in some of the nation's poorest rural and urban areas.

As a student at the University of Nevada, Fabel studied international affairs with a business administration minor, but didn't feel her degree completed the education she needed.

"I graduated college and didn't feel like I was adequately prepared to step into a position," Fabel said. "When I was in college, I learned a lot of valuable information, but it was in a classroom setting. It's academic. Service gave me the confidence and the skills I needed."

Working in her university's Service-Learning and Civic Engagement department, she provided opportunities for students to become more connected with the community and now continues those efforts at ASU.

(left)
Brett Hunt,
executive
director, ASU
Public Service
Academy
(above)
Breanne Lott,
ASU's Peace
Corps recruiter

Teach For America: Advancing educational equity

ASU jumped in Teach For America's university rankings from 11th to fourth over the past year, which fits not only ASU's long tradition in teacher education but also President Michael M. Crow's initiative of public service, says TFA campus recruiter Veronica Aguilar.

"When I speak to Sun Devils, I tell them that Teach for America is more than a teaching program. Our mission is to strengthen the movement for educational equity," Aguilar says. "What I'm seeing from students is a desire to make an impact and be a part of a network of people who share the same values and commitments."

Teach For America, founded in 1989, recruits high-performing college grads to teach in high-need urban and rural schools. The goal is to involve the fledgling teachers in a movement that ultimately corrects the sources of educational inequity.

"I knew I wanted to stay in Phoenix and make an impact in the Latino community," says Aguilar, who taught fourth grade for two years at the ASU Preparatory Academy in Phoenix after graduating ASU in 2012.

In the case of Brendan O'Kelly, his work as ASU's student body president during the 2009-2010 school year was what drew him to TFA. Working with university administration, O'Kelly spearheaded a student government initiative to boost financial aid and student retention, offering free clinics on navigating the world of grants, scholarships and loans.

"ASU provided me an opportunity to learn about public service and how rewarding it can be. That brought me to Teach For America," says O'Kelly, who taught ninth grade social studies in Baton Rouge for three years. "It was a very rewarding experience. The kids were phenomenal. They all wanted to be engaged and learn and have fun in class and get a great education."

After his stint as a TFA teacher, O'Kelly worked as a development officer for Teach For America, creating corporate partnerships and seeking business investments in the Dallas area to help the organization grow.

"From the experience of being on the inside, the classroom side, I can see what a role and big impact people from outside education can make in the lives of kids," he says. "You can always make a difference and be a leader for your community. You don't have to be a teacher to make an impact in kids' lives and help them get a great education."

Throughout the various social impact programs that ASU partners with and encourages participation in, the thread that stays consistent is a direct relationship between learning and career development while bettering the community around an individual, said Michalenko.

"No matter your background, if you desire to get a world-class education, there's access available at ASU and that's a goal that's shared with a lot of these opportunities. The ideals that we have here at ASU are embodied in those opportunities," she said. "The desire is for ASU to be socially embedded in the community and be able to engage our students and their expertise as a mechanism to improve our community."

*Eric Swedlund is a freelance writer based in Prescott, Ariz.
Photography by Dan Vermillion & Thomas Garza*



(above) ASU's Teach For America campus recruiter Veronica Aguilar (bottom) Teach For America alumnus Brendan O'Kelly





SUN DEVIL
CAMPUS STORES

Promo Code
ALUM15ASU
Alumni Discount
15% OFF
A Single Item!*

Exclusive ASU Spring Gear!

TEMPE · DOWNTOWN PHOENIX · POLYTECHNIC · WEST · SUN DEVIL MARKETPLACE



Come visit any of our five Campus Stores or Shop Online!
Some exclusive items carried at the Sun Devil Marketplace
sundeilbookstores.com | sundeilmarketplace.com

*Promo Code ALUM15ASU. Offer valid in stores and online. Applies to only one gift or apparel item. Excludes gift cards, diploma frames, supplies, technology. One redemption per person. Cannot be combined with any other offers or promotions. Offer ends 12/24/16.



SUN DEVIL
CAMPUS STORES

The official stores of Arizona State University
SUNDEVILBOOKSTORES.COM

Turning the page

Changing book publishing technology fuels rise of “hybrid” readers

By Oriana Parker



ASU students, faculty and staff are increasingly becoming “hybrid” readers who utilize digital as well as printed books.

The appearance of Amazon’s Kindle single-function electronic reading device in 2007 was greeted by many with the same enthusiasm garnered by Johannes Gutenberg when he introduced the printing press and moveable type in 1439. Digital books – whether consumed on desktops, laptops, tablets or smartphones – went from nearly nonexistent to highly desired. E-book sales increased 193 percent during 2010, and made up nine percent of the consumer publishing market by the end of that year.

But apparently tomes made of glowing pixels only hold so much appeal, compared to traditional bound paper books. A September 2015 New York Times story noted that digital book sales dropped sharply last year, dashing predictions that it would be the year in which e-books would overtake print. The article also noted that rather than choosing one format over another, many book buyers were becoming “hybrid readers, who juggle devices and paper.”

ASU scholars and researchers involved in publishing, writing and technology are tracking the habits and preferences of modern readers, and say refraining from pitting paper books and digital books against one another may be the best way to utilize and understand the strengths of each platform.

Indexing the benefits of each type of book

While paper books seemed to temporarily go “back on the shelf” during the initial emergence of e-books, there are many reasons why their intrinsic value has not diminished.

“While this may change as we get used to reading on screens, right now studies still show both practical and less tangible, more intuitive benefits of physical books,” said Sally Ball, an associate professor of English at ASU. “In practical terms, we retain more when we read a book in hand. There are a range of theories about why – for example, that perhaps the visual aspect of memory is lost on an e-reader. Also, our habits of e-reading incline us to go faster, zooming along, which for most of us means a more superficial kind of attention.”

Ed Finn, founding director of ASU’s Center for Science and the Imagination, concurs with Ball’s assessment, noting that the organic strengths of paper books haven’t changed any.

“I think we’ll be using print books for a long time,” he said. “They’re a mature technology that actually works amazingly well – low power usage, great memory capacity (when you use the margins), and great navigation tools when you think about flipping through pages, using indices, and the sensory memory of where in a book a particular passage is located.”

Of course, the myriad benefits of e-books should not go unnoted. Many students appreciate integrated dictionaries that allow checking on a word’s definition while still reading the book, the ability to underline and notate passages, the ability to easily share passages on social media, and portability – since it’s clearly easier to carry around 100 books on an e-reader (or read them through an app on one’s iPad or iPhone) than 10 traditional books in a backpack.

“Students obviously want an option,” says Roy Rukkila, managing editor for Bagwyn Books, a small press operated by the Arizona Center for Medieval and Renaissance Studies, which is headquartered at ASU. “And if you look at airport and train station bookstore selections, it becomes quite evident that readers in general want a choice of reading modes.”



Sally Ball, associate professor of English at ASU.

Exploring different publishing scenarios

“We need to stop trying to make digital books that are like physical books, or ‘as good as’ physical books, and try to figure out what unique and exciting things digital books might do,” asserts Finn, who oversaw CSI’s Sprint Beyond the Book, a 2013-2014 project that explored the future of reading, writing and publishing. The venture sought opinions on the future of publishing from authors, publishers, designers, critics and scholars at during multimedia “book sprints” at the Frankfurt Book Fair in Germany, Arizona State University’s Downtown Phoenix campus, and Stanford University’s Department of English, resulting in a thought-provoking collection of more than 250 contributions that the center published as a three-volume collection online. The online book includes audio and video interviews from the “book sprints” embedded in with the text. Finn said this was inten



Roy Rukkila, managing editor for Bagwyn Books, a small press operated by the Arizona Center for Medieval and Renaissance Studies.

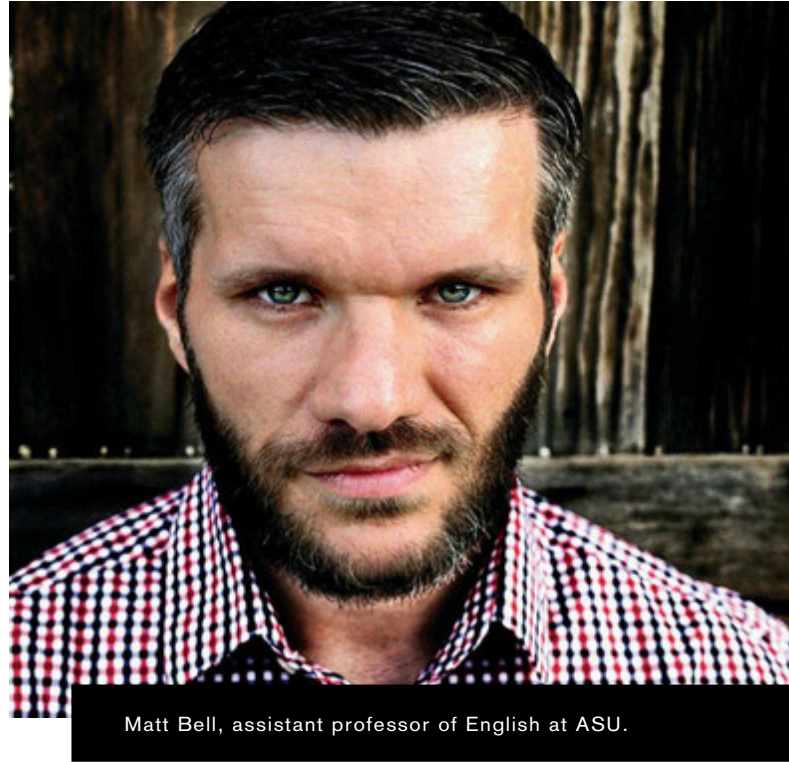


tional, as the center wanted to explore the unique capabilities of electronic books.

"Books have always created an imaginary space for intellectual community around a story or a set of ideas," he said. "What if digital books made that space real by allowing people to share annotations, reference materials and otherwise collaborate around digital texts? What if they existed primarily as networked objects, leading people fluidly to new ideas and to one another?"

Ball, who serves as associate director of the literary press Four Way Books, and who supervises MFA students in ASU's Creative Writing program who serve as interns for that publisher, said, "My sense of the publishing industry is that we are all – large houses and independents – still trying to figure out the ideal balance of paper and screens." Ball's publishing house stresses measures designed to enhance the physical book, including Quick Response (QR) codes that are printed on the jackets to link potential buyers and readers to special content, such as a video of the author reading, a book trailer, an interview or other online information.

"There continues to be a flurry of multimedia activity around book publication," concludes Ball. "For me, the question is how to use these digital tools in ways that actually help writers and readers connect more quickly or more deeply."



Becoming active "literary citizens"

Regardless of platform, authors and publishers continue to discover how social media and a digitally interconnected world have reshaped the literary marketplace. Matt Bell, an assistant professor of English at ASU and the author of the novels "Scrapper" and "Cataclysm Baby," says that building a network of enthusiastic audience members must precede, not follow, publication of a book.

"I think the big mistake most writers make is thinking that becoming involved in your community is something you do after your book is published," muses Bell. "The better solution is, as a part of your daily work as a writer, to support the communities you wish to become a part of, by reading books, writing reviews, promoting other writers or bookstores as part of your social networking."

