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Sustainability summit

On Sept. 17, ASU will convene a panel of some of the nation's best and brightest leaders in business, government, advocacy and academia to address the most serious sustainability problems the world faces.

The Sustainability Solutions Summit will take place in Washington, D.C., from 6:30 a.m. to 8 a.m. Arizona time, at the Columbus Club at Union Station. It will provide a lively discussion of what the leaders from key sectors are doing and should be doing to ensure our planet will be able to continue to sustain life.

A free, live webcast of the summit will be provided through the Web site www.asu.edu/sustainabilitysummit. An archive of the forum will be available after the event.

The panelists, which include ASU President Michael Crow, will address such issues as automobile fuel efficiency and alternative energy sources, waste reduction, water quality, global carbon emissions, and the role that government, industry and individuals can – and should – play in that effort.

Besides Crow, other confirmed panelists include Francis Beinecke, president of the Natural Resources Defense Council; Brad Casper, president and chief executive officer of the Dial Corp.; Anthony Cortese, president, of Second Nature; William Ford, executive chairman of Ford Motor Co.; John Hofmeister, former president of Shell Oil Co. and president of Citizens for Affordable Energy; U.S. Rep. Edward Markey, D-Mass.; Minnesota Gov. Tim Pawlenty; U.S. Rep. Fred Upton, R-Mich.; and Rob Walton, Wal-Mart's chairman of the board.

Aaron Brown, former CNN news anchor, host of PBS' "Wide Angle" and a professor at ASU's Walter Cronkite School of Journalism and Mass Communication, will moderate the panel discussion.

Touting tobacco?

Long-term tobacco use has been a major culprit in the rise of U.S. cancer incidence. But if ASU Biodesign Institute researcher Charles Arntzen and colleagues have their say, we soon could be thanking tobacco for saving lives.

In a new perspective article published in the prestigious journal *Science*, Arntzen recaps the rapid strides in plant biotechnology. Through hard work and ingenuity, scientists are on the cusp of using tobacco plants as versatile, pharmaceutical factories to produce vaccine candidates against a variety of diseases, including cancer.

To learn more, read the article online at www.sciencemag.org/cgi/content/full/321/5892/1052.

ASU, Grist offer 'green' news to students

By Karen Leland

In the first collaboration of its kind, ASU and Grist.org, the country's leading source of online environmental news and information, have announced an agreement to send all of ASU's 60,000-plus students and many faculty and staff a biweekly e-mail with news, commentary and advice about sustainability issues.

The e-mail newsletter, which launched Sept. 10, includes timely reporting on national environmental and sustainability news, as well as localized coverage of issues affecting the university, the greater Phoenix community, the state of Arizona and the Southwest. The

agreement marks the first time a major public university has committed to regularly sharing environmental news with its students.

"Sustainability is a concept with as much transformative potential as justice, liberty and equality, and ASU intends to foster it in our academic institutions and broadly across business, industry and government," says ASU President Michael Crow. "By teaming up with the environmental news experts at Grist, ASU will provide a steady flow of ideas and information that bring sustainability issues into practical focus for all members of our campus community."

"Grist is thrilled to join forces with ASU in shaping how today's students, and tomorrow's leaders, think about issues of sustainability and

their connections to everyday life," adds Chip Giller, founder and president of Grist. "From climate and energy to food and transportation, Grist.org is a place where students and faculty alike can turn to make sense of the latest 'green' news in a way that's fresh, relevant and engaging."

ASU and Grist appear to make a perfect pair. ASU has built a reputation as one of the most sustainable universities in the country, and Grist has a track record of bringing environmental news to young people in an irreverent and funny style that keeps them entertained and engaged.

Grist.org recently has been ranked as a top green Web site by *Time* magazine and the *Lon-*

(See PARTNERSHIP on page 11)

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TOM STORY PHOTO

Home for the hardware

ASU softball standout Katie Burkhart, left, hands the NCAA national championship trophy to teammate Kristen Miller to place in the bulging trophy cases of the Carson Student Athletic Center Sept. 8. The 2008 squad posted a 66-5 record and claimed the Pac-10 crown along the way to the university's first-ever national softball championship.

ASU research team helps re-engineer nation's power grid for renewable energy

By Joe Kullman

ASU researchers will help create a framework for re-engineering the nation's power grid to make it adaptable to renewable electric-energy technologies such as solar and wind power.

A team of faculty members in ASU's Ira A. Fulton School of Engineering and School of Sustainability are part of a new National Science Foundation (NSF) Engineering Research Center formed to develop technology to transform the United States' centralized power grid into a "smart grid" that will be able to store and distribute energy produced from wind farms, solar photovoltaic panels, fuel cells and other alternative energy sources.

"The goal is to enable greater use of renewable energy sources to make us a more green-energy-based society," says Gerald Heydt, a professor in the Department of Electrical Engineering.

Heydt will lead an ASU team that includes fellow electrical engineering faculty members George Karady, Keith Holbert, Raja Ayyanar and Dan Tylavsky, along with Jay Golden from the School of Sustainability, who also is an affiliate faculty member in the Department of Civil and Environmental Engineering.

They will work with NSF's new Engineering Research Center for Future Renewable Electric Energy Delivery and Management (FREEDM) Systems, led by North Carolina State University.

An NSF grant of \$18.5 million and an additional \$10 million in support from various institutions and industry membership fees will fund establishment of an effort that will involve several universities, in addition to national laboratories and industry laboratories in 28 states and nine countries.

More than 65 utility companies, electrical equipment manufacturers, alternative energy start-up ventures and other busi-

(See RESEARCH on page 11)

EUREKA! NIH funds 2 innovative biomedical projects

By Joe Caspermeyer
and Joe Kullman

ASU can now shout the classic exclamation of discovery – "Eureka!" – twice.

Fueled by a new initiative at the National Institutes of Health called the EUREKA program, two ASU teams have received million-dollar grants to pursue the next frontiers in biomedical research.

EUREKA, an acronym for Exceptional, Unconventional Research Enabling Knowledge Acceleration, is intended to boost exceptionally innovative research.

Biodesign Institute researcher John Chaput and Ira A. Fulton School of Engineering associate professor Rudy Diaz each have received \$1.2 million research grants from the new, high-impact NIH program. The EUREKA program represents the NIH's increased emphasis on supporting unconventional, paradigm-shifting research.

"EUREKA projects promise remarkable outcomes that could revolutionize science," says Elias Zerhouni, NIH's director. "The program reflects NIH's commitment to supporting potentially

transformative research, even if it carries a greater-than-usual degree of scientific risk."

Adds ASU President Michael Crow: "The National Institute of Health's decision to fund these key biomedical research projects not only speaks to the intellectual merits of ASU's outstanding proposals, but also confirms ASU's success in attracting federal investment in bold, high-risk, high-impact research central to our mission."

Chaput and Diaz's projects were two of 38 proposals deemed exceptional. This is an

impressive showing for ASU, and it demonstrates the university's ability to compete with the best and brightest scientists from across the nation.

"The EUREKA competition provided a unique forum for our Biodesign team to develop a transformative platform that represents a convergence of chemistry, biology and informatics," says John Chaput, a Biodesign Institute researcher and ASU assistant professor in the Department of Chemistry and Biochemistry.

(See EUREKA on page 11)

ASU's Baldwin adds expertise to issue of health care reform

By Debbie Freeman

Fear and hope surround the controversial issue of health care reform in America. While the presidential candidates are announcing their plans to deal with reform, one expert is endorsing some politically viable recommendations, stopping short of universal health care.

"All countries wrestle with the same issues about what they want to attain with their health care systems," said Marjorie Baldwin, director of the School of Health Management and Policy at ASU's W. P. Carey School of Business and author of more than 30 health care articles. "You are constantly trying to deal with three different major needs: providing everyone with access to health care, making it high-quality care, and efficiently delivering it at a low cost. The catch is, you can really only do two of these things at any time."

In other words, for those who provide low-cost health care to everyone, the quality then may suffer. If high-quality care is provided to everyone, then the price will go up. If high-quality care is delivered at a low cost, then the health care providers won't be able to offer the care to meet everyone's needs, or wait times and access will be problematic. That's demonstrated in countries with universal health care, such as Great Britain, where patients can wait months for routine treatment.

Baldwin, a top health economist, has noted disparities in

health care across states, providers, and racial and ethnic groups. She also says the wrong incentives are being given to patients and providers. She agrees with many other economists in her sector regarding several recommendations considered more politically acceptable than universal coverage to address current problems in the health care system. For example:

- Equalize tax treatment for buying health insurance, so people can buy coverage through their employer or on their own with the same tax break.
- Nationalize the health insurance markets, so there is less inequality across state lines, and consumers can have more choices about the plans they buy. Right now, different states require different types of plans.
- Offer lower premiums to those who live healthy lifestyles.
- Offer more high-deductible policies, so people will be more selective about whether they really need to see a doctor. However, discounts could be offered to ensure that people still get preventive services.

"Most of this is just common sense," Baldwin says. "I get reductions in my homeowner's insurance because I have a security alarm and smoke alarms. I pay less for car insurance when I have no accidents. It just makes sense that you should pay less for health insurance, if you live a healthy lifestyle and get preventive services such as mammograms

and other screenings."

No matter what, some people are risk-takers who will choose to go without insurance, unless there is a mandate or universal coverage. About 5 percent of those who could buy health insurance through their employers choose not to do it, even if they don't have another option through a spouse.

Regardless, no country has a perfect health care system. Baldwin points to surveys that show about 70 percent of people in other countries believe their health care systems need major changes or a total overhaul. That's similar to the percentage of those in America who are dissatisfied with the U.S. health care system.

Baldwin recently spoke about health care reform at the National Association of Women Business Owners annual conference in Phoenix. For more information on the speech, go to the Knowledge@ W. P. Carey Web site at <http://knowledge.wpcarey.asu.edu/article.cfm?articleid=1632>. For more on what the candidates should be saying on health care reform, go to the School of Health Management and Policy's Web site to order a policy brief called "What the Candidates Should Be Saying About Health Reform" by Mark Pauly.

Freeman, with the W. P. Carey School of Business, can be reached at (480) 965-9271 or debbie.freeman@asu.edu.

New Night Gallery shines spotlight on ASU faculty, graduates

By Judith Smith

There's a new gallery in town. And word is that it's already a pretty popular place.

The new space – Night Gallery – is located in Tempe Marketplace, at the corner of McClintock Drive and Rio Salado Parkway.

It's a venue for graduate students, faculty and alumni of the Herberger College School of Art to show their artworks large and small.

Best of all, it's underwritten at present by Vestar Development Co., creators of Tempe Marketplace.

Night Gallery is located in an empty storefront near Barnes and Noble, in "The District," the popular shopping-dining-entertainment area of the mall.

"We're grateful for the opportunity to work in an alternative space," says Joe Baker, director of community engagement for Herberger College of the Arts. "But we have a good-faith agreement with Vestar. They have agreed to locate other vacant spaces in the marketplace when we have to move."

Night Gallery will feature one major exhibit in the front of the 3,800-square-foot gallery, with works by a number of artists in the back half of the space. There also will be an artist-in-residence who will be available to discuss his or her work with gallery visitors.

Nan Vaughn, a graduate student who creates public art, is the first to occupy the artist-in-residence studio.

The gallery is open, as its name implies, only in the evening, five days per week. Hours are 6 p.m. to 9 p.m., Tuesday through Saturday.



The current featured exhibit in the Night Gallery is "Ornaments," by Michael Anderson. Anderson graduated from ASU 40 years ago.

The first exhibit, which inaugurated the gallery June 26, was kinetic sculpture by David Young, a School of Art MFA graduate who won the International Sculpture Center's 2007 Outstanding Student Achievement in Contemporary Sculpture Award last fall.

The current featured exhibit is "Ornaments," by School of Art alumnus Michael Anderson.