Combined with publishing innovations akin to those mentioned above, perhaps literary citizenship will help usher in a "golden age" for all readers.

Oriana Parker is a freelance arts writer based in Phoenix.

just published

2010s

Seong-Hoon Kim '14 Ph.D. announced the publication of his translation of "From Sand Creek" by ASU Professor of English Simon Ortiz. This publication is the first Korean translation of Ortiz's work and was published in South Korea. Ortiz is widely considered among the most important living Native American writers, and this seminal poetry collection is included frequently in Native American studies curricula, in part because of its suggestion that history does not have to dictate the future.

Justin Vélez-Hagan '10 M.B.A., an economic policy analyst, announced the release by Lexington Books of his introductory economics text, "The Common Sense behind Basic Economics: A Guide for Budding Economists, Students and Voters."

2000s

Ashley Biggers '08 M.M.C. announced the release by Reedy Press of her guide to top things to see and do in Albuquerque, "100 Things to Do in Albuquerque Before You Die."

Adrienne Leavy '04 M.A., '13 Ph.D., curator of the website Reading Ireland and editor of Reading Ireland: The Little Magazine, a quarterly e-journal, announced the successful launch of the subscription-only journal. The publication's third issue was released recently.

Billy Gardner '03 B.S.E. announced the release by Xulon Press of his book, "Bible in a Year: Mission Possible." This guide for reading through the Bible in a year was designed to generate small-group discussions.

Héctor Martínez Morales '02 B. Mus., an educator and freelance composer in Boston, Mass., announced the release by Dramatic Publishing of his musical, "Mariachi Girl," about a 10-year-old girl who dreams of becoming a mariachi singer and performing with her father. The play is the first musical with all-original mariachi music; Morales wrote all of the music and lyrics.

1990s

Dyana Hesson '91 B.A. announced her release of "Radiance, The Paintings of Dyana Hesson" that features the author's botanical and landscape paintings from the first 25 years of her career. **Chris Bird '90 B.F.A.** collaborated with the author on the book's design. The book is available from the Desert Botanical Gardens in Phoenix or through the author's website.

1980s

Valerie Sherer Mathes '88 Ph.D., a social science faculty member at City College of San Francisco, announced the release by University of Oklahoma Press of her edited volume (with Phil Brigandi), "A Call for Reform: The Southern California Indian Writings of Helen Hunt Jackson."

◆ **Linda Bierwagen '83 B.S.** announced the release of two books under the pseudonym L S Wagen. "Perils of Perplexity" is a novella for recent high school graduates or older teens. "Super Man's Resume: A Beginner's Guide to Writing, and Beyond" is intended for beginning resume writers. Both are available on Amazon.

GENEROSITY LEADS TO OPPORTUNITY

"As a first-generation student, I was unable to afford the costs of college education. My Sun Devil Family Association Scholarship has allowed me to be the first member of my family to be enrolled in a university."

— **MARIO MUNIZ**, criminology and criminal justice,
ASU College of Public Service & Community Solutions

Learn how you can make a difference. ASU.EDU/GIVE

ASU Foundation
for A NEW AMERICAN UNIVERSITY

ARIZONA STATE UNIVERSITY

1970s

♦ **Constance Gibbons '78 B.A.E., '94 Ed.D.**, a retired educator with a lifelong military connection, announced the release by Village Books of her children's book, "Mom Told Me You Are A Hero," about the significance of military veterans. Written from a child's perspective, the work has a partner coloring book and is intended to spark intergenerational discussions.

Robert K. Buchheim '72 B.S., who operates the private Altimira Observatory in Coto de Caza, Calif., and who is the secretary of the Orange County Astronomers and a board member of the Society for Astronomical Sciences, announced the release by Springer of his book, "Astronomical Discoveries You Can Make, Too!: Replicating the Work of the Great Observers."

1950s

Ken Horner '59 M.S. announced the release by Linden Publishing of his fourth book about wood-working, "Basic Marquetry and Beyond: Expert Techniques for Crafting Beautiful Images with Veneer & Inlay."

Faculty and Staff

Paul Cassell, faculty fellow in Barrett, The Honors College, announced the release by Brill Academic Publishing of his book, "Religion, Emergence, and the Origin of Meaning: Beyond Durkheim and Rappaport," that investigates the social impact of religion and the relationship between religion, the supernatural and natural worlds.

Laurie Stoff, faculty fellow in Barrett, The Honors College, announced the release by University of Kansas Press of her historical work, "Russia's Sisters of Mercy and the Great War: More than Binding Men's Wounds," about the Russian nurses' untold stories from the front lines of World War I.

John W. Tippeconnic III, professor and director of American Indian Studies, announced the release by University of Oklahoma Press of "Voices of Resistance and Renewal: Indigenous Leadership in Education" that he co-edited. The book discusses philosophical principles to guide leaders who seek effective educational practices for students who are Native American.

Awards and Recognitions

Iliana Rocha '08 M.F.A., a doctoral student in English at Western Michigan University, received the 2014 Donald Hall Prize for Poetry for her poetry collection, "Karankawa," that was published recently by the University of Pittsburgh Press. The prize is sponsored by the Association of Writers and Writing Programs and includes a \$5,500 prize in addition to publication.

Kathleen Heil '04 B.A., poet, translator, dancer and Sturgis International Fellow in Berlin, was awarded a 2016 Literature Translation Fellowship from the National Endowment of the Arts in support of her translation of Argentine author Patricio Pron's story collection "El mundo sin las personas que lo afean y lo arruinan (The World Without People Who Run It and Make it Ugly)." As a Sturgis Fellow, Heil studies and writes about the city's international contemporary dance culture.



The Girl Who Wrote in Silk By Kelli Estes '96 B.S., Naperville, IL: Sourcebook, Inc., 2015

From the first few lines of the prologue through the final paragraphs, "The Girl Who Wrote in Silk" is an explication of contrasts. This work of carefully researched historical fiction presents a dual narrative of two women's lives, one set in the late 1800s and the other more contemporary. Their stories intersect by chance when contemporary Inara makes a long delayed visit to her family's estate on an island near Seattle. While there, prior to arranging the sale of this large, recently inherited property, Inara discovers both a compelling new direction for her life and the exquisitely embroidered story of Mei Lien. The two women's stories prove to be woven as finely together as the vibrant, layered embroidery that Inara finds carefully hidden in the house that is now hers. Estes' attention to detail and descriptive talent draw readers equally into the physical settings of the story and the emotional experience of the characters.

Themes of love and hatred, courage and fear, respect and disdain, life and death drive the story, making the work extraordinarily difficult to put down. Inspired by actual but little-known events, this book is ultimately about the triumph of the human spirit and the common threads running through humankind. Aficionados of history, historical fiction, self-discovery, adventure and mystery are likely to enjoy and remember this book. Further, it will extend readers' knowledge of a part of U.S. history that is little discussed.

Attention Sun Devil authors:

ASU Magazine seeks news of books published within the past two years by degreed alumni, students, and faculty/staff members of Arizona State University for our Just Published section. Include the author's full name, class year(s)/degree(s), email address and phone number. Email notices to alumni@asu.edu.

The magazine also reviews a select number of books each year in its Shelf Improvement section. Self-published books will not be considered for review. To be considered for inclusion, mail a complimentary copy of the book (which should have been published in the past 24 months) to Book Review Editor, ASU Alumni Association, Old Main, 400 E. Tyler Mall, 2nd Floor, Tempe, AZ 85281.

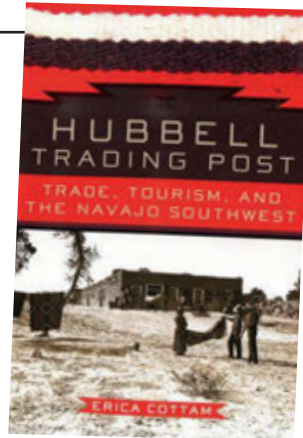


The Tiniest Tumbleweed

By Kathy Peach '14 B.A.E.,
Chandler, Ariz.: Little Five Star,
2016

Starting from the premise that everyone has both limitations and gifts to share to with others, Peach identified two Sonoran desert characters to encourage children when they are more aware of their felt shortcomings than strengths. The Tiniest Tumbleweed and Baby House Sparrow both started smaller than others and did not grow enough to make up the size difference. Their stories begin when they first arrive in their parents' care. Family support and parental suggestions encourage them to be their unique best. By the book's conclusion, the two characters find each other and, simultaneously, their special contributions to the place where they live. Well-grounded in factual information about the Sonoran desert and engagingly illustrated by Alex Lopez (who would have thought that a tumbleweed could be so expressive!), the book will stimulate interest in that unique environment while also sparking conversation about children's feelings and opportunities to take charge of their lives.

Peach's attention to the developmental and educational needs of children will be clear to parents, educators and other teachers of young children. In addition, adults will find helpful the many suggestions she makes for extended curricula and explorations related to the book and its emotional and ecological themes. The book supports Arizona's College and Career Ready Standards for third grade English Language Arts. It is appropriate for independent readers at that grade level and will appeal to younger readers as well.



Hubbell Trading Post: Trade, Tourism, and the Navajo Southwest

By Erica Cottam '12 M.A., '14 Ph.D., Norman, Okla.: University of Oklahoma Press, 2015

Undeniably remote and unique in the history of the United States, the trading posts of the nation's Southwest helped to shape the mystique, economy and culture of the region. In "Hubbell Trading Post: Trade, Tourism, and the Navajo Southwest" Erica Cottam details the origins and eventual passing of the pre-eminent Hubbell Trading Post of Ganado, Ariz. The work necessarily begins with a close look at the life and character of the charismatic trading post founder, John Lorenzo Hubbell, and the co-evolution of the Hubbell family; Navajo and, to a lesser degree, Hopi trading; the relationships between traders and the region's original peoples; and the changing, broader context of the United States between the late 1800s and the mid-1960s. Many of the later-day players in this evolution remain in living memory today.

This history is a carefully detailed and nuanced look at an era that concluded only recently. Characters and places come alive through description, image and quotations from the period. Readers who have traveled the Navajo reservation and visited the few remaining trading posts will recognize the scenes and ambiance of reference. Others may well wish that they had the opportunity for this first-hand experience. All readers will finish the work with a much deeper appreciation of the complex interpersonal relationships that made these institutions generally and mutually beneficial for traders, Native Americans, and western territories that became states during the time span covered by the book.



Playing Juliet

By Joanne Stewart Wetzel '65 B.A.,
Sky Pony Press, 2015

Beth Sondquist, a budding middle-school actress, enjoys the small roles she is playing as a member of the Oakfield Children's Theater and hopes that someday, she can tell her parents that she wants to grow up to be a real actress. But her hopes of making it big are threatened when the theater is slated to be closed. The theater's director decides to close with the same play that the group opened with 50 years before – Shakespeare's "Romeo and Juliet." Beth would love to try out for the female lead role in that play, but there's just one problem. She has been grounded for sneaking out after bedtime to plan how to save the theater with her best friend, Zandy. If she's not allowed to try out for any parts in the final play, how can she keep the theater open?

"Playing Juliet" is a breezy middle-grades reader that is a delightfully chaotic trip into the world of children's theater. It's easy to fall in love with Beth's pluck and persistence, her friend Zandy's desire to connect with her expatriate father, and the professionalism of the adults who run the theater. Well-written enough to read out loud to children of all ages, the book moves quickly and helps appreciative audience members understand the magic that keeps "theater people" coming back for more, play after play.

Higher calling

Recent alumni activities showcase access, excellence, impact

By Liz Massey



ASU President Michael M. Crow (far right) and ASU Alumni Association President Christine K. Wilkinson (second from left) share the stage at Founders' Day 2016 with Alumni Achievement honoree Derrick Hall (second from right) and Founders' Day Committee Chair Michelle Bolton (far left).

The three watchwords often seen associated with ASU as it fulfills its destiny as the New American University are access, excellence, and impact. This winter, various events hosted by the ASU Alumni Association have reflected one or more of this trio of values.

Access, excellence and impact are worthy of pursuit because each one enriches the university experience. Access ensures all qualified students who seek a college education are accommodated. Excellence bears witness to the fact that mastery and innovation can and should be goals for students, faculty, staff and alumni. And impact gives an institution of higher learning such as ASU its reason for existence: to enrich the community in which it finds itself.

Here's a quick recap events held over the past few months by the ASU Alumni Association.

Celebrating advocacy and excellence

The year 2016 got off to a rousing start with two events focused on advocating support for higher education at ASU. The Legislative Advocacy breakfast held on Jan. 12 before the start of the Arizona Legislature's annual session featured a keynote address from President Michael M. Crow on the importance of educational attainment. More than 100 Sun Devil advocates attended. On Feb. 16, the 30th ASU Day at the Capitol was held. More than three dozen vendors and hundreds of ASU supporters visited the event, which was held on the lawn in front of the

Capitol and showcased ASU's many contributions to the state's economy and well-being.

In between those two events, the Alumni Association and the university paused to salute faculty, alumni and university supporters who demonstrated the pioneering spirit of ASU's institutional founders at the Feb. 3 Founders' Day Awards Dinner. More than 700 persons were on hand to meet the honorees, who were chosen for reflecting the 130 years of growth, innovation and excellence inherent in ASU's history.



Courtney Klein, co-founder of SEED Spot, presented a workshop in November on becoming a social entrepreneur.

Career events usher in new era

The association's Alumni Career Services program had a productive fall and winter, kicking off on Nov. 18 with a virtual networking hour that attracted alums interested in chatting with each other via text on their smartphones, tablets or desktop computers. This first event, which focused on connecting alumni in the fields of business, education, health care, nonprofit, and science/engineering, were followed by online events on Dec. 1 that focused on mentoring and one on Dec. 16 aimed at fostering alumni connections in Asia.

The online networking hour's debut was followed the next day with a presentation on Nov. 19 by alumna Courtney Klein '05 B.I.S., '10 M.Np.S. on succeeding as a social entrepreneur. The event took place at the ASU SkySong-Scottsdale Innovation Center and introduced many alumni to the location's reputation as a good place to launch or grow a business.

Another exclusive opportunity for Sun Devils was an alumni-only Hire Arizona Career Fair at Chase Field in downtown Phoenix. ASU alumni were able to meet with more than 75 local and national employers, including Amazon, Edward Jones, Vanguard, The Princeton Review, Sunrun, Inc., WebPT and Zenreach.

With all the new events, the association did not forget its well-attended networking mixers. A Maroon and Gold Professionals mixer was held at the Hard Rock Café in downtown Phoenix on Jan. 20, and scores of proactive career-oriented Sun Devils attended.



More than 100 children and their parents participated in Sun Devil Generations' Fingerpaint the A event on March 19.

Getting up close and personal with A Mountain, giving back to the community

ASU families made the trek up Hayden Butte on the Tempe campus on March 19 to participate in the Fingerpaint the A event hosted by Sun Devil Generations. Future Sun Devils learned about the work of SAA's "A Team" and why it is important for the letter on A Mountain to stay gold at all times. More than 100 children and their parents and grandparents stuck their fingers in gold paint and touched the A.

Also during March, Sun Devils around the country participate in volunteer projects to benefit organizations in their local communities as part of the ASU Cares Day of Service program. Nearly two dozen geographic alumni chapters hosted ASU Cares projects, and alumni, staff, students and faculty at the Tempe campus of ASU also participated in a service project that beautified the area.

What's in a name?

Many university buildings honor iconic Sun Devil alumni

By Sarah Auffret

The name given to a building or landmark is powerful evidence of what we remember and ultimately what we honor. At ASU it gives us a chance to pay tribute to our history, showcasing our traditions and keeping them alive.

Few students recognize McClintock Hall as being named for a pioneer newspaperman, who also was the first president of the Normal School (ASU) Alumni Association. Freshmen may puzzle at first over Frank Kush Field, but as soon as they stick their toes into Sun Devil lore they learn quickly that ASU loyalty runs deep.

Buildings and centers bearing the names of famous alumni can be found throughout ASU's campuses. Here are a few of the most familiar.

McClintock Hall

James H. McClintock was a member of the first graduating class in 1887, who built a distinguished reputation as a newspaperman, soldier, public servant and state historian. Shortly after commanding a group of Rough Riders in the Spanish-American War, he became secretary of the Normal School Board and helped secure a \$15,000 appropriation to give the school its first residence hall and its first dining hall. His contributions to the university resulted in him being the namesake for McClintock Hall, built in 1951, which today is a residence hall located in the heart of the Tempe campus.

Ed and Nadine Carson Student-Athlete Center

Contributing to the success of ASU athletes in class as well as on the field, the Ed and Nadine Carson Student-Athlete Center was built in 1988 through the generosity of the Carsons, who were both graduates (Ed '51 B.S., Nadine '53 B.A.) known for their philanthropy and dedication to ASU. The center, one of the finest in the country, allows a student to meet with an academic adviser, receive treatment or prepare for practice in its conditioning center, contains study areas, a nutrition center, a track and a pool.



Ira A. and Mary Lou Futon are the namesakes for the Fulton Center

Ross-Blakley Law Library

The Ross-Blakley Law Library, built in 1993, is named for two prominent Phoenix attorneys, John J. Ross and William C. Blakley '71 J.D., whose lives were tragically cut short in an airplane crash in 1987. Both valued keen legal analysis and supported ASU, though only Blakley was an alumnus. Their widows spearheaded a fund-raising campaign to complete the much-needed library, which dramatically increased research space and computer facilities for young attorneys in training.

Frank Kush Field

The playing field at Sun Devil Stadium was renamed Frank Kush Field in 1996 in honor of ASU's legendary head football coach who led the Sun Devils from 1958 to 1979. Best known for his discipline and motivation, Kush ('61 M.A.) helped build ASU's national reputation with his 176 victories, and he engendered fierce loyalty among fans and players. Naming the field in his honor helped heal an open wound left by his departure during the 1979 football season. Kush returned to serve as a fundraiser for Sun Devil Athletics in 2000.

The Fulton Center

Ira A. and Mary Lou ('75 B.A.E.) Fulton are the namesakes for the Fulton Center, a sleek glass building built in 2005 that houses the ASU Foundation, the university administration, and assorted other university initiatives. The couple's commitment to education led to their becoming the most generous donors in ASU history, giving more than \$160 million total. In addition to funding the center, they also endowed the Ira A. Fulton Schools of Engineering and the Mary Lou Fulton Teachers College.

John Spini Gymnastics Center

The John Spini Gymnastics Center, built in 2006, bears the name of the longest tenured coach in ASU history, an influential man (who received his bachelor's degree from ASU in 1977) who was the driving force behind the design and fundraising for the new facility. In his 34 seasons as head gymnastics coach, nine of Spini's squads finished in the top five at the NCAA championships. The state-of-the-art practice facility includes locker rooms, showers and sports medicine facilities.

The Swette Center for Environmental Biology

The Swette Center for Environmental Biology, located at ASU's BioDesign Institute, was renamed in 2011 to honor business investor Brian Swette '76 B.S. for his support of sustainability at ASU. He established the Swette Strategic Investment Fund, to identify technological approaches poised for scientific breakthroughs. The center emphasizes graduate research and manages microbial communities that make society more sustainable, generating renewable energy and making polluted water and soil clean.

Sarah Auffret, formerly assistant director of media relations for ASU, is a freelance writer based in Tempe.

Getting into the mix

Sun Devils connect with Sun Devils at networking events

By Jan Stanley

Relationships, collaboration, connection, teams, community – top business and nonprofit leaders list these ingredients frequently when explaining why working with others has been key to their individual success. With this in mind, the ASU Alumni Association offers two networking event series to encourage connections between its graduates located in the Valley of the Sun: the Maroon and Gold Professionals, aimed at all local and visiting alumni, and the Women in Business group, which focuses on ASU's female grads. A part of the Alumni Association's Career Services program, the mixers are a complimentary benefit for dues-paying members, and are open to non-members for a nominal fee.

With more than 200,000 alumni living in Maricopa County, the ASU Alumni Association topped the Phoenix Business Journal's annual Networking Association list in 2015. This "critical mass" of local graduates means that mixer attendees have plenty of people to chat with if they are looking for job leads, seeking to meet new potential clients or customers for their business, or if they need referrals for a vendor to partner with their company. ASU alumni are working at all levels in diverse career fields across the Valley, as well as operating a healthy number of entrepreneurial ventures. Often hosted at Sun Devil-owned or -managed establishments, the mixers are held throughout Maricopa County. The two networking groups alternate hosting events, and a mixer can be found on the calendar almost every month of the year.

For those living outside of Maricopa County, the Alumni Association also provides networking opportunities through its geographic chapters. These mixers allow Sun Devils to utilize their ASU connection in their current location, and share information about career-related resources. A new option for alumni, regardless of location, is online or "virtual" networking events. Alumni Career Resources hosted a series of three online networking sessions in November and December, which focused on networking within specific



industries, mentoring, and expanding Asia connections, respectively.

Jennifer Kabrud '06 B.A., '13 M.Np.S. is a regular at Alumni Association events and said the networking mixers are among her favorites. Not only does she mark her own calendar well in advance of the mixers, she sends the information to friends and colleagues who may benefit from attending. She says the events have led to "countless professional connections and true friendships" being forged.

Kabrud's advice for getting the most out of Alumni Association mixers is to become involved in introducing oneself to others right away at such events, especially Alumni Association staff members at the event, who, she asserts, "are always thrilled to introduce people." Most importantly, Kabrud says, be open and welcoming to others at the mixer and be sure to keep in touch afterward. She has found social media particularly helpful in maintaining these connections.

The Alumni Career Services program is provided in collaboration with ASU Career Services. This helpful program was revitalized in 2007 in response to members' needs during the nation's economic downturn and has continued to grow since that time.

Additional information about the networking mixers and a current schedule of events are available at <https://alumni.asu.edu/services/career-resources>.

Jan Stanley is a contributing editor for ASU Magazine, and an executive coordinator in the Office of the Senior Vice President and Secretary of the University.

Reports from the Sun Devil Nation



Austin chapter members gather for a game-watching event during football season.