Anderson graduated from ASU 40 years ago. His steel works are in public and private collections across the United States and in more than five countries, including the United Arab Emirates and Australia.

Anderson's large sculptures, which resem-

ble Christmas ornaments, are very heavy – some weighing close to a ton – and they draw the curious, even during the day when the gallery is closed.

Passers-by stop and peer in, and if graduate sculpture student director, Mike Thomas, happens to be there, he will welcome them in.

Already, 300 to 500 people stop by the gallery every night, Baker says, with easily double that number on weekends.

"We're beginning to see a return audience," he says. "That speaks to the quality of the artists."

The gallery had its genesis when Baker had lunch with Summer Katzenbach, marketing director for Tempe Marketplace.

"She's passionate about the arts," Baker says. "She said, 'Wouldn't it be great to create something like First Friday in Phoenix, but why not create something new?' I told her to give us the space, and we would create that experience. And so was born Night Gallery."

Coincidentally, Jim White, a professor of sculpture at the Herberger College School of Art who is known for his neon work, stopped by to visit Baker to lobby for creation of a "first-rate professional gallery, not on campus, that would serve graduate students, faculty and alumni."

Such a gallery would not include undergraduate work, White says, because "we have several other galleries on campus that do that."

White has become the driving force be-

hind the gallery, and he particularly enjoys greeting the patrons.

"People are so appreciative," he says. "Some have their kids, and the kids ask, 'Dad, what is that?' Engineers who stop in always want to know what the work is all about."

Both White and Baker have big dreams for Night Gallery. Baker wants to include the performing arts, to "move outside the walls into the public space."

White also imagines the day when there is a budget to ship in work from artists who live outside of Arizona to enhance the gallery's scope.

"It's very exciting to make contact with alumni artists who continue to make their art their life's objective," White says. "Many of the featured Night Gallery artists have become important figures in today's art world."

Katzenbach says she and Vestar officials are pleased with Night Gallery – and their loan of the space that eventually will rent for \$15,000 per month, not including utilities, security and insurance.

"We're passionate about bringing arts and culture to a retail space," she says. "We are pleased to see people stopping by and interacting with the artists. ASU is a focal point for Tempe, and this is a wonderful partnership."

For more information about Michael Anderson's sculpture, visit www.michaelandersonsculpture.net.

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Association honors counseling psychology professor

By Verina Palmer Martin

Terence J.G. Tracey, a professor of counseling psychology with the Mary Lou Fulton College of Education, has been honored with two of the American Psychological Association's most prestigious awards for his career contributions to the field of counseling psychology.

Tracey received the 2008 Leona Tyler Award for Lifetime Distinguished Contribution to Counseling Psychology Aug. 18 at the APA National Convention in Boston. Tracey also was awarded an APA presidential citation for his 27 years of seminal research and his profound influence on the field of counseling and social psychology.

"The American Psychological Association has recognized Terry Tracey for his distinguished scholarship and influential contributions to the field of counseling psychology by presenting him with two of the association's most prestigious awards," says George Hynd, senior vice provost for education and innovation and dean of the Mary Lou Fulton College of Education. "His tireless support and passionate commitment to the profession of counseling psychology and to the education of its future leaders is legendary at ASU and across the country. I can think of no other individual more deserving of the APA's Presidential Citation and Tyler Award than our distinguished colleague and friend, Professor Tracey."

The Leona Tyler Award, given to stimulate and reward research or professional achievement in counseling psychology, was named for the influential psychologist who theorized that individuality is based on the choices people make and how they cognitively organize their experiences.

"Terry Tracey is an outstanding scholar who is internationally recognized for his empirical and theoretical contributions to counseling psychology

including the areas of interpersonal aspects of behavior and personality, non-cognitive predictors of college success, and the development of vocational and other interests," says James Klein, professor and director of the Division of Psychology in Education within the Fulton College.

Tracey cultivated new theories about how human interests relate to educational and occupational choices, persistence, success and satisfaction.

"Interest is a neglected area because we tend to over focus on competence," he says.

As a scholar whose career has given him carte blanche to study the issues that most interest him, Tracey's theories propose the best choices result from an exploration of options as people decide who and what they want to be.

"For some people, it's a daunting experience," he says.

His research also has examined how people negotiate relationships to determine who they are and how they interact with others. He developed the cornerstone model used in counseling and psychotherapeutic practice today to determine how clients and counselors work together toward successful treatment.

Underlying all of Tracey's research themes is method.

"I like numbers, so there's a lot of methodological sophistication," he says. "All my research focuses on assessment. My goal is to provide information and better tools to counselors, psychologists and the public."

Tracey is one of the five most published authors in the history of the *Journal of Counseling Psychology*, with more than 100 articles that have been cited more than 2,000 times.

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ASU Insight

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Taylor made

Arizona Board of Regents member Fred DuVal addresses the crowd gathered at the opening of Taylor Place Residential Community at ASU's Downtown Phoenix campus Sept. 8. The first phase of Taylor Place welcomed students to their new home Aug. 20. In its inaugural year, the first tower is providing 576 beds for ASU students. An additional 550 beds in a second tower will be available by the fall of next year. Both towers cover 366,500 combined square feet.

TOM STORY PHOTO



In THE NEWS

ASU experts frequently are called upon by the local and national news media to provide insight and opinion on current events and issues of public interest. Following are excerpts of recent news articles featuring ASU representatives.

ASU researchers are reporting a breakthrough in understanding the effect of urban pollution on climate change. Associate professor **Peter Crozier** and senior research scientist **James Anderson** say some measures used in atmospheric science overlook important factors that relate to climatic warming and cooling as studies of the greenhouse effect focus on carbon dioxide and other gases. Brown carbons from combustion processes are the least understood of these overlooked aerosol components, according to the researchers. *Phoenix Business Journal*, Aug. 7.

A nationwide order to trim trees near power lines could decrease significantly the kinds of power outages that plunge whole states into darkness, energy industry experts say. "Tree trimming will make a big difference because right-of-way incursions is one of the biggest reasons why we have outages in general," says **Vijay Vittal**, an ASU electrical engineering professor. *USA Today*, Aug. 11.

A discovery of two skeletons in North Africa is providing clues to two civilizations that lived there, a thousand years apart, when the region was moist and green. "At first glance, it's hard to imagine two more biologically distinct groups of people burying their dead in the same place," says team member **Chris Stojanowski**, an ASU bioarchaeologist. *Los Angeles Times*, Aug. 15.

In addition to rising oil prices, which have led to higher utility and food costs, people are more aware of man's impact on the environment. "With the effects on the pocketbook and a wider acceptance of our impact on the environment, it's like a perfect storm," says **Charles Redman**, director of the Global Institute of Sustainability. "People seem more willing to make changes. This is not a blip. There will be greater staying power. But just how much are you and I willing to change? That's an unanswered question." *Arizona Republic*, Aug. 18.

Research has shown that some specially tailored games seem to help preserve mental fitness. According to ASU cognitive scientist **James Gee**, fun and engrossing activities are strongly encoded in memory because they engage our emotions. "Any information associated with pleasure and excitement triggers dopamine release," Gee says. Dopamine fosters exploration in search of reward, causing newly acquired knowledge "to be stored more deeply and better remembered later," he adds. *Discover*, Aug. 27.

Refugee children's artwork on display at ASU museum

The front windows of ASU's Museum of Anthropology currently frame a very special collection of artwork that includes 24 paintings by refugee children now living in Arizona.

Inside the museum are 24 additional paintings, along with storyboards detailing the young artists' harrowing journeys to their new lives in the United States.

In simple strokes of primary colors, the dreams and nightmares of these resilient youths come to life in a mini-exhibit titled "From Harm to Home."

The images on canvas and paper are painted by youngsters from Burma to Burundi, and they illustrate the scope of refugee children's heartache, as well as their hope. The unique body of art is the outgrowth of an International Rescue Committee session in March, in which several dozen refugee children ages 3 to 15 were encouraged, under the guidance of an art therapist, to create paintings of their families, their homelands and their new homes in Arizona.

The ASU presentation is but a sampling of more than 300 paintings created during the session and is a poignant complement to the museum's concurrent full exhibits, including "Fuse: Portraits of Refugee Households in Metropolitan Phoenix" and "Mosaic: Cultural Identity in America."

All three exhibits will be on display through Oct. 3.

The "From Harm to Home" installation coincides with the International Rescue Committee's 75th anniversary. The group, which began in 1933 by Albert Einstein and prominent American citizens to aid Germans suffering under Hitler's regime, continues to assist refugees, provide emergency relief, alleviate suffering, and advocate around the world for the protection of human rights and dignity.

The museum is open 11 a.m. to 3 p.m., Monday through Friday. Admission is free. For more information, call (480) 965-6224 or visit: asumuseum.asu.edu.

The ASU Museum of Anthropology is located in the School of Human Evolution and Social Change building, room 240, on the Tempe campus. A map of ASU's museum locations is online at asu.edu/museums/map.htm.

NIH grant continues development of DNA sequencing technologies

By Joe Caspermeyer

Imagine a patient going into the doctor's office for a yearly physical – only instead of a routine blood test, the patient could order a complete workup of his or her DNA.

Such a scenario could become a reality, thanks to the National Institutes of Health's continued funding of DNA sequencing research at ASU's Biodesign Institute.

The National Human Genome Research Institute (NHGRI), part of the NIH, awarded more than \$20 million in grants to develop innovative sequencing technologies. The goal is to make the technology inexpensive and efficient enough to sequence a person's DNA as a routine part of biomedical research and health care.

"The ability to comprehensively sequence any person's genome is the type of quantum leap needed to usher in an age of personalized medicine where health care providers can use an individual's genetic code to prevent, diagnose and treat diseases," says Alan E. Gutmacher, acting director of the National Human Genome Research Institute.

Among the awardees was Biodesign Institute researcher Stuart Lindsay, who will continue development of next-generation sequencing technologies to cut the cost of whole-genome sequencing to \$1,000 or less.

"The Human Genome Project took 10 years to complete and cost billions of dollars," says Lindsay, an ASU Regents' Professor in physics and chemistry and the Edward and Nadine Carson Presidential Chair in Physics. "Scientists need to reduce the cost and time required by many orders of magnitude to benefit human health. The DNA sequencing technology program at the NHGRI has allowed us to explore a very different route to high-speed sequencing."

Lindsay directs the Center for Single Molecule Biophysics at the Biodesign Institute.

Genomes 'R' Us

Lindsay was one of eight investigators to develop revolutionary technologies that might make it possible to sequence a genome for \$1,000.

"There has been substantial progress made to sequencing technologies over the past decade," says Jeffery Schloss, NHGRI's program director for technology development. "We continue to seek further improvements to enable routine sequencing of genomes to advance scientific knowledge and health care."

DNA sequencing costs have fallen dramatically over the past decade, fueled in

large part by tools, technologies and process improvements developed as part of the successful effort to sequence the human genome.

However, it took two multibillion-dollar efforts to sequence the DNA genomes of the first two individuals on the planet: DNA co-discoverer James Watson and the leader of the private Human Genome Project venture, J. Craig Venter.

In an effort to help gain acceptance of DNA sequencing, they have unveiled their genetic code to the world. But to make genome sequencing a routine part of personalized medicine, breakthrough innovations are needed.

A DNA 'speed reader'

During the coming year for the \$370,000 award, Lindsay and his team, including research professors Jin He and Peiming Zhang, will undertake a collective approach that will incorporate many complementary elements that integrate biochemistry, chemistry and physics with nanotechnology to develop a radical "sequencing by recognition" strategy to breakthrough the DNA sequencing cost bottleneck.

"The key to quantifying the complete genetic picture of the 7 billion or so human genomes will be to develop a vanguard technology to make much longer DNA sequencing reads than are currently possible," Lindsay says.

In concept, the Lindsay's solution would work somewhat like a supermarket scanner – only shrunk down to the nanoscale – to read genomic DNA at a speed of hundreds to thousands of bases per second. It involves using nanostructures to read the electrical current through DNA bases, thereby identifying the sequence.

The DNA is passed through a tiny hole – a nanopore – and past a "reader," which recognizes one of the four DNA bases. The full DNA sequence would be assembled by combining the readouts from four different DNA readers.

If successful, during the second stage of the project, Lindsay's team plans to develop a preliminary prototype of the high-speed DNA reader.

The latest DNA sequencing award complements a three-year, \$890,000 award Lindsay received from the NHGRI in 2007. Lindsay's effort also joins two other ASU research teams, led by Biodesign's Peiming Zhang and colleague Jian Gu and Peter Williams, who have more than \$3 million in other DNA sequencing projects funded by the NHGRI.

Caspermeyer, with the Biodesign Institute, can be reached at (480) 727-0369 or joseph.caspermeyer@asu.edu.

School of Social Work teaches methods to treat animal abusers

By Corey Schubert

A common assumption is that people who are cruel to animals eventually will hurt people. Ted Bundy, Jeffrey Dahmer, David "Son of Sam" Berkowitz and Albert "Boston Strangler" DeSalvo shared a history of injuring animals.

But the association between animal cruelty and human violence is much broader, according to Christina Risley-Curtiss of ASU's School of Social Work.

The school's "Treating Animal Abuse Certificate" program is training human service practitioners to understand that people who hurt animals often are showing signs of much deeper issues that, when properly diagnosed and treated, can help to prevent other forms of violence.

"Animal cruelty is often a mechanism for kids to take out anger for their own abuse," says Risley-Curtiss, director of the program. "Persistent early-age animal cruelty is an early indicator of a child who's in trouble."

Very few human service professionals in the nation are training people to treat children or adults who are cruel to animals, yet animal cruelty has been found to be associated with domestic violence, child maltreatment and increased criminality, she says.

The online certificate program is designed to augment the skills and knowledge of degreed social work and other human service practitioners, and to help create a body of

professionals who are trained in treating people who abuse animals.

The two non-credit courses use a cognitive-behavioral approach to treatment. The courses show counselors how to teach animal abusers to be accountable for their actions, and how to develop empathy and self-management skills.



Christina Risley-Curtiss

Students learn the positive and negative aspects of animal-human relationships, sensitivity to cultural contexts of abuse, and the social-psychological causes of violence.

The program, in partnership with the national nonprofit Animals and Society Institute, is taught through the School of Social Work in the College of Public Programs at the Downtown Phoenix campus. An advanced program that includes clinical supervision also is available.

Courses also teach how the types of abuse and motivations for animal cruelty vary.

For example, "Dogs are more likely to be abused while being disciplined, and cats are more likely to be killed and tortured," says Risley-Curtiss, who is one of just 100 advisors globally for the Oxford Centre for Animal Ethics.

Males are more likely to physically abuse animals, she says, but the typical "hoarder" – someone who keeps many animals with insufficient resources to properly treat them – is a middle-aged woman.

Risley-Curtiss also is developing an assessment and diversion program for children who are abusing animals. The School of Social Work has helped to coordinate field work for several graduate students in organizations that incorporate the human-animal bond, including the Maricopa County Sheriff's Office MASH Unit, a no-kill shelter for abused animals.

"We're so human-centric as a society that it's hard to get people interested in looking at animal cruelty unless we can directly relate it to the human benefits," she says. "By treating animal cruelty, particularly in children, we're assisting in preventing other forms of violence."

Risley-Curtiss points to a recent case in which she studied a 12-year-old boy who feels driven by an instinct to hurt animals. He hates cats with a passion.

"If this kid doesn't get help, he almost certainly will go on to hurt people," she says.

For information, visit the Web site <http://ssw.asu.edu/portal/academic/certificates/animal-abuse> or call Risley-Curtiss at (602) 496-0083.

Schubert, with the College of Public Programs, can be reached at (602) 496-0406 or corey.schubert@asu.edu.

College of Human Services

Field education program offers 'real-world' lab

"The field internship experience provides you an opportunity to put into practice the lessons learned in the classroom. Most students report that their greatest learning experiences occurred during their internship."

– College of Human Services, Social Work Web site

By Steve Des Georges

Imagine the possibilities if one could fit eight years' worth of community service into a single academic calendar. Picture the changed lives. See in your mind's eye the bright promise of hope. Soak in the caring that could take place.

It's exactly what is happening through the hard work and dedication of the students and faculty in the College of Human Services' Social Work Field Education program directed by faculty member Sandra Ealy.

In the 2007-2008 school year, Ealy's charges – 43 undergraduate and 93 graduate students – were placed in 69 agencies throughout the greater Phoenix metropolitan area and across the state. Collectively, the students contributed more than 68,000 hours of social work services – the equivalent of nearly eight years – to children and adults, low-income families, the elderly, dying individuals and their loved ones, and others.

"The internship program allows students the opportunity to practice those theories, skills and interventions that are learned in the classroom," says Ealy, who joined the Department of Social Work in the College of Human Services in 2001. "It is a time for students to observe other professional social workers as they work with disadvantaged, oppressed or vulnerable populations."

One of the many success stories belongs to graduate student Sarah Brook and her recent internship with Catholic Charities in Phoenix, where she served under resettlement director Joanne Morales. During a five-month service, Brook offered support to refugees by providing mental health education and in-home visits to families facing significant adjustment issues.

Although Catholic Charities was established in Phoenix in 1933, the resettlement of refugees in 1975 was a fledgling, just-emerging program. In the past 33 years, the program has grown and evolved, and it is recognized nationally as a leader in the effective, compassionate resettlement of thousands of refugees. Today, the Phoenix refugee program boasts a continuous talent resource provided by student interns.

"The interns bring many skills to our unique program," says Morales, who has worked with ASU interns for three years at Catholic Charities. "First, they are highly prepared, skilled, thoughtful and dedicated to the profession. They bring with them



ASU College of Human Services faculty member Sandra Ealy directs a Social Work Field Education program that is helping those in need.

new developments in the field, which enables our program to evolve with emerging best practices. They bring creativity and have new ways of looking at situations."

Brook is certainly among those whose drive has influenced the lives of the community's refugee population, although her work for Catholic Charities might have seemed like *déjà vu*.

Before entering her graduate studies at ASU's West campus, Brook was a case manager at the Urban Pathways Olivieri Drop-in Center for Homeless Women in New York, providing a full range of counseling and case management services while also creating and directing a client leadership council designed to provide a forum to assist clients in the identification and prioritization of center issues.

Before that, Brook was a resident worker at New York's Maryhouse Catholic Worker, where she co-managed and operated the House of Hospitality, providing shelter, clothing and meals for homeless live-in guests and others. She also was a clothing distribution organizer for the Holy Name Center for Homeless Men in New York, where she implemented clothing distribution and informally counseled clientele.

Having established a résumé of social work that dates to 2000, the graduate of the University of Notre Dame (she earned her bachelor's degree in liberal studies in 2006) added to it with her five month, 340-hour internship at Catholic Charities.

The experience taught her life lessons different from her classroom curriculum.

"There's no amount of school learning that can fully equip you for developing effective working relationships with clients," says Brook, who will earn her master's in social work this spring. "In working with clients from very different cultures than my own, I had to learn – and I'm still learning – to walk the fine line between respecting their cultural values and maintaining a degree of professionalism as a social worker. To me, respecting someone else's culture means not prioritizing my values above theirs."

"The internship gives you the chance to

put all you've learned into action, and also to begin to understand and develop your own particular way of practicing social work."

Morales, whose introduction to Catholic Charities came through her MSW field placement while at ASU, points to the internship program as a critical stage in a social worker's development.

"One of the strongest components we can develop is cultural competency and international issues within social work," Morales says. "The students are working with clients from all over the world. They learn about compassion and how to be effective advocates. Sarah impressed me with her thoughtfulness and her respect for our clients and her work."

Ealy, a clinical professional who earned her bachelor's in social work from Temple University and her master's degree in social work from the University of Michigan, says the program also serves as reinforcement to students of the honor involved in the social work field.

"They will learn a very important lesson," she says. "They come to realize that their passion for those whom they serve – and the commitment to the profession – is one of the highest callings one human being can have."

"They learn and experience a discipline that can work with all types of individuals, families, communities and organizations, because each of these have strengths that can help change to happen."

For Brook, the fieldwork she completed – and the lessons learned during her College of Human Services internship with Catholic Charities – were important ingredients in the overall mixture that is necessary in the building of healthy communities.

"Working in the field this way is the only way to integrate your own ideals into the reality of what the profession requires," she says. "It is the starting point to define your own method of social work practice."

Des Georges, with Public Affairs at the West campus, can be reached at (602) 543-5220 or stephen.desgeorges@asu.edu.

Lifelong learning offerings span metro Phoenix

By Matt Crum

Fall educational offerings from ASU's Osher Lifelong Learning Institute will span the Valley from Sun City Grand in the northwest to ASU's Polytechnic campus in the southeast.

Classes also will be offered on ASU's West campus and at the Tempe Public Library through a partnership with Tempe Connections. Additionally, an "Art Inspiring Art" workshop will take place downtown at the Phoenix Art Museum.

"We're pleased to make high-quality educational offerings for mature adults available to more Valley residents," says Diane Gruber, director of ASU's Osher Lifelong Learning Institute. "With intellectually stimulating short courses, lectures, workshops, and travel opportunities, there's something to match everyone's interests."

Courses are taught by ASU professors, emeritus faculty and top community instructors, with a range of topics such as film, foreign affairs, Arizona history, and contemporary medicine.

Among the course offerings this fall at Sun City Grand are "Ancestral Puebloan People" and "How Your Brain Works." On ASU's West campus, community members can choose from classes including "What Do Diseases Look Like? Revealed Through the Fascinating World of Radiology" and "Monday Nights at the Opera."

"The opera class has been very popular, and we're expanding its scope this fall," Gruber says.

The class, presented in partnership with Arizona Opera, will address topics including French opera and 19th century Italian opera. Arizona Opera docents will preview upcoming Arizona Opera productions and live digital broadcasts of Metropolitan Opera productions to be shown in local movie theaters.

Courses to be held at the Tempe Public Library include "The First 100 Years of Quantum Physics" and "Appreciating Jazz." At ASU's Polytechnic campus in Mesa, short courses on topics including "Writing Family History" are offered along with several free lectures. The free lectures cover a variety of subjects, such as "The Presidential Campaign and the Media" and "Happiness, Virtue and Love."

The "Art Inspiring Art" workshop at the Phoenix Art Museum explores ekphrasis, a device in which one artistic medium directly inspires another. Participants will create their own written works inspired by the masters and guided by Catherine Hammond, Arizona poet and Roster Artist for the Arizona Commission on the Arts.

Members of the ASU Osher Lifelong Learning Institute enjoy benefits that include electronic access to the vast holdings of the ASU Library system, and community borrower privileges at ASU's Polytechnic and West campus libraries.

Most fall classes start in October, and registration procedures vary by location. Details are available at <http://lifelonglearning.asu.edu>.

Crum, with Public Affairs at the West campus, can be reached at (602) 543-5209 or matt.crum@asu.edu.

Insight On campus

September 12, 2008

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Former CNN anchor back on airwaves – and in class, too

By Julie Newberg

Aaron Brown may be back on television, but his heart is still in the classroom.

The former CNN anchor returned to the airwaves this year as host of "Wide Angle," a weekly PBS series of documentaries covering little-reported stories happening throughout the world. He tapes the show during the summer and returns to teaching at the Walter Cronkite School of Journalism and Mass Communication during the school year.

"PBS feels like a natural home to me," Brown says. "There's also something quite magical about walking into the classroom and seeing 20 faces staring back at you."

Brown, who made his mark in broadcast history when he tirelessly covered the terrorist attacks in New York and Washington, D.C., on Sept. 11, 2001, is now responsible for a series of documentaries that examine global issues such as the war in Darfur and Japan's emerging military.