Austin

Our chapter had a busy fall and winter! Our events included: game watches, the (in) famous ASU-USC Pub Crawl, our holiday pub crawl, and of course, our signature event – the Lake Austin boat cruise.

In the coming months, we'll host an ASU Cares event in March, a Pat's Run Shadow Run in April, our annual golf tournament in May, and a winery/brewery tour in June! Our chapter is a fun, welcoming group and we'd love to have you join us.

You can follow our exploits on Facebook at facebook.com/austinsundevils.

Chicago

Our chapter in Chicagoland kicked off the winter holidays with some mild weather, featuring temperatures in the 60s in late November. That warming trend may be over, but the heat remained after our winter ASU Chicago bowling league kicked off its season. With several ASU alumni teams participating, we hope to beat our competition, including the other PAC-12 schools.



Chicago Sun Devils cheer ASU on to victory.

By the time you read this, it'll be March and that can only mean one thing: ASU Cares Month. We are joining the Lakeview Pantry again to help them pack food for those less fortunate. In April we host a Pat's Run shadow run, and in early summer we host our signature event at the Cubs game.

If you want to keep up with our chapter, email us at asuchicagoalumni@gmail.com to be added to our mailing list.

Devils' Advocates

The Devils' Advocates student organization is celebrating its 50th anniversary in 2016! In honor of this milestone, we invite all Devils' Advocates alumni to join us for a big celebration at ASU Homecoming 2016.

Please keep in touch with us by liking our page on Facebook at tinyurl.com/DAAAlumniFB. We'll be posting event information and photos from all 50 years of walking backward. We're also looking for Devils' Advocate alumni to be 'Year Captains.'

If you'd like to help us spread the word to fellow graduates or to help plan 50th anniversary events, contact Hope Larsen at hope.larsen@asu.edu.

Devil's Horns

Since current Sun Devil marching band had duties all day long for the Cactus Bowl, Sun Devil Marching Band Director James Hudson asked the newly re-established Devil's Horns alumni club to find alumni to support the Sun Devils women's basketball team in their home opener against Cal on Jan. 2. Our club was proud to fill in, and we look forward to making this an annual event! Devil's Horns members also recently joined the current members of the Sun Devil Marching band in the pre-game presentation for the College Football National Championship Game held at University of Phoenix Stadium.



Members of the Devil's Horns alumni club served as the house pep band at the women's basketball home opener on Jan. 2.

Flagstaff

Our club will host our first downtown Flagstaff pub and brewery crawl on Saturday, June 11. We will celebrate summer in the cool pines and visit several bars owned by ASU alumni in downtown Flagstaff. This will be a very bicycle friendly pub crawl, and we plan on reserving a party bike as well.

You can find more information on our Facebook page (search for Flagstaff Sun Devils) or our Twitter (@FlagDevils).

Georgia

Our chapter ended the greatest year in its history with a bang. We had some great events during the fall and winter, including a visit with local alumni at the College Football Hall of Fame from ASU's Athletic Director Ray Anderson and ASU Alumni Association President Christine K. Wilkinson, the hottest foodie gathering in the city at our monthly "Foodie Tuesday" outings, and game-watching events for ASU hockey and baseball. There will be more to come this spring and summer!

Idaho

Idaho Sun Devils are celebrating five successful years of engagement with the Treasure Valley community. During that time, we have been an example of public service, camaraderie and school spirit, showing Idaho what being a Sun Devil really means.

This year, we hope more alumni will join us for ASU Cares in March and our Sun Devil Send-Off this summer. Most of all, we hope you'll join us for our signature event – our Pat's Run shadow run on April 23. The shadow run in Boise has grown more and more successful each



ASU Alumni Association President Christine K. Wilkinson (front row, farthest right) and Athletic Director Ray Anderson (front row, farthest left) visited with Georgia chapter members at the College Football Hall of Fame.



The Idaho group will celebrate five years as an alumni club in 2016, and will host a Send-Off this summer.

year, helping to raise funds for military scholarships by running along the beautiful Boise River. We hope you'll join us!

Iranian American Club

The ASU Iranian American Alumni Club held its first fundraising event on Jan. 30. More than 60 participants from different age groups attended this event, which was held at Tasty Kabob restaurant in Tempe. We enjoyed authentic Persian food, and beautiful Persian music and dance kept everyone entertained. The event was a success, and we were able to raise funds for outstanding scholarship recipients.

Las Vegas

Our chapter had a great turn out for our fall networking mixer, connecting local Sun Devils who live in the Las Vegas area. Thanks to all who organized and participated in this event!

On April 23, we will host our annual Pat's Run shadow run. Details on this event are available on the following Facebook pages for more details: Las Vegas Sun Devils Alumni and Pat's Run shadow run Las Vegas.

In addition to the Pat's Run shadow run, other 2016 events that we're working on will include a networking mixer in May, attending an ASU baseball game against UNLV on May 10, and a Sun Devil Send-Off in July.

Leadership Scholarship Program

More than 60 LSP alumni and friends gathered for our Homecoming reception on Nov. 13, the highest alumni attendance we have ever had at any chapter event! During the reception, it was announced that the LSP alumni, in commemoration of the LSP program's 40th anniversary in 2017, will be leading a community-wide initiative consisting of a series of events promoting the study of multi-generational leadership.

In the meantime, we'll keep our chapter strong in 2016 with events such as LSP Career Night, the Senior Wine Tasting event, the selection of the 2016 Wilkinson Leadership Award honoree, and the first-ever LSP Family Meeting. You won't want to miss it!

LGBT Devils' Pride

During the fall semester, our chapter reacquainted our members with each other through a series of networking mixers, as well as our Duel in the Desert game watching party. We also were able to express a huge thank you to the Greater Phoenix Gay and Lesbian Chamber of Commerce for their continued support of our LGBT Scholarship Fund. Their contribution of \$5,000 will help us help support deserving students complete their education.

If you're interested in helping us make a larger impact through our Community Leadership Scholarship Program, visit asufoundation.org/lgbt-alumni for details.

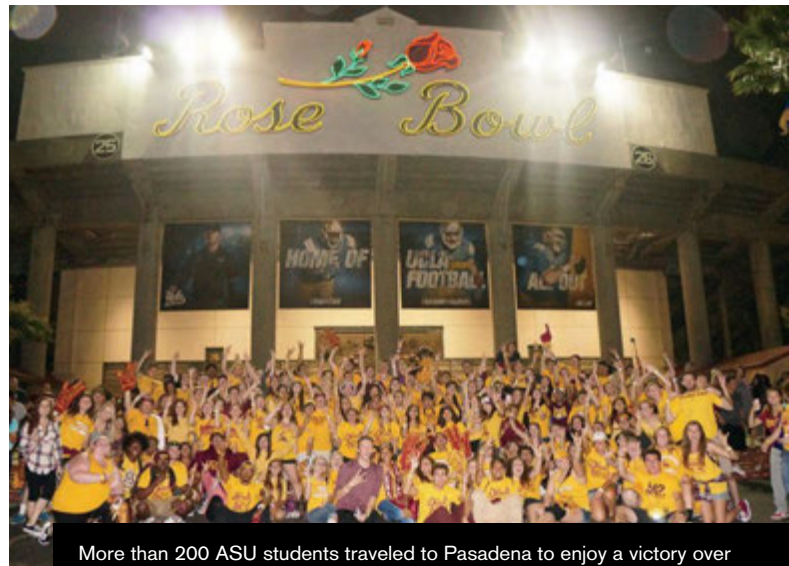
Los Angeles

Thank you to everyone that attended our game watching parties throughout the fall. We appreciate your support, and your attendance helped increase our donations to our scholarship program. We had some wonderful alumni events in LA during the fall, including our Friday Night Inferno before the football game in Pasadena, followed by a great win over UCLA at the Rose Bowl. We also kept the bowling pin trophy at our 16th annual ASU vs. Arizona bowling tournament in November, and Los Angeles alums also supported the men's and women's basketball teams during winter games at USC and UCLA.

This spring, join us for an ASU Cares community service event at the Ronald McDonald House, our Pat's Run shadow run in Hermosa Beach on April 23, cheering on ASU baseball when they play UCLA May 20-22, and a wine tasting event in Malibu. We look forward to seeing you at any of our upcoming events.



Members of the LGBT chapter thank the Greater Phoenix Gay and Lesbian Chamber of Commerce for their contribution to the chapter's scholarship fund.



More than 200 ASU students traveled to Pasadena to enjoy a victory over UCLA at the Rose Bowl.

National Capital

Spring in our nation's capital means the alumni chapter will be back on the field for the 2016 Capital Alumni Network softball season! Most games are held on the National Mall on weeknights and all alums are welcome.

If softball's not your forte, we have other great events coming up, such as our Pat's Run shadow run at East Potomac Park on April 23, and our annual Sun Devil Crabfeast in May. For all the latest info on events throughout the year, check out our Facebook Group, Arizona State National Capital Alumni.



Happy Sun Devils enjoy a visit to Judd's Hill winery as part of the Northern California chapter's Sparky's Wine and Dine event.



Sandra Pattea (right) received Alumna of the Year honors at the Josiah N. Moore Scholarship Benefit Dinner in November.

Native American

Our chapter hosted the 21st Annual Josiah N. Moore Scholarship Benefit Dinner on Nov. 7 at Old Main on the ASU Tempe campus. The keynote speaker at this year's event was ASU President Emeritus Lattie F. Coor. In attendance were Native American alumni and community leaders including Peterson Zah and Vernon Masayesva; Alumnus of the Year award recipient Sandra Pattea; and scholarship recipients Melanie Deschine, Gerald Shorty, Theron Henderson, Trudie Jackson, Aaron Bia, Davis Henderson, and Krissy Bergen.

This event would not be possible without our volunteers, sponsors, and silent auction donors. Thank you to all who came out to support this event and we look forward to seeing you again next year!

Northern California

Our chapter closed out 2015 in style. We sold out our ninth annual Sparky's Wine and Dine event and treated alums to a fantastic day, highlighted by alumni owned and operated wineries including Gargiulo Vineyards (Justin Drago '94 B.S., '97 M.B.A.) and Judd's Hill (Judd Finkelstein '95 B.A.).

The football season was highlighted by a local visit of the Sun Devils to Cal as well as the inauguration of our new home base in San Francisco for watching ASU events, Silver Clouds, owned by alum Tom Dougherty.

As spring approaches, we've been planning exciting events as ASU Cares, in which we support the Ronald McDonald houses in the Bay Area, and of course our Pat's Run shadow run in April.

Orange County

The fall was an exciting and event-filled season for our chapter. We have enjoyed spending time cheering on the Sun Devils during our football viewing parties hosted by American Junkie in Newport Beach. Our attendance was fantastic, and as always, we have loved supporting the Devils in an energetic and ASU-themed venue!

In October, Amy Hillman, dean of the W. P. Carey School of Business, and Mark Stapp, the director of the master's in real estate development (MRED) program, hosted a special reception at the Pacific Club, celebrating the accomplishments of the W. P. Carey School of Business. The reception was well attended and it was great to reconnect with the school and other alumni. In December, we hosted our annual Newport Beach Christmas Boat Parade Viewing Dinner, and enjoyed a fabulous evening with friends, family, and great food at Newport Landing in Newport Beach.