"I've enjoyed working in front of a PBS audience," he says. "They are more demanding. They get that good journalism matters."

Making an international story interesting is a process of good storytelling and relevance, Brown says. Covering the story of 2 million Iraqi refugees is something that has obvious implications in this country, considering that the United States took in 450 Iraqi refugees last year, while Sweden took in 40,000.

"These are 2 million people who are hopeless and without homes," he says.

In the classroom, Brown examines pivotal moments in television news history from the assassination of President John F. Kennedy in 1963 – when "television news was born," he says – to coverage of the Vietnam war.

He says he tries to cover overarching themes of how TV changes events, how events change TV – and how technology changes both.

"Because the fall class will be right in the guts of the presidential campaign, we'll probably spend more time on TV and politics," he says.



TOM STORY PHOTO

Former CNN anchor Aaron Brown returned to the airwaves this year as host of "Wide Angle," a weekly PBS series of documentaries covering little-reported stories happening throughout the world.

Brown also makes a point of engaging each student and finding out what they want to get out of the class.

"It matters a great deal to me that I know every young man and woman in the class, that I know how they think, what drives them, and where they want to go," he says. "Getting to know them helps me to teach them."

Samuel Burke works with Brown as his teaching assistant.

"Aaron runs his classroom much in the way someone would anchor a newscast or run a newsroom," Burke says. "In other words, he breaks the college professor mold. Aaron relies heavily on video content, and

(See FORMER on page 8)

Software gives boost to online education effort

By Joe Kullman

Research to improve software technologies for online education and long-distance research collaboration will be supported by a \$1.2 million National Science Foundation grant for the third phase of a project led by Andreas Spanias, a professor in the Department of Electrical Engineering.

Spanias' team is working on designing computer software geared to online education programs, including enabling distance learners to participate in laboratory classes over the Internet. The software also will be adapted to help researchers in different locations work together more effectively over the Internet.



Andreas Spanias

Java Digital Signal Processing (J-DSP) software will aid instruction and lab work for online courses and research in earth sciences, engineering, multimedia technology, computer-generated music, electrical power systems, and genomics, among other areas.

The goal, Spanias says, is for the J-DSP software to provide "a graphical interface that is user-friendly, freely accessible and capable of supporting multidisciplinary research and education applications. You would need only a Web browser to use it."

The ASU research team also includes Harvey Thornburgh and Ellen Campana, both assistant professors in the Arts, Media and Engineering program, and Stephen Goodnick, ASU's associate vice president of research, as well as Department of Electrical Engineering faculty members, including associate researcher Susan Haag, research technologist Christophe Legendre, associate professors Raja Ayyanar and Martin Reisslein, and professors Marco Saraniti, Antonia Papatreou-Suppappola, Cihan Tepedelenlioglu and Trevor Thornton.

ASU is the lead university on the third phase of this project, with three other university partners and three additional test sites. The ASU Java-DSP lab was allotted more than \$1 million from this collaborative grant to develop algorithms and software for J-DSP.

Partner universities, which will test the new software in online courses and research, are Johns Hopkins University, the University of Washington-Bothell, and Prairie View

(See SOFTWARE on page 8)

American journalist Trillin to discuss 'The Writing Game' at ASU

By Ashley Lange

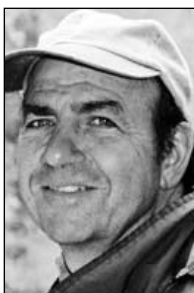
Readers of the political journal the *Nation* know Calvin Trillin for his clever and often biting "Deadline Poet" features: satirical comic verses that lampoon politics – and, of late, the presidential race.

Yet others know Trillin as an author of humorous books that chronicle his escapades as a "happy eater" or for his memoirs, including a tribute to his late wife. Still others know the Kansas City, Mo., native as a staff writer for the *New Yorker*, where he produced a highly praised series of articles called "U.S. Journal."

This versatile and best-selling author, journalist and humorist will deliver the Jonathan and Maxine Marshall Distinguished Lecture at 7 p.m., Sept. 30, at ASU's Gammage Auditorium on the Tempe campus. The title of the lecture is "The Writing Game."

The lecture, sponsored by ASU's College of Liberal Arts and Sciences, is free and open to the public, though tickets are required.

Tickets can be reserved online at clas.asu.edu/Marshall



Calvin Trillin

Lecture. They also will be available at the ASU Bookstore.

Trillin, who earlier this year was elected a member of the American Academy of Arts and Letters, graduated from Yale in 1957. After serving in the military, he joined *Time* magazine, where he covered the South from the Atlanta bureau before becoming a writer for *Time* in New York.

Throughout his career, Trillin has produced columns for *Time* and the *Nation*, some of which have been collected in five books.

Trillin is the author of several *New York Times* best-sellers, including his collection of comic verse about the current Bush Administration, "Obliviously On He Sails: The Bush Administration in Rhyme," and the sequel, "Heckuva Job: More of the Bush Administration in Rhyme." Trillin also has written extensively about regional American cuisine, including "The Tummy Trilogy," which details his travels and experiences eating across America.

Trillin's more personal works include the tribute to his late wife, "About Alice," described by many reviewers as a love story, and the acclaimed "Remembering Denny," about a classmate and friend from Yale University who committed suicide. Trillin also wrote "Messages from my Father" about his relationship with his father.

The Jonathan and Maxine Marshall Distinguished Lecture Series brings to ASU nationally known scholars concerned with promoting culture through the humanities and a better understanding of the problems of democracy. The annual lecture series has been supported since 1993 by the Marshalls, retired publishers of the *Scottsdale Daily Progress*, and the Marshall Fund of Arizona.

"My wife and I spent most of our lives interested in what was going on in the world politically," Jonathan Marshall says. "We've endowed this lecture because we felt it was important to bring really great minds to Arizona and ASU who would stimulate thinking."

The lecture series has featured notable journalists, including *Newsweek's* Jon Meacham, Robin Wright, Seymour Hersh, Paul Krugman, Arthur Schlesinger Jr., Daniel Goldhagen, Doris Kearns Goodwin and Robert F. Kennedy Jr.

"Journalism is one of the highest callings there is," Marshall says. "Good journalism is essential to democracy. With good journalism, you have good government."

For more information, call (480) 965-1441.

Lange, with the College of Liberal Arts and Sciences, can be reached at ashley.lange@asu.edu.



Events are free, unless otherwise noted. Items in the "Exhibitions" section run at exhibit opening and on the first of each month only. Building abbreviations are listed according to the official ASU phone directory. Send information to Judith Smith at jps@asu.edu or fax (480) 965-2159. For information about ASU events, visit the Web at <http://events.asu.edu>.

Meetings

■ Tuesday, Sept. 16

Public Art and Design Review Council, 8-10 a.m., University Services Building (USB) conference room 2105. (480) 965-1855.

■ Tuesday, Sept. 23

Phi Delta Gamma, 11:30 a.m.-1 p.m., Interdisciplinary B-365. Phi Delta Gamma is an honor society for graduate students. Information: (480) 965-4821.

Lectures

■ Monday, Sept. 15

CAP LTER All Scientists Meeting, 3 p.m., Global Institute of Sustainability (GIOS) room 481. Jianguo Wu, Charles Redman and other members of the Land Use and Land-Cover Change IPA of the Central Arizona-Phoenix Long-Term Ecological Research project will provide the presentation. Information: (480) 965-2975.

■ Tuesday, Sept. 16

"A Texture Synthesis Approach to Euler's Elastica Variational Inpainting," noon, Engineering Center (EC) G-317. Speaker: Kangyu Ni, Department of Math and Statistics, ASU. A Computational and Applied Mathematics Proseminar. Information: (480) 965-3951.

■ Wednesday, Sept. 17

Constitution Day Lecture, "Eighth Amendment, Cruel and Unusual Punishment," 1:30-2:30 p.m., Hayden Library room C6East. Speaker: Robert McWhirter, Maricopa Legal Defender's Office. Information: (480) 727-7636.

"The Inconvenient Truth About Phoenix," 2 p.m., Fulton Center sixth-floor board room. Speaker: Patricia Gober, professor of geography, ASU. A colloquium sponsored by the Emeritus College. Information: (480) 965-0002.

■ Thursday, Sept. 18

"Neural Estrogen Receptors and Sex Differences in Stress and Anxiety," noon-1 p.m., College of Medicine's Virginia G. Piper Auditorium, 550 E. Van Buren, Phoenix. Speaker: Robert Handa, College of Medicine-Phoenix. Information: (602) 827-2102.

"What Should a Professional Do When No One is Watching?" 2:15 p.m., Picacho Hall room 150, Polytechnic campus. Speaker: Michael S. Pritchard, William A. Brown Professor of Philosophy and co-director, Center for the Study of Ethics in Society, Western Michigan University. Sponsored by Lincoln Center for Applied Ethics and ASU School of Applied Arts and Sciences. Information: joseph.herkert@asu.edu.

"Computational Microscopy of the Living Cell," 7:30 p.m., PS H-150. Klaus Schulten, professor, Department of Chemistry, University of Illinois, delivers the annual Eyring Lecture. Sponsored by Department of Chemistry and Biochemistry. Information: (480) 965-2747.

■ Friday, Sept. 19

"Memory Networks: From Molecules to Behavior," 2-3 p.m., LS E-104. Speaker: Uli Mueller, Freie Universität Berlin Institut für Biologie-Neurobiologie. Information: (480) 965-2705.

"Physics of Photosynthesis in Purple Bacteria," 3:40 p.m., PS H-152. Klaus Schulten, professor, Department of Chemistry, University of Illinois, gives the annual Eyring Lecture Technical Presentation. Sponsored by Department of Chemistry and Biochemistry. Information: (480) 965-2747.

■ Saturday, Sept. 20

"Set in Stone But Not in Meaning: Southwestern Indian Rock Art," 1 p.m., Deer Valley Rock Art Center, 3711 W. Deer Valley Road, Phoenix. Speaker: Archaeologist Allen Dart, director, Old Pueblo Archaeology Center, Tucson. Information: (623) 582-8007.

■ Monday, Sept. 22

"From Illustration to Decoration: Maurice Denis reads Paul Verlaine and André Gide," 3-4:30 p.m., Durham Language and Literature Building (LL) room 165. Speaker: Frederic Canovas, associate professor of French, School of International Letters and Cultures. Part of the SILC Work-in-Progress Lecture Series. Information: silc@asu.edu or (480) 965-6281.

■ Wednesday, Sept. 24

Distinguished Lecture Series, 7 p.m., PS F-173. Speaker: Carlos Bustamante, University of California-Berkeley. Sponsored by Department of Physics. Information: (480) 965-9075.

■ Thursday, Sept. 25

Physics Colloquium, 4 p.m., PS F-123. Speaker: Carlos Bustamante, University of California-Berkeley. Sponsored by Department of Physics. (480) 965-9075.

■ Friday, Sept. 26

Sustainability Discussion, 10-11:30 a.m., Union Annex Ballroom, Polytechnic campus. Speakers: Jonathan Fink, director of the Global Institute for Sustainability and University Sustainability Officer; Charles Redman, director, School of Sustainability; and Bonny Bentzin, manager, University Sustainability Business Practices. Hosted by vice president and dean Keith Hjelmstad. R.S.V.P.: CTIRSV@asu.edu by Sept. 22.

"The Role of Engineers in Public Policy," 2-3 p.m., PS H-153. Speaker: Johné Parker, University of Kentucky. Sponsored by Mechanical and Aerospace Engineering Department. Information: (480) 727-0476.

"Autoantibody-induced Neuroinflammation: Neuropsychiatric Syndromes in Lupus-prone Mice," 2-3 p.m., LS E-104. Speaker: David A. Lawrence, head, Cellular Immunology, New York State Department of Health. Sponsored by School of Life Sciences. Information: (480) 965-2705.