Philadelphia

Calling all Sun Devil runners and volunteers! We will be holding two Pat's Run shadow runs this year, one in West Chester, Penn. and the other in Mt. Laurel, N.J. Show your Sun Devil pride and help honor Pat Tillman by participating or volunteering.

After the shadow run is over, join us for the second annual "Sun Devils at the Shore" event in June. Look for more info on our Facebook page, which you can find by searching for Philly Sun Devils - Greater Philadelphia ASU Alumni.



The Philadelphia chapter will host two Pat's Run shadow runs in 2016 – one in West Chester, Penn., and the other in Mt. Laurel, N.J.

Portland

Our alumni club is excited to announce two new board members, Abby Koier and Tom Studdert. Both worked for the ASU Alumni Association during their time at ASU, and we're so happy to have them!

We had an adventurous fall season as we searched for a new venue for game watches. Thanks to the efforts of some of our connected alumni, we met up at The Station on Alberta, Laurelwood Pub, and Fire on the Mountain to cheer on the Sun Devils together. In November, the School of Sustainability visited us to host their first annual mix and mingle event at Grand Central. We had a great turnout as sustainability is a hot topic in Portland! Thanks to everyone who braved the wind and rain to join us.

Right now, we are planning our spring activities, such as ASU Cares in March and our always-popular Pat's Run shadow run on April 23. To join us and for more information about upcoming events, check out our Facebook, Twitter and Instagram pages.

School of Sustainability

The School of Sustainability welcomed more than 100 alumni over the past year, and we are looking forward to having everyone at our events!

This year (2016) also marks the 10th anniversary of the school, and we'll be celebrating those who made it possible. A festival on the Tempe campus will begin on April 14 with a Wrigley Lecture by author Michael Pollan, and will end with a sustainability service project on April 16. We look forward to seeing you all there.

Our recent out-of-state events were a success in Portland and San Francisco! Closer to our ASU home, you're invited to join our monthly garden volunteer day on the second Saturday of every month at the Escalante Community Garden in Tempe.



Seattle alumni participated in an ASU Cares event at Northwest Harvest food bank.

Seattle

Thank you to everyone who made our recent ASU Cares event such a success! Seattle Alumni have made a huge difference in Washington by giving their time to help fight hunger with Northwest Harvest.

We are expecting another great Pat's Run Tacoma shadow run in April, as we partner with our friends at Joint Base Lewis-McCord and Starbucks. Get involved as a runner or volunteer, and plan to join us for our post-race event at The Swiss.

Looking farther down the road, don't forget about our annual event, the popular Seattle Signature Cruise, which is happening this August! Registration for that will open in May.

Twin Cities

Our chapter has been having a great time cheering on ASU's new NCAA Division I hockey team! With Ice Devil visits to St. Cloud and Bemidji, we had a great time planning group trips up to watch the games! We also were excited to continue meeting at our home sports bar, Runyons, over the winter to check out our basketball team and see what Coach Hurley has done!

We also hosted our fifth annual Fork and Bottle wine tasting in February. There is no place better to be during a Minnesota winter than in the warmth enjoying a variety of wines from our favorite "wine guy," Tyler, paired with delicious Spasso food!

As this issue goes to press, we are looking forward to our annual spring events, the ASU Cares day of service event and our Pat's Run shadow run! Our shadow run has grown every year since we began and we are so proud to celebrate the legacy of Pat Tillman with local alumni as well as community members. If you're in the area and haven't been to an event yet, we'd love to see you! Find us on Facebook by searching for Twin City Sun Devils.



Twin Cities alumni are hoping for another epic turnout for their Pat's Run shadow run in April.



Utah Sun Devils volunteered at the Utah Food Bank as part of the ASU Cares day of service event.

Utah

As 2016 got underway, Sun Devil alums, family and friends enjoyed a fabulous day of the best snow in the United States during our Ski & Snowboard Day at Brighton Ski Resort, Utah. Put it on your calendar to join us next year.

In March, our annual ASU Cares volunteering at the Utah Food Bank was a great time for all. We helped sort pallets of donations for future recipients.

We'd love to have you come out to our upcoming spring event: our Pat's Run shadow run on April 23. Join us for fun, fitness, fellowship and philanthropy!

Veterans

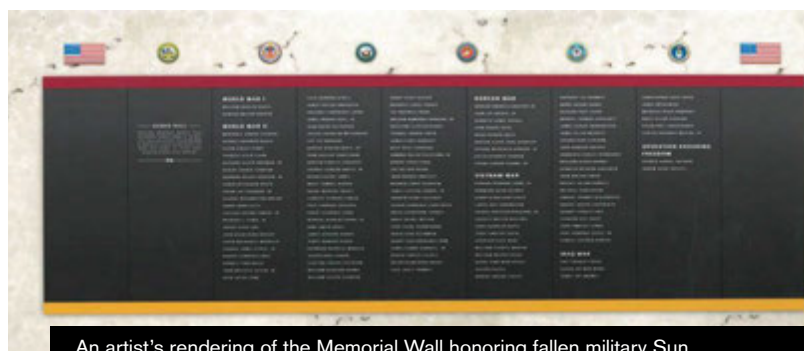
Our chapter continues its drive to install a Memorial Wall in the Memorial Union on the main campus in Tempe. Many Sun Devils have joined the U.S. Armed Forces and fought bravely for our country. This Memorial Wall is designed to be a permanent reminder to our community of all the fallen military personnel who previously walked the halls of ASU. Our chapter has identified the names of 132 men and women who will be included on the Wall, including Sun Devil and Arizona Cardinal football hero Pat Tillman.

In addition to our work on the Memorial Wall project, we were able to provide more than 100 stoles for graduating veterans in December at our Stole Ceremony and are now looking forward to the Spring Commencement in May, when we expect to provide double that number.

Western Pennsylvania

Our chapter had another successful fall. We surpassed our attendance of 2014's signature event at our annual Pittsburgh Pirates outing. We are proud of local alum David Regoli, who was kind enough to host our annual Send-Off picnic while running for a judge position in Westmoreland County in the November elections.

Looking ahead to the spring, we're hosting our ASU Cares event with the Humane Society this month, and our Pat's Run shadow run in Pittsburgh's Schenley Park in April. Please consider joining us!



An artist's rendering of the Memorial Wall honoring fallen military Sun Devils that the Veterans chapter is working to have installed at the Memorial Union on the Tempe campus.

White Mountains

If you're still making an effort to keep some New Year's resolutions, please make plans to attend our 2016 Steak Fry this June 24-25 at the Pinetop (Ariz.) Lakes Golf and Country Club. Activities include a barbeque and Heritage Night party on Friday evening, the golf tournament on Saturday, and our famous Steak Fry on Saturday evening. Come have fun in the cool pines and connect with ASU coaches, well-known athletic alumni and your fellow alumni! The funds we raise provide scholarships for students in the White Mountains and a donation to the Sun Devil Club, which also helps provide aid to the athletic program. Mark your calendars now for the event of the season!

Want to get involved?

See a chapter or club that represents your geographic area, your academic program, or a special interest? Find contact information, social media links, and more photos and information on upcoming activities for all ASU Alumni Association alumni chapters, clubs, connections and affiliates by visiting alumni.asu.edu/groups.

When a high school buddy asked Michael Burns if he wouldn't mind road tripping with him to Phoenix to check out Arizona State University, Burns jumped at the chance to escape New Jersey for some sun and sand.

"The road trip lasted four years," said Burns, a member of the class of 1980, and the current vice chairman of Lionsgate Entertainment.

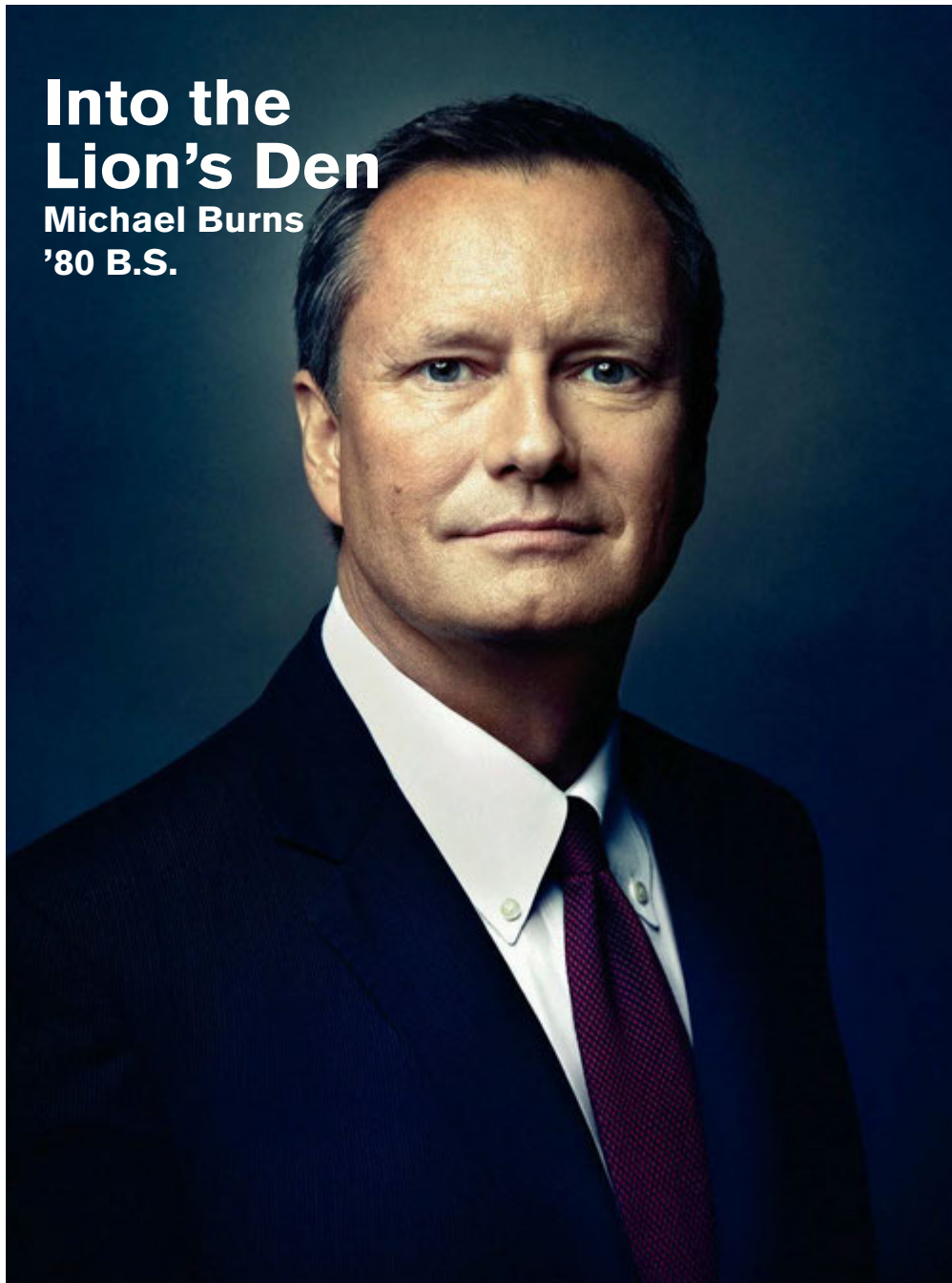
Truthfully, Burns isn't a name you'd necessarily recognize in the entertainment world, and Burns admits as much. "I really don't think I'm that interesting," he said.

However, millions of movie fans would most definitely disagree. Burns shepherded a \$30 million recapitalization deal back in 1999 that injected much needed fresh blood into Lionsgate, at the time a struggling film company known for a few indie hits like "Gods and Monsters." In 2000, Burns took the helm as vice chairman. Today, the company is listed on the New York Stock Exchange and is a global media force, garnering \$2.4 billion in revenue in 2015 and creator of a suite of wildly successful films like "The Hunger Games," "Twilight," and "Monster's Ball," plus 30 small-screen binge-worthy shows including "Orange is the New Black," "Mad Men," and "Weeds." (Burns reports that he's a big fan of "House of Cards" and, because he's a dad to three young boys, that he ends up watching "The Flash" in between shuttling them to weekend baseball games and birthday parties.)

The path for Burns to becoming a studio executive began at ASU by taking courses like The History of Theater and Finance, and was supplemented by hustling tips working at The Fiesta Inn and Monte's during school. He successfully juggled work, classes and intermural football throughout college.

"ASU was a terrific place from which to jump," said Burns.

When he graduated, Burns was ready to "take off running." IBM offered the new grad a sales job in one of two available territories: Newport Beach or Yuma.



Into the Lion's Den

Michael Burns '80 B.S.

California won out. After five successful years in sales, Burns returned to the east coast to join Shearson/American Express. A very frigid 12-block walk on New York's Upper East Side and an offer to serve as Prudential Securities managing director lured the then 32-year old Burns back to L.A. A self-described "late bloomer," Burns married his wife, actress Pell James, in 2006.

Despite his leadership role with Lionsgate, said Burns, the credit for his company's phenomenal growth lies with the team that's been built there.

"We've got good people, and we've built a superb platform with quality content," said Burns.

By Molly Blake, a freelance writer based in Palo Alto, Calif.

Structure and service

Tony Garcia '95 B.S.D.

The emotion a beautifully designed church can evoke is what led alumnus Jose Antonio (Tony) Garcia into architecture.

"Churches of any denomination can be very inspiring," he said. Garcia, who immigrated from Mexico as a child, grew up sketching and drawing caricatures. He gained an appreciation for architecture at an early age during his visits back to Mexico. "I was very intrigued by some of the older, more historic architecture," he said.

Garcia, a 1995 graduate, has been receiving attention and accolades for his work recently. He was the recipient of the 2014 American Institute of Architects (AIA) San Diego Chapter Young Architect of the Year Award and was awarded the 2015 City of San Diego Historical Preservation Award for contributions to the architectural rehabilitation of the George & Kathagene McCormack House, located adjacent to Morley Field and the Balboa Park Golf Course in the community of North Park. His architectural studio also was awarded an AIA San Diego Design Award of Merit for Architecture for its work on the Richard's Grove Pavilion in Windsor, Calif. in 2015. He also was named a 2010 California Senior Housing Design competition finalist, and has won two awards from San Diego Home/Garden Lifestyle for his design projects.

He credits his ASU education for giving him the ability to think critically about design.

"Critical thinking has helped me better learn the craft of architecture, as well as have empathy for others' points of view, which has enhanced my ability to work with many different people," Garcia said.

He began his career in architecture at CCBG Architects in Phoenix, focusing on large scale mixed-used projects. After traveling through Europe for three months, Garcia landed in San Diego to help establish a satellite office for CCBG. In 2005, Garcia founded A² (A Squared) Studios in San Diego with fellow owners (and ASU alumni) Jessie



Photo by: Kevin Sutton

Whitesides '95 B.S.D. and Vince Stroop '95 B.S.D. The studio focuses on residential and commercial work, as well as historic property renovations, public service work, hospitality and winery design projects.

During a studio class at ASU, Garcia participated in the charity Habitat for Humanity, and public service projects

continue to be a part of his focus as an architect today.

"Public service is always an emphasis in our profession and it is certainly an ideology that was influenced by my time at ASU," he said.

By Jenny Keeler, a Chandler-based freelance writer.

2010s

Siera Santos '15 B.A. joined Comcast SportsNet as its newest on-air talent for the signature nightly sports news program, SportsNet Central. Her primary duties include on-site reporting at varied professional, collegiate and high school sport events in Chicago. She will also co-anchor the program on occasion.

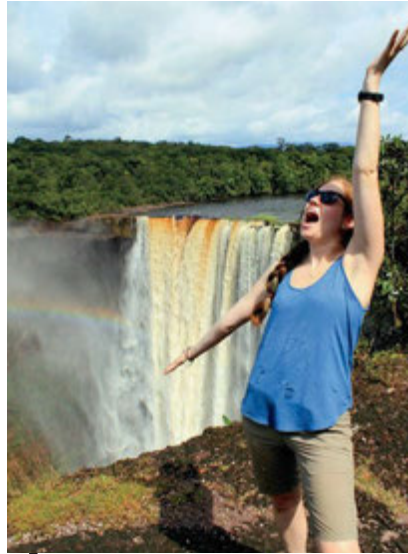


Paul Isso '14 L.L.M. launched the Isso Law Firm in Phoenix. The firm focuses on legal ethics; criminal defense; civil litigation; and entertainment, media and sports law.

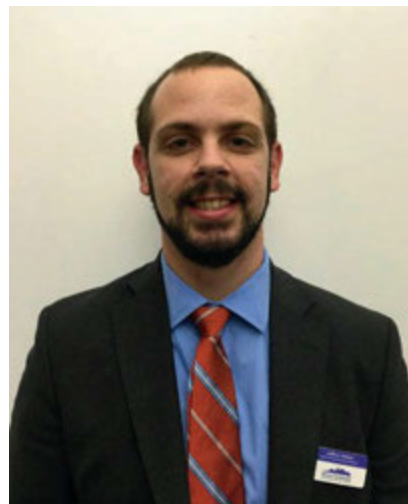


Autumn Moore-Barkus '13 B.S., a student at RPS in Seattle, studied biotic, physical, and cultural forces that

affect tropical biodiversity at Costa Rica's Monteverde Cloud Forest Reserve and La Selva Biological Station in summer 2015. The work is part of her study for a master's degree.



Courtney Baxter '13 B.S., a Zoo Adventures instructor at Woodland Park Zoo in Seattle, studied traditional ecological knowledge of the Makushi indigenous people and the potential of local wisdom to guide conservation initiatives in Guyana, South America, in summer 2015. The work is part of her study for a master's degree.



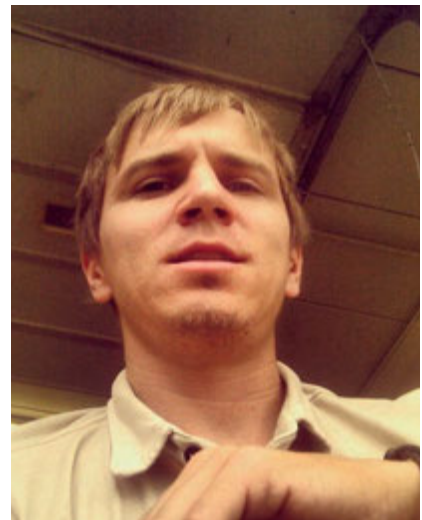
Jeffrey Hebert '13 B.S. was appointed as a commissioner for the Arizona Commission for the Deaf and the Hard of Hearing.

Chanelle Patnode '13 B.S., an aquarist at SeaWorld San Diego, studied coral reef ecology and the conservation of marine systems along the Great Barrier Reef during the summer of 2015 as part of her graduate studies.

Billy Barlow '12 B.S. became the youngest mayor in New York State when he was sworn in as mayor of Oswego, his hometown, in January 2016.

Jacqueline Christakis '12 B.S., aquarium presenter at Loveland Living Planet Aquarium in Salt Lake City, studied diverse terrestrial, coastal, and coral reef communities in the Central American country of Belize during the summer of 2015. The work was part of her coursework for a master's degree.

Staci Grady '12 B.A., night camp assistant at the Phoenix Zoo, studied the ecosystems, desert plants and the diverse life forms at the Bahía de los Ángeles UNESCO World Heritage site and in the Sea of Cortez. Grady participated during the summer of 2015 as part of her master's degree requirements.



Lars Kariniemi '12 B.S.E. accepted a position as assembler at Anchor Scientific Inc.

Carrie Harding '11 B.A.E., night camp supervisor at the Phoenix Zoo, studied sustainable approaches to human-wildlife coexistence at the Maasai Mara National Reserve in the South Rift Valley of Kenya during the summer of 2015. The work was part of her graduate education.



Caitlin Sheedy '11 B.S., a science teacher at McPherson (Kan.) High School, studied coral reef ecology and the conservation of marine systems along Australia's Great Barrier Reef last summer as part of her study for a master's degree.

◆ **Margaret Dunn '10 B.A., '12 M.B.A.** and **Joan Koerber-Walker '00 M.B.A.** were named by the Phoenix Business Journal as part of the 25 Most Admired Leaders Awardees of 2015.

Devin Fletcher '10 B.A. received a law degree with a concentration in criminal practice from the Baylor University School of Law.

2000s

Mario Aniles '08 B.S., finance director, Housing Authority of Maricopa County; **Jennifer Bare '07 M.B.A.**, founder and owner, GetCrocked.com; ◆ **Miguel Bravo '00 B.S., '03 M.P.A.**, manager, Arizona Public Service Co.; **Justin Chase '04 B.S.W., '06 M.S.W.**, president and CEO, Crisis Response Network; **Gabriel Cooper '04 M.B.A.**, CEO, Brushfire and Virtuous Software; **Marion Donaldson '01 B.A., '01 B.A.**, development director, Arizona School for the Arts; **Mary Hebert '05 B.I.S., '11 M.P.A.**, vice president of strategic initiatives and performance management, Greater Phoenix Economic Council; ◆ **Scott Kaufmann '03 B.S., '09 M.R.E.D.**, president, Lucid Agency; ◆ **Graham Rossini '02 B.S., '11 M.B.A.**, vice president of special projects, Arizona Diamondbacks; ◆ **Joshua Simon '07 B.I.S.**, president, Simoncre; and **Benjamin Taylor II '00 B.S.**, owner, Law Office of Benjamin Taylor, were named to the Phoenix Business Journal's 40 Under 40 list for 2015.

Phillip Barden '09 B.S. earned a doctoral degree in comparative biology from the American Museum of Natural History's Richard Gilder Graduate School in New York City in October 2015.

Christine (Carroll) Kindler '09 B.S. completed her doctoral degree at the Department of Agricultural and Resource Economics at the University of California, Davis.

Gary Nunley '08 B.S., '13 M.S.T.C. is co-founder of Bizbid, a micro-jobbing site that allows job seekers to bid on work posted by people who need to have small jobs done.