Conferences

■ Thursday, Sept. 18

"Can We Talk? Tools for Creating Civil Discourse," 8-11:45 a.m., Arizona Biltmore Resort, 2400 E. Missouri Ave., Phoenix. A conference on methods for cultivating civil discourse in diverse settings. Sponsored by Arizona Chap-

ter of the Association for Conflict Resolution, with support from ASU's Conflict Transformation Project. Conference registration: \$60. Information: (480) 209-1295 or <https://www.123signup.com/event?id=tsdbc>.

■ Friday, Sept. 26

"Is Form-Based Coding in Your Future?" 8:30 a.m.-5:30 p.m., Planning + Design Academy at PURL, 234 N. Central Ave., Phoenix. Admission. Continues Sept. 27. Information: (480) 727-9819 or laurel.arndt@asu.edu.

Miscellaneous

■ Saturday, Sept. 13

Fall Service Plunge Day of Service, 9 a.m.-1:30 p.m., two Phoenix locations. Lunch and transportation provided. Sponsored by ASU Community Service Program. Information: (480) 965-0305 or volunteer@asu.edu.

Sun Devil Football Tailgate, 5-7 p.m., University Club. Barbecue buffet \$10 per person, including soda or iced tea. Reservations: (480) 965-0701.

■ Monday, Sept. 15

"Classroom Assessment Techniques: An Introduction," 12:15-1:30 p.m., Discovery Hall room 212 (formerly AG). Sponsored by the Center for Learning and Teaching Excellence. Information and registration: <http://clte.asu.edu>.

Clean Election Debate, 6:30 p.m., Mercado, 502 E. Monroe St., Phoenix. Candidates in District 16 will speak. Information: (480) 965-0100.

■ Tuesday, Sept. 16

"Cooperative Learning Techniques II," 12:15-1:30 p.m., Discovery Hall 212. Sponsored by the Center for Learning and Teaching Excellence. Information and registration: <http://clte.asu.edu>.

■ Wednesday, Sept. 17

Clean Election Debate, 6:30 p.m., University Center Building (USB) La Sala Ballroom. Candidates in District 10 will speak. Information: (480) 965-0100.

■ Thursday, Sept. 18

"The Learning Cycle I: Writing Effective Learning Objectives," 12:15-1:30 p.m., Discovery Hall 212. Sponsored by the Center for Learning and Teaching Excellence. Information and registration: <http://clte.asu.edu>

■ Friday, Sept. 19

Brown Bag reading, noon, Emeritus College Center, Wilson Hall (WILSN) room 101. Sponsored by Emeritus College. Information: (480) 965-0002.

"Communicating Assignment Expectations Through Rubrics," 12:15-1:30 p.m., Discovery Hall 212. Sponsored by the Center for Learning and Teaching Excellence. Information and registration: <http://clte.asu.edu>.

"The Poetry of Social Protest," 2-3:30 p.m., Durham Language and Literature Building (LL) room 316. A reading and discussion sponsored by the English Club. Information: (480) 965-7611.

Decision Theater tour, 3-4 p.m., Decision Theater, 21 E. 6th St., suite 126A, Tempe. Information: Michele.nobles@asu.edu.

Science Café, 5:30-6:30 p.m., Arizona Science Center, 600 E. Washington St., Phoenix. The topic "Is Nanotechnology Good for Sustainability ... or Not?" will be discussed by George Maracas, Brad Allenby and Patrick Phelan – two engineers, and a professor of ethics and industrial ecology.

EMPLOYMENT

The following positions are available as of Sept. 12 and are subject to change. All positions will be advertised in *Insight* only once. The staff requisition or job order number for each position is indicated by the (#) sign. ASU is an equal opportunity-affirmative action employer.

ASU POSITIONS

A complete job announcement for classified, administrative and service professional positions at the Downtown Phoenix, Polytechnic, Tempe and West campuses is available on the Human Resources Web page at www.asu.edu/asujobs, or the Telecommunication Device for the Deaf at (480) 965-3002.

For complete position descriptions and application requirements for academic positions, contact the appropriate department listed below. Faculty, academic professional and graduate assistant positions are also listed on the Human Resources Web sites and details must be obtained from the hiring department. Application deadlines are listed.

Dates listed are application deadlines, and application material is due by 11:59 p.m. on that date. Positions are 100 percent, full-time employment (FTE) unless otherwise noted. Code below is: (O) – position is open to the public.

STAFF POSITIONS

TEMPE CAMPUS

Professional

Accounting Specialist (O) #20825 – Financial Services (Sept. 19).
Analyst Senior Systems Support (II) (O) #20904 – Ira A. Fulton School of Engineering (Sept. 26; every week thereafter until search is closed).
Coordinator (O) #20912 – College of Liberal Arts and Sciences and the Center for Film, Media and Popular Culture (Sept. 17).
Coordinator of Events (O) #20907 – Herberger College of the Arts (Oct. 3).
Disability Access Consultant (O) #20838 – VP University Student Initiatives (Sept. 19).
Events Attendant-Floor Manager (part-time) (O) #20787 – Public Events-Gammage (Sept. 26).

Events Coordinator Assistant (part-time) (O) #20758 – Public Events (Sept. 24).

Health Research Analyst (O) #20783 – Ira A. Fulton School of Engineering, School of Computing and Informatics (Sept. 24).

Management Intern (part-time) (O) #20765 – VP University Student Initiatives (Sept. 19).

Program Manager (O) #19605 – VP University Student Initiatives/Student Financial Assistance (Sept. 26).

Administrative support

Financial Aid Specialist (O) #20845 – VP University Student Initiatives-Student Financial Assistance (Sept. 19).

Library Assistant (part-time) (O) #20905 – University Libraries (Sept. 17).

Office Assistant/Receptionist (O) #20858 – W. P. Carey school of Business/MBA Programs (Sept. 17).

Office Specialist Senior (O) #20531 – Associated Students of ASU (Sept. 19).

Secretary Administrative (O) #20443 – College of Liberal Arts and Sciences (Sept. 17).

Service/field craft/maintenance

Grounds Assistant Supervisor (Facilities Management) (O) #19764 – University Services (Sept. 19).

Groundskeeper (Facilities Management) (O) #20301 – University Services (Sept. 19; every week thereafter until search is closed).

WEST CAMPUS

Professional

Student Support Specialist #20729 – New Student Programs (Sept. 24).

DOWNTOWN PHOENIX CAMPUS

Professional

Program Manager (O) #20811 – Walter Cronkite School of Journalism and Mass Communication (Sept. 19).

Administrative support

Library Assistant Senior (Part-time) (O) #20846 – University Libraries (Sept. 17).

ACADEMIC POSITIONS

TEMPE CAMPUS

Assistant Professor #9203 – School of International Letters and Cultures (Oct. 31; every week thereafter until search is closed).

Assistant Professor #9209 – School of International Letters and Cultures (Oct. 31; every week thereafter until search is closed).

Assistant Professor #9210 – School of International Letters and Cultures (Nov. 15; every week thereafter until search is closed).

Assistant Professor #9204 – W. P. Carey School of Business – Management (Oct. 1; if not filled, then every two weeks thereafter until search is closed).

Assistant Professor #9205 – W. P. Carey School of Business – Management (Oct. 1; every two weeks thereafter until search is closed).

Assistant/Associate Professor #9206 – Hugh Downs School of Human Communication (Oct. 31; every week thereafter until search is closed).

Assistant/Associate Professor #9207 – Hugh Downs School of Human Communication (Oct. 31; every week thereafter until search is closed).

Associate Professor #9208 – College of Liberal Arts & Sciences – English (Oct. 31; every week thereafter until search is closed).

Faculty Associate #9156 – University College – American English & Culture Program (Sept. 19; every week thereafter until search is closed).

Sponsored by the Center for Nanotechnology in Society. Information: (602) 716-2000.

■ Saturday, Sept. 20

Sun Devil Football Tailgate, 3-5 p.m., University Club. Barbecue buffet \$10 per person, including soda or iced tea. Reservations: (480) 965-0701.

■ Monday, Sept. 22

Clean Election Debate, 6:30 p.m., ASU Kerr Cultural Center, 6110 N. Scottsdale Road, Scottsdale. Candidates in District 8 will speak. Information: (480) 965-0100.

■ Tuesday, Sept. 23

Clean Election Debate, Student Union Cooley Ballroom, Polytechnic campus. Candidates in District 22 will speak. Information: (480) 965-0100.

Discussion of "Red Cavalry" by Isaac Babel, 7 p.m., Hayden Library room C6A/East. Part of a monthly series titled "Let's Talk About it: Jewish Literature." Information: Rachel Leket-Mor, (480) 965 2618.

■ Wednesday, Sept. 24

Clean Election Debate, 6:30-8 p.m., SkySong. N. Scottsdale Road and SkySong Way, Scottsdale. Candidates in District 17 will speak. Information: (480) 965-0100.

■ Friday, Sept. 26

Ollie's Storybook Adventures, 10-11 a.m., Deer Valley Rock Art Center, 3711 W. Deer Valley Road, Phoenix. Theme is "Desert Sounds." For children ages 3 to 6 and their parents. Admission. Information: (623) 582-8007.

"Locating Funding," 3-4:45 p.m., Computing Commons (CPCOM) room 107. Sponsored by Office for Research and Sponsored Projects Administration. Information and registration: <http://researchadmin.asu.edu/Training/workshops.cfm>.

Clean Election Debate, ASU Research Park ASML Training Center, 2010 E Centennial Circle, Tempe. Candidates in District 20 will speak. Information: (480) 965-0100.

Astronomy Open House, 8-10 p.m., PS roof H Wing (fifth floor). Information: (480) 965-7652 or <http://homepage.mac.com/agfuentes/openhouse.html>.

Events and Performances

*Indicates tickets available at Herberger College of Fine Arts Box Office, Nelson Fine Arts Center, (480) 965-6447.

■ Sunday, Sept. 14

Katie McLin, violin and Andrew Campbell, piano, 2:30 p.m., Katzin Concert Hall.*

■ Monday, Sept. 15

Faculty artists Catalin Rotaru, bass, and Jonathan Swartz, violin, 7:30 p.m., Katzin Concert Hall. A student string quintet also performs violin and cello repertoire.*

■ Tuesday, Sept. 16

"American Art Song Recital," 7:30 p.m., Katzin Concert Hall.

■ Thursday, Sept. 18

Wind concert, 7:30 p.m., ASU Gammage. Audience will get to choose whether to hear about the music, blog about the concert, talk about it, or just listen!

■ Friday, Sept. 19

"ELINA's LINEAge," 7:30 p.m., Paul V. Galvin Playhouse. A gala tribute to long-serving ASU Herberger College Dance faculty member Elina Mooney. Continues at 7:30 p.m., Sept. 20; 2 p.m., Sept. 21.*

■ Sunday, Sept. 21

"Esprit Rude – Esprit Doux," 2:30 p.m., Katzin Concert Hall. Performing: flautist Elizabeth Buck and clarinetist Robert Spring.*

■ Friday, Sept. 26

"We Won't Pay! We Won't Pay!" 7:30 p.m., Lyceum Theatre. A rollicking comedy of stolen groceries, hysterical pregnancies, political awakenings and hilarious comeuppances by Nobel Prize winner Dario Fo. Continues at 7:30 p.m., Sept. 27 and Oct. 2-4; 2 p.m., Sept. 28 and Oct. 5.*

Exhibitions

ASU Art Museum, Nelson Fine Arts Center – Regular hours: 11 a.m.-9 p.m., Tuesday; 11 a.m.-5 p.m., Wednesday-Saturday; 1-5 p.m. Sunday. Summer hours: 10 a.m.-5 p.m., Tuesday-Saturday. Information: (480) 965-2787

Through Sept. 28, "NOW: Selections from the Ovitz Family Collection." Reception: 7-9 p.m., Sept. 26.

Gallery 100 – 1-5 p.m., Monday-Thursday; 1-3 p.m., Friday. Tempe Center, suite 199. Information: (480) 965-2380.

Opens Sept. 22, "Craftmanship 2008." Opening reception: 7-9 p.m., Sept. 22. Second Arizona Designer Craftsmen juried exhibition.

Harry Wood Gallery – 9 a.m.-5 p.m., Monday-Thursday; 9 a.m.-3 p.m., Friday, Art Building, first floor. Information: (480) 965-3468.

Opens Sept. 15, MFA thesis exhibition in painting by Christine Wuenschel. Reception: 7-9 p.m., Sept. 15.

Opens Sept. 22, MFA thesis exhibition in fibers by Mindy

Sue Meyers. Opening reception: 7-9 p.m., Sept. 22.

Hayden Library Rotunda – normal library hours. Information: (480) 965-6164.

Through Sept. 30, "Surveying Arizona: Select Photographs from the Arizona Historical Foundation Collection." For more than 100 years, Arizona has been surveyed and photographed from a variety of perspectives.

Hayden Library Arizona Historical Foundation Collection – 8 a.m.-5 p.m., Monday-Friday. Information: (480) 965-3283.

Through Dec. 31, "Murder & Mayhem: The Strange Saga of Winnie Ruth Judd." Was Arizona's famous "Trunk Murderess" Winnie Ruth Judd guilty, or insane – or did she shoot in self-defense? This exhibit includes more than 100 original photos of the saga that remains a mystery.

Interdisciplinary Arts and Performance Gallery – 11 a.m.-2 p.m., Monday-Thursday, University Center Building, Room 228, West campus. Information: (602) 543-ARTS. Tours: (602) 543-8152.

Opens Sept. 30, "Twenty Irish Printmakers Respond to the Schwemberger Photographs." The Schwemberger Photographs is a collection of more than 100 compelling images of American Indian peoples, homes and landscapes dating back to 1902.

Through Sept. 25, "Poesia=Imagen: Celebrating Hispanic Heritage Month." Faculty Artist Leandro Soto's solo show works with poets of the Hispanic tradition in an interdisciplinary exhibition honoring Hispanic Heritage Month.

Museum of Anthropology – 11 a.m.-3 p.m., Monday-Friday, Cady and Tyler Malls. Information: (480) 965-6224.

Through Oct. 3, "Mosaic: Cultural Identity in America" and "Fuse: Portraits of Refugee Households in Metropolitan Phoenix."

Night Gallery – 6-9 p.m., Thursday-Sunday, 2000 E. Rio Salado Parkway, suite 1021, Tempe. Information: (480) 965-3468.

Through Sept. 28, "Ornaments." ASU graduate Michael Anderson exhibits large-scale sculptures that resemble Christmas ornaments.

Step Gallery – noon-5 p.m., Monday-Thursday; noon-3 p.m., Friday, Tempe Center, 10th Street and Mill Avenue. Information: (480) 965-3468.

Through Sept. 19, "Mandala."

Defenses

Anusorn Payakkakom, PhD, Coun. Psy., 10 a.m., Sept. 16, EDB 401/6A.

Herberger schools develop sustainable production practices

By Judith Smith

When Kimberly Marshall, director of the ASU Herberger College School of Music, attended the grand opening of ASU's Global Institute of Sustainability in May, she came away fired up to "go green."

"I was so inspired. I thought, 'How can the School of Music get on board?'" she says.

It turns out that Marshall wasn't the only one thinking in those terms.

Others in the School of Music, and in the School of Theatre and Film, already had ideas and were talking about what the schools could do to save resources – and funds.

One of the first topics of discussion in the School of Music was programs.

What if information about performances were projected in the concert halls and posted in the lobbies? Would audience members mind? What would they do without programs to read and shuffle?

Bill Symington, technical director for the School of Music's Lyric Opera Theatre, went to Marshall with an idea for how to project information in Katzin Concert Hall, Recital Hall and the Evelyn Smith Music Theatre. (ASU Gammage, where the school's larger ensembles perform, doesn't have the necessary projection equipment.)

"We throw out 8,000 programs a year that never get used," Symington says. "Occasionally, someone will keep one for a scrapbook, but people take them home and put them in the trash. I just thought there must be a more

environmentally responsible way to get the audience information."

Marshall and Gary Hill, director of bands, estimate that, over the course of a year, the School of Music uses a minimum of 500,000 sheets of paper for programs for its 650 events in all its concert halls. At, say, \$4 per ream of paper, that's a savings of at least \$40,000.

Marshall said having concert information projected on screens "will enhance the musical experience in many ways. It will help people follow the program, and they won't be dropping them on the floor."

There are still issues to be worked out, such as how long composition titles should be displayed on the screen, whether the various movements of long works should be listed and how to deal with copyright issues for some pieces.

But audiences will not be uninformed, Hill says.

"We want people to have information," he says. "We are an educational institution."

Shortly after she arrived at ASU in 2004, Linda Essig, director of the School of Theatre and Film, began thinking of ways to be more sustainable. As a lighting design expert, she investigated the possibility of a lighting upgrade for the theatrical performances, but "the energy cost payback period was too long at that time to garner university interest in supporting the initiative," she says.

Now the school is seeking \$140,000 to replace the current lighting with more

energy-efficient fixtures.

"By doing so, we can reduce our energy consumption for stage lighting by as much as 40 percent," Essig says.

At an early staff meeting last fall, Lance Gharavi, an assistant theater professor, got the ball rolling by suggesting that the school look at ways they can model sustainable practices, especially in their production practices.

It has taken a year, but the school now has its "Go Green" campaign in place.

"The list evolved over the course of several staff meetings about our production practices, and it will continue to evolve as we find additional means to reduce our environmental impact," Essig says.

The campaign list includes recycling steel, re-using old paint, minimizing the use of volatile organic compounds, exchanging materials with other organizations through the Web site www.reuseaz.org, recycling costumes and donating fabric scraps to charity, all of which already is happening.

"The scene shop sells its unusable scrap steel to scrap yards to be smelted down and reused," says Christopher Tubilewicz, scene shop supervisor. "Not only does this help the environment by reusing the material instead of sending it to a landfill, it also helps recoup some of the cost of these materials."

The scene shop also maximizes resources by mixing old show paints to create the colors needed as opposed to buying everything new for each show.

"Because latex paint and scenic paint rot, we add vinegar to the paint to kill the bacteria that causes the paint to rot," Tubilewicz says. "This practice enables us to discard far less latex paint waste."

The school's environmental goals include some small steps – and some that are more ambitious. The smaller steps include switching from latex paint to more ecologically friendly (and more expensive) paint products in the scene and prop shops, and replacing traditional hair coloring and styling products that contain heavy metals with plant-based products.

According to Essig, one of the biggest goals is to use electronic book readers or tablets in the play development process.

"The Festival of New Work consumes thousands of sheets of paper each year as plays go through the process of readings, workshop and production," she says. "New technology in lightweight tablets could reduce our paper consumption significantly and really could have affect the way new work is developed."

Lyric Opera Theatre also is applying these "green" principles in its scene and costume shop, Symington says.

"We're using more eco-friendly paint in our shops, more steel in our sets and trying to promote recycling materials as much as possible," Symington says. "We're doing it."

Smith, with Media Relations, can be reached at (480) 965-4821 or jps@asu.edu

Software boosts online education

(Continued from page 5)

A&M in Texas. Additional test sites are the University of New Mexico, the University of Cyprus and the Rose-Hullman Institute of Technology in Indiana.

As part of research supported by a National Science Foundation grant for the second phase of the project, J-DSP already is being used to support online laboratories at ASU, the University of Central Florida, the University of Texas-Dallas and the University of Rhode Island. The Massachusetts Institute of Technology recently asked ASU for permission to use the technology in their bioengineering online courses.

Spanias also is the director of the SenSip (Sensor Signal and Information Processing), a university-industry consortium developing signal and information processing capabilities for next-generation technologies for sensing applications in biomedicine, defense, homeland security, environmental sustainability, interactive media, wireless communications and vehicular systems.

Kullman, with the Ira A. Fulton School of Engineering, can be reached at (480) 965-8122 or joe.kullman@asu.edu.

Former CNN anchor Brown returns to airwaves – and classroom

(Continued from page 5)

uses that as a launching pad to engage the class and begin the discussions. Aaron knows all of the students' names by the second week, and he does that because the thing he values most in the class is participation."

Burke has parlayed working with Brown into a stint at CNN.

"Nothing could have prepared me for that more than working with Aaron last semester," Burke says. "The classroom preparation is almost identical to how a newsroom assembles a newscast."

Brown says he draws heavily on his 30 years of television experience to teach his students.

"My sense is everything I've done in my life prepared me for what I do at the university," he says. "It gave me an enormous set of experiences."

Brown tells his students that technology and media outlets are changing so fast that it's not easy to predict how news will be delivered in the years to come.

But one thing never changes: the time-honored tradition of telling a good story.

"The essential job of reporting will be unchanged," he says. "Regardless of the medium, they're going to need to find good stories with good characters that are well-reported. That's the nature of storytelling."

Students will be entering a market that is suffering from a downturn in advertising, and that affects budget and pay. But

most journalists aren't in it for the money, Brown says. They like reporting and watching history unfold from a front-row seat.

"You figuratively and literally get the best seat in the house," he says.

Brown has had that seat for many years. He has covered disasters, presidents and wars. Among the most memorable stories he has covered were watching a democracy unfold in South Africa, traveling to the Middle East to report on Iraqi refugees with his daughter, and updating the nation during and after the 9/11 attacks.

"People will always associate me with 9/11," he says. "It's a great honor to be one of the people to tell the most important story of our lives."

Lauren Proper, who took Brown's class during the spring semester, recalls learning about Brown's role that pivotal day.

"It was really emotional for everyone, but most of all Aaron," she says. "He would stop the tapes and explain to us what was going on in his head, what was happening and how everyone was dealing with piecing together the information. It was cathartic."

Brown considers it an honor to teach some of the brightest students in journalism and hold them to the highest standards. "I tell my students every day: 'Go be great,'" he says. "Good doesn't mean anything. Anyone can be good."

Newberg, with Media Relations, can be reached at (602) 496-1005 or julie.newberg@asu.edu.

In BRIEF

Female participants sought for wine study

The ASU Department of Nutrition is seeking female volunteers to participate in a study to determine the polyphenol absorption efficiency of and preference for different wines.

Participants must be 21- to 50-year-old females who weigh more than 110 pounds and are moderate drinkers. Women who are pregnant, smoke or are very active (high-intensity exercise more than three times per week) are not eligible to participate.

The study involves three afternoon visits to ASU's Polytechnic campus, with each visit about two to three hours in length.

Each visit will include consumption of one standard 5-ounce serving of wine in under 15 minutes, with the collection of three blood samples over time.

Food will be provided at about one hour after arrival, after the last blood sample has been drawn. A qualitative survey about the wine also will be administered.

To register for the study, or for more information, contact Kristen Rasmussen at kristenkrasmussen@gmail.com or leave a voice message at (480) 727-1268.

Institute schedules fall faculty seminar series

The Institute for Humanities Research is sponsoring a fall faculty seminar series around the theme "Race, Ethnicity and the Humanities."

The first session of the series will take place from noon to 1:30 p.m., Sept. 16, in room 109 of the Social Sciences Building on ASU's Tempe campus.

The featured faculty members at the first session include:

- Claudia Sadowski-Smith, (English): "What Border Fictions Tell Us About Ethnic Studies."

- Don Fixico (history): "Why Stories are Important: The Oral Tradition of Native Americans and the Human Experience."

Space is limited, and an R.S.V.P. is required to attend. To R.S.V.P., send an e-mail to ihr@asu.edu or call (480) 965-3000.

For details, visit the Web site www.asu.edu/clas/ihr/events.

Events highlight Deaf Awareness Week

Deaf students at ASU tend to blend in with our very large student body. Unless they come to class with a sign-language interpreter, you would never know they are hearing impaired.