Shawn Sheehan '07 B.A., an algebra and special education teacher at Norman High School, was selected as Oklahoma's 2016 Teacher of the Year.

Nicolette (Nicky) Carter '05 M.B.A. earned a master's degree in education and is now working on doctorate in instructional leadership. She is the founding director of Blossom Park, the first Precision Teaching learning center in Arizona.



Wesley Ray '05 B.A., an associate with the national law firm Polsinelli in its Phoenix office, was included in Best Lawyers in America 2016 in the category of Bankruptcy and Creditor Debtor Rights/Insolvency and Reorganization Law.

Ruben Gutierrez '04 M.Ed., associate superintendent for teaching and learning for the Riverside Elementary School District and governing board member for the Pendergast Elementary School District in Phoenix, received the \$10,000 Association of Latino Administrators Superintendents Scholarship Award for 2015.



David Katz '04 B.S. joined Omni Hotels and Resorts as the director of sales and marketing.



Surendra Shakya '02 M.A., founder of the EduVision Foundation in Nepal, was selected as one of three nominees for the Energy Globe World Award 2015 in the category of "Youth" out of a pool of more than 1,700 competing submissions. The international award recognizes projects that safeguard the planet and access to healthy and fulfilling lives for future generations.

Melissa Ho '01 B.A., '01 B.S., a shareholder in the Phoenix office of the national law firm Polsinelli, was selected among Arizona's Most Influential Women by AZ Business Magazine. She was included also as a 2015 Southwest Super Lawyers Rising Star in the category of Criminal Defense: White Collar.

◆ **Michael Sosso '01 B.A., '01 B.S.** is now vice president of ethics and compliance at BP in London.

Victor Olivieri '04 B.A. graduated with his Ph.D. in political science from the University of Florida in May 2015 and became chief of staff in the Office of the Provost and Executive Vice Chancellor at the University of California, Riverside.

Ed Ableser '00 B.A., '04 M.C., '14 Ph.D., a state senator from Tempe, announced his departure from the Arizona Legislature to head the Nevada Department of Education's Office for a Safe and Respectful Learning Environment.

Andreas Ronneseth '03 B.S.E., '06 M.S., co-founder of ZoID LLC, announced the company's development of biometric voice authentication technology, named ZoID, that utilizes random speech recognition in wide-ranging applications.

Dominique Baker '00 B.A., a former U.S. Youth Exchange Student Ambassador to Israel, accepted the opportunity to return as a kibbutz volunteer and has since returned from the Holy Land.

◆ **Jennifer Church '02 B.S.** represented her employer, Abbott Laboratories, as a competitor in The Great Wall Marathon, the world's third toughest marathon, in China on May 16, 2015. Church completed the half marathon in 5:06:01, running over challenging terrain that included 5,164 steps of The Great Wall, switchback roads, small villages and rural farmland.

Carrie Severson '00 B.A. was selected as one of 20 semi-finalists from Mutual of Omaha's Aha Moment Tour participants for the company's next commercial spot. Severson's aha moment connected her passion with her purpose as founder and leaders of Super Girls, an after-school organization that empowers young girls across the country.

Matthew Desmond '02 B.S., associate professor of sociology and social science at Harvard University, was awarded a 2015 MacArthur Fellowship for his work on the impact of eviction on the lives of the urban poor and its role in perpetuating racial and economic inequality. The award includes a \$625,000 grant.



William Elza '02 B.A. accepted a position as clinical assistant professor at Midwestern University Dental School in Glendale, Ariz.

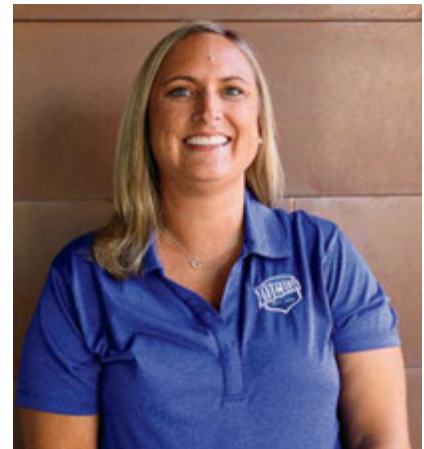
◆ **Travis Timmons '00 B.S.** celebrated 15 years at Banner University Medical Center Phoenix as a medical technologist.

1990s

Beth Collins-Burgard '99 M.Ed., shareholder in Brownstein Hyatt Farber Schreck's Santa Barbara, Calif., office, joined the board of trustees for Crane Country Day School.

Ron DuBois '99 B.A.E.S.E., '01 M.Ed., a former ASU basketball player, is head coach at the University of California, Santa Cruz.

Matthew Shindell '99 B.S., '04 M.S., formerly a post-doctoral fellow at Harvard University, accepted a position as curator at the Smithsonian Institution's National Air and Space Museum in Washington, D.C. Shindell was the first master's student in ASU's Biology and Society program and one of the first undergraduates in that program.



Christina Hundley '98 B.A. was named athletic director of Paradise Valley Community College. She will oversee the college's 12 intercollegiate sports.

◆ **Bret Parke '97 B.S., '03 J.D.**, formerly general counsel for the Arizona Department of Administration, was appointed deputy director of the state's Department of Environmental Quality, where he will serve as chief of staff to the director and oversee agency operations.

Chris Van Tuyl '97 B.S. joined Sacks Tierney P.A., a Scottsdale, Ariz., law firm, as a shareholder. His practice encompasses debt and equity securities offerings, venture capital financing, mergers and acquisitions, and other business transactions.

◆ **Maj. Richard Armstrong '96 J.D.** was appointed gaming commissioner for the Federated Indians of Graton Rancheria and the Graton Resort & Casino in Rohnert Park, Calif. He serves also as a regional judge advocate in the United States Marine Corps Reserves and is of counsel to the nationwide American Indian law firm Rosette, LLP. Armstrong operates a gaming law practice in Folsom, Calif., and was named the 2015 Best Gaming Law Firm in California by Acquisition International.



Russell Richelsof '96 B.S., '99 J.D., a criminal law attorney with Davis Miles McGuire Gardner, received an award from the Arizona Newspapers Association for his article in the October 2014 Record Reporter.



Phil Guttilla '95 J.D., '99 M.Tax., a shareholder in the Phoenix office of the national law firm Polsinelli, was included in Best Lawyers in America 2016 in the category of Corporate Law.



Jennifer Chasteen '92 B.A. has been promoted to senior director of brand and product strategy for Church's Chicken.



◆ **Shana Ellis '92 B.S., '97 M.P.A.** and **Lana Whitehead '91 M.A.** were named by the Phoenix Business Journal to its list of the 25 Most Admired Leaders of 2015.

James Simon '92 M.M.C., '93 Ph.D., previously interim dean of the College of Arts and Sciences at Fairfield University, accepted a position as dean of the College of Arts and Sciences at New York Institute of Technology.

Jason Tarno '92 B.S. was named group director of medical education for Centura Health, Penrose-St Francis Hospitals. He also acts as the physician advisor for case management and physician champion for the clinical documentation improvement team.

Nicole Carroll '91 B.A., formerly executive editor for The Arizona Republic and azcentral.com, was promoted to vice president of news and editor for the organization. In addition to her previous responsibilities, she will add oversight of the editorial board, public engagement and events activities and the supervision of the Phoenix Design Studio, which handles news production for other Western newspapers owned by the publication's parent company, Gannett Co., Inc.



Dyana Hesson '91 B.A., a botanical artist, opened her retrospective show, "Return to the Desert, Celebrating the First 25 Years," at the Phoenix Desert Botanical Garden in January 2016.

Jaime Daddona-Brennan '97 B.A., '99 M.P.A., '04 J.D., partner, Squire Patton Boggs (U.S.) LLP; **James Murphy '98 B.S., '09 M.S.**, owner and president, Willmeng Construction Inc.; and **Tanya Wheelless '98 B.S., '01 J.D.**, president, Tanya Wheelless Executive Leadership, were named to the Phoenix Business Journal's 40 Under 40 list for 2015.

1980s

Bruce Polay '89 D.M.A., artistic director/conductor of the Knox-Galesburg (Ill.) Symphony and professor of music at Knox College, led the orchestra to its fourth recognition by the Illinois Council of Orchestras as an Illinois Orchestra of the Year (2015). Polay is also a three-time recipient of Illinois Conductor of the Year honors; has guest conducted in Italy, Mexico, Romania, Russia, Spain and Ukraine; and has twice presented master classes at the famed Moscow Tchaikovsky Conservatory of the Music. Most recently, he offered a combined conducting/composition master class in Austria.

◆ **Chad Clark, Jr. '88 B.S.**, the principal of Chad Clark Travel in Scottsdale, Ariz., a luxury travel agency with the ability to customize travel experiences, was named to Travel and Leisure's international A-List of travel advisors. The agency received the Most Inspiring award at Luxperience in Sydney for excellence in the planning and development of innovative travel products and services, which has been featured in Forbes magazine and the publication Cigar Aficionado.



Joseph Cotterman '88 B.S., '91 J.D. was selected for inclusion in The Best Lawyers in America 2016 in the fields of bankruptcy and creditor debtor rights/insolvency and reorganization law, and litigation – bankruptcy.

◆ **Scott Neff '88 B.S.**, co-owner of As You Wish Pottery, celebrated the 20th anniversary of the business.

Christopher Burawa '87 B.A., '94 M.A., '04 M.F.A., a poet and translator and former director of the Center of Excellence for the Creative Arts at Austin Peay State University, accepted a position as executive director of the Anderson Center for Interdisciplinary Studies in Red Wing, Minn.



Karen Dickinson '87 J.D., a shareholder in the Phoenix office of the national law firm Polsinelli, was included in Best Lawyers in America 2016 in the category of Information Technology Law.

Cynthia Kaus '87 B.S.E., '93 M.S., College of Arts and Sciences associate professor at Metropolitan State University in Saint Paul, Minn., received the Carol C. Ryan Excellence in Advising Award, which is the university's 2014-2015 top student advising award.



◆ **Chris Hill '86 B.S.**, formerly CEO of St. Luke's Medical Center/Tempe St. Luke's Hospital, accepted a position as CEO of Urgent Care Extra in Mesa, Ariz.



Dawn Gabel '85 B.A. joined the Phoenix office of Quarles & Brady LLP as a partner in its Tax Law Practice Group. Her practice focuses on sales and use tax, property tax, multistate income tax and related litigation. Gabel has been recognized in The Best Lawyers in America, The Legal 500 US, and Southwest Super Lawyers.



Barbara J. Carter '84 M.Ed., who was instrumental in the creation of the Tempe Center for the Arts, was honored on Sept. 16 when the center formally dedicated and named a room in her honor.



Shawn Aiken '83 J.D. was inducted as a fellow of the American College of Trial Lawyers on Oct. 3, 2015, at the organization's annual meeting in Chicago.



Tawn Downs '81 B.S. accepted a position as director of the Arizona Historical Society Museum at Papago Park, which fosters exploration of Arizona's diverse cultural and natural history.

Mark Hiegel '80 M.B.A., previously director of marketing and business development for Greenberg Traurig law firm, accepted a position as the president and CEO for the Scottsdale Area Chamber of Commerce.