Those students, and the staff members who work with them, want you to know more about them, and how they live their lives communicating with American Sign Language.

To that end, ASU is sponsoring and participating in a number of events during Deaf Awareness Week, Sept. 21-28, to which the public is invited.

The week begins Sept. 21 with Deaf Awareness Kick-Off, from 11 a.m. to noon in the Education Lecture Hall on ASU's Tempe campus.

From 1 p.m. to 4 p.m., Sept. 21, Arizona Deaf Theatre will sponsor an afternoon with deaf actor Robert DeMayo, also in the Education Lecture Hall.

The highlight of the week is the ASL Festival, from 10 a.m. to 2 p.m. on Hayden Lawn on the Tempe campus. The event includes signers, storytellers, shows and booths, sponsored by ASU and ASU's American Sign Language Program (ASU-ASL).

Donna Leff, a lecturer in ASU's ASL program, who maintains a blog listing events geared to the deaf, says that ASL is the fourth most widely studied language on college campuses, behind Spanish, French and German, and ahead of Italian.



FELIPE RUIZ-ACOSTA PHOTO

Joining forces to battle cancer

Jessica Franklin, right, of the American Cancer Society, chats with of Phi Gamma Delta (Fiji) members Cody Roth, left, and Charles Coryell during the Greeks Battle Cancer fundraising event Sept. 6 along Alpha Drive before ASU's football game against Stanford at Sun Devil Stadium. The Interfraternity Council event, with combined efforts from the 21 chapters represented at ASU, raised \$700 for the American Cancer Society through food purchase proceeds, silent auction purchases and donations.

For more information about Deaf Awareness Week events, visit the Web site <http://donna.blog.asu.edu>.

Phi Beta Kappa to induct student members

The Beta of Arizona Chapter of the Phi Beta Kappa Society, one of the most selective and prestigious honorary societies in the nation, will induct student members for the 2008-2009 academic year at 3:30 p.m., Sept. 26, in the Memorial Union's Alumni Lounge on ASU's Tempe campus.

Phi Beta Kappa was founded Dec. 5, 1776, by a handful of students, including President James Madison, at the College of William and Mary. Since then, liberal arts colleges and universities across the nation have strived to be granted a charter by the society.

ASU earned its charter in 1973, and the Sept. 26 event will be the 35th time the university has inducted student members.

All faculty and staff members of Phi Beta Kappa are encouraged to attend the initiation and reception. The cost for the event

is \$15 and can be paid at the door, but members should R.S.V.P. their attendance no later than Sept. 22 to Kate Lehman at (480) 965-6506.

Workshop sessions address legal issues

The Office of General Counsel will conduct its nationally recognized "Law for the University Administrator" workshop from 8 a.m. to noon, October 22-24, in the Memorial Union at ASU's Tempe campus.

The featured speaker will be William Hoye, executive vice president for administration, planning and legal affairs with International Education of Students (IES).

IES is the nation's leading study-abroad provider, with more than 80 programs in 31 cities.

Hoye will address the legal, risk and crisis management issues affecting international programs, including short-term and faculty-led programs. His presentation will be followed by a panel featuring ASU experts who will discuss these issues in the university's global activities.

A panel of ASU experts also will present and discuss other topics, including employment of foreign nationals; the Family Medical Leave Act; discrimination; harassment and retaliation; disciplinary practices; internal controls; risk management; gifts and gratuities; signature authority; conflicts of interest; and public records.

To register, visit the Web site www.asu.edu/counsel, print the registration form and send it to campus mail code 7405, attention: Lisa Zingale.

The fee for the workshop is \$100 (\$50 for any one-day session) and payment is required by Oct. 10 to maintain reserved status. The last day to request a refund is Oct. 17.

Enhancements improve visitor experiences

Parking and Transit Services officials understand that parking accommodations, and the PTS staff members themselves, often provide the first and last impression for many university visitors.

To that end, PTS is committed to providing the highest level of customer service to support university departments and their guests.

Departments at the Tempe and Polytechnic campuses can make reservations for their guests online at http://uabf.asu.edu/parking_guest_tempe or http://uabf.asu.edu/parking_guest_poly, respectively. These online reservations allow departments to make preparations for visitors' parking needs before their arrival.

Upon exiting, guests can pay with cash or by using a pre-purchased validation sticker given to the visitor by the department. In certain situations, departments can work with PTS to arrange for an event pass for a specific lot. For more information, call PTS Visitor and Event Programs at (480) 965-6209.

University departments at all four ASU campuses can buy validation stickers at a discounted rate for use at any of the ASU attended visitor lots or structures. Validation sticker rates can be viewed by visiting the Web site http://uabf.asu.edu/parking_visitor and clicking on the "ASU Departments" link. Stickers can be purchased at any campus Permit Sales office.

Many of the enhancements that were implemented to streamline the visitor reservation system came as a result of applying the suggestions PTS received after surveying departments who routinely use these services. The full survey responses, including frequently asked questions, can be viewed at http://uabf.asu.edu/parking_faq_res.

Rhetoric book takes look at 'second coming'

By Judith Smith

In the fall of 2003, Sharon Crowley, now a professor emerita of English, was browsing in her local library to find an audiotape to listen to on her commute to ASU.

For no particular reason, she picked up a tape of the novel "Left Behind" by Tim LaHay and Jerry Jenkins.

"What I heard stunned me," she wrote in her book "Toward a Civil Discourse: Rhetoric and Fundamentalism." "While waiting for class one day, I mentioned to some graduate students that I was listening to a frightening narrative involving mass disappearances, earthquakes, firestorms, and the general collapse of civilization.

"The students recognized the tale immediately. One picked up its thread while others joined in, and they recited the entire narrative of the apocalypse, from the Rapture – when Christians who are saved will be taken bodily into heaven – through the Great Tribulation and on to the Glorious Appearing, when Christ will return to establish his thousand-year reign on Earth."

Crowley wrote that she was, apparently, the only one who had never read the book of Revelation, and her interest was sparked. "I began to study Christian apocalypticism," she says.

What she found in her study frightened her on several levels, enough so to compel her to write her "swan song" book about rhetoric and Christian fundamentalism.

The book has won four major awards, and no one is as surprised as Crowley at its recognition.

Some people believe books about rhetoric "are museum pieces," she says, but rhetoric is "relevant right here, right now. I want to make rhetoric useful and alive for my colleagues across the country."

Her most recent honor is the Rhetoric Society of America Book Award for 2008. Along with receiving the award, Crowley was named a fellow by the society in recognition of her "sustained and distinguished scholarship, teaching and service."

In the preface to the book, which is aimed at the academic community, she writes that the more she studies fundamentalism, and



Sharon Crowley's book "Toward a Civil Discourse: Rhetoric and Fundamentalism" has won four major awards – and no one is as surprised as Crowley at its success.

its belief in the apocalypse, "the more intense becomes my desire not only to dissent from it, but to warn others of the ideological dangers it poses to democracy."

Crowley believes that the United States is dominated by two powerful, antagonistic discourses – liberalism and Christian fundamentalism – and that each group paints a very different picture of the United States and its citizens' responsibilities.

She sees little common ground between the two, and very little disagreement because Americans don't want to offend each other.

But how does one dissent from apocalypticism? Will its believers be willing to listen to those who disagree?

These questions are at the heart of "Toward a Civil Discourse."

Crowley shows how rhetorical principles could provide the foundation for such discussion and examines the consequences to

society when argumentative exchange does not occur.

She notes, in a chapter titled "Ideas Do Have Consequences," that Rousas John Rushdoony, "a post-millennialist and the driving intellectual force in this movement, aims to bring about apocalypse by transforming America into God's earthly kingdom as prophesied in Revelation."

Crowley quotes author William Martin on "how a reconstructed America might look" if apocalypticists have their way.

Among other things, Martin says, there would be no welfare state programs such as food stamps, unemployment or Social Security, because "families would be expected to take care of their own."

There would be no schools, so parents would have to home-school their children. The only people permitted to vote would be Christians who belonged to "biblically correct" churches.

And Martin adds that "Reconstruction also requires that the U.S. Constitution and its attendant body of law be rewritten to conform to biblical law, particularly that found in the Old Testament."

Though Crowley says this is a scenario at the very far edge, it still gives a hint of what some fundamentalists desire for the United States.

Crowley suggests rhetorical means that could be used to open dialogue between fundamentalists and liberals.

"I end with the hope that my readers will find, or open, many more paths of invention than I have been able to name here," she says.

In addition to the Rhetoric Society of America Book Award, Crowley also received the 2008 Conference on College Composition and Communication Outstanding Book Award; the Gary A. Olson Award for best book on rhetoric and cultural studies from the Association of Teachers of Advanced Composition and JAC: Journal of Advanced Composition; and the David Russell Award from the National Council of Teachers of English.

Smith, with Media Relations, can be reached at (480) 965-4821 or jps@asu.edu.

Singapore delegation to pay visit to university

A delegation from the School of Chemical and Life Sciences, Singapore Polytechnic will be visiting ASU's Polytechnic campus Sept. 17-18, to tour the university's facilities and analyze programs in nutrition, exercise, and wellness and spa management.

While the tour will show the visiting delegation, led by senior lecturer Hui Kheng Toh, ASU's state-of-the-art labs and facilities, Singapore Polytechnic is exploring the possibility of forming a partnership with ASU to provide further education opportunities to its students.

Currently, students at Singapore Polytechnic can obtain a diploma in nutrition, health and wellness, but not an advanced degree.

"They would like to see if the academic subjects in their diploma program are relevant and transfer easily if a student wishes to obtain a bachelor's degree at ASU," says Pamela Swan, an associate professor and interim chair in the Department of Exercise and Wellness in the School of Applied Arts and Sciences.

The possibility of a collaboration between programs would allow ASU students to exchange understanding in health and wellness globally, Swan says.

"An exchange experience will help our students as well as theirs to be better equipped to engage in all types of health promotion agencies, and wellness and lifestyle industries," Swan says. "There is also the possibility of research collaboration that we will be able to discuss."

The health experts will get a tour of the Exercise and Wellness Building, including the Physical Activity Center, kinesiological and physiological assessment labs, and nutrition and metabolic labs.

In the Spotlight

Judy Stinson, director of the Legal Research and Writing Program at the Sandra Day O'Connor College of Law, became president of the Association of Legal Writing Directors Aug. 1. Her new post in the national nonprofit professional association will enable her to play a more prominent role in shaping the skills of tomorrow's attorneys.



Judy Stinson

The AWLD represents more than 200 directors of legal reasoning, research, writing, analysis, and advocacy programs at more than 150 law schools throughout the United States, Canada and Australia.

Stinson joined the faculty at the College of Law 11 years ago, and she teaches in the areas of legal writing and appellate advocacy. She previously taught at the University of Illinois and practiced law for several years.

Stinson has been affiliated with ALWD for 14 years and has been a member of its board of directors for four years.

Craig Weatherup, chairman of the board of the ASU Foundation and chief executive officer of Pepsi-Cola Co., has been selected as a panelist for the Lodestar Foundation.

Weatherup joins eight other national leaders as part of the final selection panel for the Collaboration Prize.

This distinguished panel includes nationally recognized philanthropic and nonprofit leaders, accomplished business professionals who also are stewards of exemplary philanthropic endeavors and pioneers in the field of innovative collaboration. Together, they will select the Collaboration Prize winner – two or more nonprofits that have united to form a long-term collaborative model demonstrating the most exceptional business efficiencies and community impact over time.

Guillermo Reyes, an associate professor of theater and film and head of playwriting in the Herberger College School of Theatre and Film, won first prize for his play "Madison" in the Premiere Stages New Play Development Award, which

was produced by Premiere Stages in July.

Premiere Stages presents professional theater on the campus of Kean University in Union, N.J., during the summer as an on-campus Equity theater company. The state's leading daily, the *Star-Ledger*, called the play "witty and often hilarious."

"Madison" is a portrait of President James Madison as a young man.