1970s

Rachel Whyte '78 B.S.W. received the Lifetime Achievement Award from the Arizona Chapter of the National Association of Social Workers at the awards luncheon in Phoenix on Sept. 11, 2015.

Michael Shelton '77 B.A. was elected to the Yuma City Council to a four-year term that began in January 2016.

◆ **Ray Artigue '76 B.S.** and **William Lavidge '78 B.S., '81 M.B.A.** were named by the Phoenix Business Journal to its list of the 25 Most Admired Leaders of 2015.

Nancy Zoller '75 B.A.E., a professional potter for the last 40 years, makes art in her Loveland, Colo., clay studio, and has written five articles regarding clay construction methods in *Pottery Making Illustrated*, including one published in September/October 2015.

◆ **Richard Mahrle '74 B.A., '77 J.D.**, a partner at Gammage & Burnham PLC, was named a top mediator in Arizona by *Arizona Business* magazine. He serves on the commercial, construction, and employment arbitration panels for the American Arbitration Association.

◆ **Patrick Riley '71 B.A.E., '72 M.A.E.** retired in June 2015 from 43 years with the Crane School District #13 in Yuma, Ariz., where he served 25 years as an eighth-grade teacher and 18 years as a school administrator.

◆ **Ira Opper '71 B.S.**, CEO of Opper Sports Productions in California, and **Rob Hearn '71 B.S.**, vice president of production for Bodies in Motion in Hawaii, launched Gilad TV, which



features daily workouts designed and led by popular fitness personality Gilad Janklowicz, using the Networks on Demand technology developed by Opper's company.

1960s

Howard Pink '66 B.Mus., performed his solo show, "Howard Pink and His Musical Garden Hoses" at the National Convention of Phi Mu Alpha Sinfonia in New Orleans in July 2015. He also participated the following month in the 47th International Horn Symposium in Los Angeles.

◆ Active, dues-paying member of the ASU Alumni Association

Submitting a class note to ASU Magazine

ASU Magazine welcomes Class Notes about significant milestones in the lives of ASU alumni. Here are a few guidelines for submission.

1. Class Notes should be submitted by the alumnus/a himself or herself, or an official representative of an organization with which the alumnus/a is associated.
2. Class Notes submitted by a private third-party (such as family member) will be verified with the alumnus/a before publication.
3. Photos submitted for inclusion in Class Notes must be 500 KB to 1 MB in file size and a JPG or TIFF file.
4. All Class Notes will run in all platforms for ASU Magazine – including the print magazine and our online/mobile applications.
5. If submitting a Class Note via the U.S. Post Office, please do not send the originals of any materials you include.

How to submit a Class Note

Online: alumni.asu.edu/classnotes

Email: alumni@asu.edu

Mail: ASU Alumni Association,
Attn: Class Notes,
P.O. Box 873702,
Tempe, AZ 85287-3702.

The fabric of success

Zofia Wosinska '01 B.S., '06 M.S., '09 Ph.D.

"ASU is a big part of my journey," asserts three-time alumna Zofia Wosinska, the founder and CEO of ÉSTAINE, the high-fashion goods company she founded. "I did my undergraduate work there in the Honors College, and came back for my master's degree and Ph.D."

Indeed, the university is a family affair for Wosinska, whose sisters also attended and whose parents worked as professors at the institution. Wosinska studied pre-med, since chemistry is her first love. She performed so well that she was working as a teaching assistant as an undergraduate. But her interests included topics far beyond that of a hard scientist.

"I've always been interested in psychology and mental health, the way our mental health relates to our physical health," she said.

That's something she kept in the back of her mind, while she studied how to detect early damage in strands of DNA related to the aging process. She knew she wanted to go into industry, rather than pursue a traditional academic route, a choice that made her something of an anomaly. Eventually, she went to work for Roche Diagnostics, where she developed the dyes used in cancer tests.

"These dyes show how cancer affects

tissue and I was fascinated with how the defining colors and patterns look under the microscope," she said.

That sense of design, as well as having her husband, Jeremy Picker, diagnosed with Stage III cancer, gave her an idea. Perhaps there was a way to make something so awful and ugly a thing of beauty – and along the way educate people about the disease.

She started using the images she saw under the microscope to print onto fabrics, eventually working with Italian manufacturers that produce for high-end fashion houses like Louis Vuitton, Ralph Lauren and Prada. That gave her access to the best fabrics and textile makers in the world, allowing her to develop a luxury good with an education component.

"Every product has a card that tells you what you're looking at on the fabric," she explains. "We also partner with cancer nonprofits, giving part of the revenue we make to them."

For Wosinska, her business is an opportunity to combine both pieces of her passions – science and psychology. "Cancer is dark, it's scary," she says. "But we have to face it. Wearing our pieces can help someone see that something beautiful can come from something ugly, and give



them courage and hopefully encourage even one person to seek diagnosis early."

By Holly Beretto, a freelance writer based in Houston.

sun devil births



◆ **Maya Lucia Navarro** was born to Lorena Navarro and Caleb Navarro '05 B.S., '08 M.S. on Sept. 30, 2015.



Victoria Anoush Claridge was born to Odette (Nazarian) Claridge '10 B.A. and Ryan Claridge '08 B.A. on Sept. 15, 2015, in Scottsdale, Ariz.



Joseph Joshua Velarde was born to Dawn (Andraschko) Velarde '03 B.A. and Rosendo Velarde on July 8, 2015.



Alexander Curtis Law was born to Carrie Law '04 B.A., '14 B.S. and Matthew Law '03 B.S. on Sept. 22, 2015.



Elizabeth Hope Wettstein was born to Courtney Wettstein '14 M.S. and Colt Wettstein on April 23, 2015.



Miles Hashkii Mallette was born to DezBaa Damon-Mallette '01 B.S. and Louis Mallette on April 6, 2015 in Albuquerque, N.M.



Antonio Felipe Baez was born to Myrna Renovato Baez '04 B.A. And Francisco Baez on November 25, 2014, and joined big sister Camila at home in Tempe.



David James Lugo was born to Gregory Lugo '00 B.S., '12 M.A. and Jennifer (Sheik) Lugo '03 B.A.E. on May 14, 2015, in Gilbert, Ariz., joining big brother, Thomas James.

Learning to sustain

Ed Gorman '99 M.B.A.

More than a decade has passed since Ed Gorman found himself in a battle for survival and control of his future. A Scottsdale, Ariz. cab driver ran a stop sign and hit Gorman, a motorcycle rider, and landed him in a hospital bed fighting for his life.

"I heard someone say (after I was injured) they gave me a 50-50 chance of survival," Gorman said. "I remember saying to myself, 'No! There are still some things I want to do. I've had a great career and education, but I'm not using it.' It was eye-opening to say the least."

Until that time, Gorman, who received his MBA from the W. P. Carey School of Business in 1999 and a bachelor's degree in marketing from the University of South Carolina in 1984, had prospered in the business world, having headed up several startup companies and spent four years as a director for AT&T. It was a good life, but there were interests that had gone unexplored. Throughout his career and education, Gorman wished to pursue a business that combined his background in real estate and his passion for technology.

"I've always wanted to build and create great things," he said. "I had a passion for numbers and technology. During my time at AT&T, I took advantage of their education program and enrolled to get my MBA

at ASU. The business program at ASU was highly regarded and I have always been greatly impressed with the faculty, many of whom either had gone to or taught at the top schools."

And while his previous path had been rewarding, the motorcycle accident propelled him onto his current path with an increased sense of urgency. In 2004, Gorman launched MODUS Development, which builds sustainable Net Zero Energy homes with striking designs and forward-thinking technology in a variety of price ranges.

Gorman uses the skills he learned from ASU to lead several multi-million-dollar real estate development projects. He praises its School of Sustainability, which was founded in 2007, with advancing the field of sustainable design significantly in a relatively short amount of time. And, he says, that's making a difference, even within the university's walls.

"ASU is doing a fantastic job with the School of Sustainability. It's now in the fabric at ASU," he said. They're not just talking about it, they're walking the walk to remain at the cutting edge of the future of real estate development."

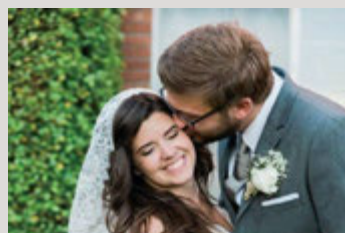
By Nathan Gonzalez, a freelance writer based in Phoenix.



sun devil marriages



Alyssa Aalmo '09 B.A. and **Bryon Becker '11 B.A., '11 B.S.** were married on Aug. 8, 2015, in Seattle, Wash. The couple resides in Washington, D.C.



Claire (Impeccoven) Williams '13 B.A. and **Michael Williams '15 B.F.A.** were married on Oct. 24, 2015.



Christine (Carroll) Kindler '09 B.S. and **Dorsey Kindler** were married on Oct. 15, 2015 in Las Vegas.



◆ **Yesenia Barraza '08 B.S., '13 M.Tax.** and **Harold Simmons** were married on Oct. 24, 2015 at Old Main on ASU's Tempe campus.

◆ **Stephanie Petersen '07 B.I.S.** and **Nicholas Petersen '09 B.S.** were married on Oct. 10, 2015, at the ASU Kerr Cultural Center. The wedding colors were maroon and gold, and Sparky attended!



Rock(s) of Ages

If rocks found on Earth seem mysterious to us, how much more puzzling still are the composition of rocks that come to us from space? ASU's Center for Meteorite Studies has been untangling questions related to meteorites for more than 50 years, and in the process has become the world's largest university-based meteorite collection, with more than 40,000 individual specimens, representing more than 2,000 distinct meteorite falls and finds.

The center was founded in 1961, after the university acquired a large collection of meteorites from famous meteorite hunter and self-taught meteoriticist Harvey H. Nininger. Professor Carleton B. Moore (pictured here) became the founding director of the center. He was a member of the Lunar Sample Preliminary Examination Team for the Apollo program and a principal investigator for the returned lunar sample program for all the Apollo missions. Moore retired from ASU in 2003 but continues to participate in the center's education and public outreach activities, and in 2011 the university named the Carleton B. Moore Meteorite Collection in his honor.

Currently, the center is directed by Meenakshi "Mini" Wadhwa, formerly curator of meteoritics at The Field Museum of Natural History in Chicago. The center's collection is actively used for geological, planetary, and space science research at ASU and throughout the world, and the center does extensive outreach to the public.

Photo courtesy of University Archives, Arizona State University Libraries

The official currency of ASU[®]

Congratulations Sun Devil[®] fans! In only four years, you've helped generate more than \$1 million to support the university with the use of your MidFirst Bank ASU[®] Debit and Credit Cards!



Proud to be the exclusive banking partner of ASU.

602-801-5000 • midfirst.com/asumag

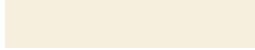
Member FDIC



ASU ALUMNI

ARIZONA STATE UNIVERSITY

PO Box 873702, Tempe, AZ 85287-3702



**you +
generosity
= impact**

You give. Lives change.

asu.edu/give

ASU Foundation
for a new AMERICAN UNIVERSITY

ARIZONA STATE UNIVERSITY