The play has been praised for its accuracy in portraying the fourth president of the United States and his personal life.

Reyes, a native of Chile, also is the author of the plays "Chilean Holiday," "Men on the Verge of a His-Panic Breakdown," "Deporting the Divas," "Miss Consuelo," "The Seductions of Johnny Diego," "Mother Lolita" and "Places to Touch Him," among others. Two of his plays, "Miss Consuelo" and "Places to Touch Him," are published in the new anthology, "Borders on Stage: Plays Produced by Teatro Bravo."

Pat Lauderdale, a professor in the School of Justice and Social Inquiry, recently was appointed a visiting scholar at the Center for Comparative Studies in Race and Ethnicity at Stanford University. His teaching and research interests include indigenous jurisprudence, racialization, diversity, global indigenous struggles, law and the social science, and international terrorism. In the 1980s, he helped create the Herbert Blumer Institute in Costa Rica with the goal of discovering and describing alternatives to violence and criminal law.

Before coming to ASU in 1981, Lauderdale was an associate professor of sociology and law at the University of Minnesota. His seminal book "Law and Society" (with James Inverarity and Barry Feld) has been translated into Japanese, with a forthcoming version in Chinese.

Tamera Herrera, who teaches the first-year course "Legal Writing and Method" at ASU's Sandra Day O'Connor College of Law, recently wrote a book titled "Arizona Legal Research." The book was published as part of the state-law legal research series from Carolina Academic Press, which includes 12 books on legal research in states from Arkansas to Washington.

Herrera's book is being used in legal writing classes by first-year students at the College of Law.

Herrera also teaches upper-level writing classes, including "Fundamentals of Legal Drafting" and "Appellate Advocacy."

An article by ASU law professor **James Weinstein**, titled "Institutional Review Boards and the Constitution," will be reprinted in the "First Amendment Law Handbook," published by Thomson Reuters/West.

"The 'First Amendment Law Handbook' is a compendium of the year's notable articles on First Amendment matters," according to editor Rodney Smolla.

Weinstein is the Amelia D. Lewis Professor of Constitutional Law and a fellow with the Center for the Study of Law, Science & Technology.

Alfredo Artiles and **Elizabeth Kozleski** have been selected by Teachers College Press as co-editors of a new groundbreaking book series that will offer an interdisciplinary approach to disability, culture and equity issues in education.

At the Mary Lou Fulton College of Education, Artiles' research examines the ways ideologies of difference (indexed by race, language background and class) mediate schools' responses to student needs. He examines disability identification practices as a window into schools' cultural constructions of difference. His research also focuses on professional learning for social justice. Kozleski's research focuses on complex systems change in school reform, inclusive education and its impact on students, families, teachers and professional learning for urban education.

The book series, titled "Disability, Culture & Equity," explores some of the most pressing challenges in schools today, including how to educate culturally and linguistically diverse learners. Kozleski notes that their work on the National Center for Culturally Responsive Educational Systems (www.nccrest.org) demonstrates a longstanding U.S. trend to disproportionately identify and place students from culturally, ethnically and linguistically diverse backgrounds in special education.

Students benefit from partnership between Barrett, College of Law

By Janie Magruder

A new collaboration between ASU's Sandra Day O'Connor College of Law and Barrett, the Honors College is enabling qualified honors students to make a seamless transition to law school and use their undergraduate scholarships to pay part of their law-school tuition.

Most honors students at ASU receive four-year merit scholarships, but they frequently come to the university with so many college credits earned during high school that they finish their bachelor's degrees in three years.

These students previously were unable to take full advantage of their scholarships, but now they will be able to use the funding to attend law school and earn undergraduate degrees and law degrees in six years, rather than the usual time of seven years.

"In essence, they can complete their first year of law school as their last year of scholarship eligibility through Barrett," says Shelli Soto, assistant dean of admissions and financial aid at the College of Law.

Dean Paul Schiff Berman says the College of Law is thrilled to be a partner in the unique initiative.

"Each year, Barrett brings to campus some of the very

top students in the country," Berman says. "We believe they are fully prepared to excel in law school, and we are very pleased to help facilitate their transition into what we are certain will be the upper echelons of law practice."

American Bar Association rules allow law schools to admit students who don't have bachelor's degrees. However, Soto says, Barrett students interested in attending law school and benefiting from this financial arrangement still must follow the application process, including taking the Law School Admission Test and being admitted to the college.

"This allows us to better support our students by taking advantage of the scholarship they have been awarded and lowering the cost of their legal education," she says. "This also allows us to assist the university in keeping Arizona's best and brightest in the state for the long term."

Mark Jacobs, Barrett's dean, says the new program is ideal for honors students.

"This allows students to be moving on and starting work on their graduate courses, instead of being here

their last year," Jacobs says. "They get to go to a place where the faculty is as good as any they would find in law schools across the country, and yet stay in state where the tuition is lower. I don't know of any other university where such a partnership between the honors college and the law school exists."

The first Barrett student to enroll in the new program is Jillian Tse, an English literature major who started law school in August. Tse will be able to finish her honors thesis, a prerequisite for earning a certificate from Barrett, while attending law school.

Tse says she is excited to have the opportunity to hone her writing skills while learning about the law.

"It was a really good opportunity, and I'm especially excited about the pro bono program and the clinical program," she says.

The College of Law and Barrett have another unique partnership, Project Excellence, which enables honors students to take certain law courses that will challenge them and give them an idea of what law school is like.

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Technology transfer group assists Phoenix entrepreneurs

By Janie Magruder

A technology transfer group that helped Arizona Technology Enterprises bring ASU's scientific discoveries to market has turned its attention to assisting Arizona's innovators and entrepreneurs.

The Arizona Technology Ventures Services Group (TVSG) was launched as a new and enhanced effort by ASU from its predecessor, the Technology Ventures Clinic at the Sandra Day O'Connor College of Law. The TVSG will now direct the energy of ASU's entrepreneurial student body toward a goal of diversifying Arizona's economy through the incubation of small technology companies.

Under the supervision of professionals, students in the group will provide essential services to the region's innovators, entrepreneurs and small businesses during their critical, yet fragile, start-up phases.

The changes are a win-win for the 22 students who represent law, business and engineering disciplines at ASU and are enrolled in the inaugural, one-semester for-credit course, and for entrepreneurs and others on the path to making their ideas a reality.

"I couldn't be happier about the spectacular growth and evolution of this initiative," says Paul Schiff Berman, dean of the College of Law. "The TVSG is a prime example of how we at the College of Law are remaking 21st century legal education at the New American University. Through this group, we extend legal education into the broader community, contributing to Arizona's economy while training the next generation of entrepreneurially minded and tech-savvy lawyers."

Eric Menkhus, the TVSG's director, describes the new program's goals as a hybrid of education for students, affordable services for entrepreneurs, and economic development for Arizona.

"I've been talking to a lot of service providers, attorneys and others, who say that there are a lot of really interesting new ideas here in Phoenix," says Menkhus, an associ-



DAVID SANDERS PHOTO

Eric Menkhus, left, director of the Technology Ventures Services Group at ASU's Sandra Day O'Connor College of Law, recently named three mentors to help with the new technology transfer group. The mentors are Phoenix attorneys Michael Hool, second from left, and Jennifer Lefere, second from right, and entrepreneur Tom Fulcher, right.

ate clinical professor at the College of Law. "However, compared to other large cities, there aren't a lot of people here who specialize in turning ideas into businesses that are attractive for funding – and, subsequently, high growth. Furthermore, the 'idea people' often lack the funding to hire professionals to fill in their various knowledge gaps. This is the niche we plan to fill."

The TVSG is housed at SkySong, ASU's center for innovation in Scottsdale, and is made up of two student groups. The Technology Ventures Legal Clinic, comprising second-semester, second-year law students, as well as those in their third year, will provide services for business formation, employment issues, licensing and other agreements, limited patent work and other intellectual property issues. The Technology Ventures Consulting group, consisting mostly of graduate students from outside the law school, will offer market research and analysis, technology and supply chain assessments, financial model creation, implementation planning, leadership team

analysis and other business planning services.

"We want to build a critical mass of small businesses that are fundable and poised for growth," Menkhus says. "There's nothing like the TVSG, that I know of, in the United States that involves the breadth of students we have and provides the cadre of services that we will."

The program is part of the Entrepreneurship at ASU initiative and is being funded via \$40,000 from the Kauffman Foundation's \$5 million grant to the university. Additionally, Hool Law Group Ltd. has stepped forward with financial support and become a community partner of the TVSG.

For more information about the TVSG, or to learn more about how to become a client, visit the Web site <http://law.asu.edu/tvchventures>.

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Hessick follows indirect path to teaching

By Judy Nichols

After serving as a visiting professor last year, Andy Hessick joins the Sandra Day O'Connor College of Law this year as a permanent faculty member and will be teaching civil procedure, remedies, administrative law, and law and the regulatory state.



Andy Hessick

Hessick's path to the law was indirect. About 10 years ago, he was desperate to leave his job as a government contractor for the Uniform Health Service, and the two options that presented themselves were law school and the Air Force. He chose law and graduated from Yale Law School in 2002.

After law school, Hessick served two clerkships, practiced at a Washington, D.C., law firm and worked for the Solicitor General's Office in the U.S. Department of Justice. He then taught as a visiting associate professor at Boston University School of Law and as a guest lecturer at Harvard Law School.

Hessick says his approach to civil procedure will be doctrine-heavy, with some discussion of the reasons behind the laws.

"I do a lot of 'cold calling' in class," he says. "It keeps people focused, and I think it's useful for students to get used to being asked questions and having to respond on the spot. That's what you do as a junior attorney, answer questions. You've done the research, you're prepared, and the more you do it, the faster you get over the stage fright."

Hessick's wife, Carissa, also is a faculty member at the College of Law.

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Japanese judge spends semester as scholar-in-resident at College of Law

By Janie Magruder

Takehiko Saito, an assistant judge in Nagoya District Court in Japan, is spending the year in Arizona, taking courses at the Sandra Day O'Connor College of Law and researching juvenile justice issues for a paper that he eventually will write for his country's Supreme Court.

Through December, Saito is a scholar-in-residence at the college, where he is taking a course on contracts with professor Charles Calleros, another on criminal procedure with professor Carissa Hessick, "Legal Method & Writing" with professor Tamara Herrera and a fourth course, juvenile law, with professor Ann Stanton. He says

he enjoys the atmosphere of the college and especially its law librarians, whom he described as "very friendly, smart and helpful."



Takehiko Saito

The 30-year-old judge chose Arizona upon the recommendation of his predecessor on the court, who had visited some years before. Saito says he is interested in finding out the differences in dependency cases, which are heard in juvenile court in Arizona, but in family court in Japan.

Beginning in January, Saito will spend six months at the Maricopa County Superior Court, observing judges and lawyers in

court and behind the scenes.

Saito, who lives in Tokyo and has a degree from the Faculty of Law of Meiji University in that Japanese city, has been a judge for six years, including two years as an assistant judge in Nagoya Family Court. He hears primarily bankruptcy and foreclosure cases.

Saito is being accompanied for three weeks this month by Masatake Kakutani of the Osaka District Court. Kakutani will conduct research in the library and chat with faculty on the topics of class actions and assessment of damages, and especially the awarding of punitive damages.

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Research team helps re-engineer nation's power grid for renewable energy

(Continued from page 1)

nesses have committed to the global partnership, according to the NSF.

Described as an "Internet for energy," the "smart grid" is to enable millions of users to generate energy from renewable sources as well as sell excess energy back to utility companies.

Heydt says developing the new system involves providing for vastly more renewable-energy generation in addition to building a sophisticated infrastructure that offers a variety of options for energy distribution.

The technology will advance the development of plug-in hybrid vehicles, appliances and other devices that can store energy – and send it back to the power grid, too.

The ASU team's role focuses on its expertise in power systems engineering, particularly the use of computers and semiconductors for operating power systems.

"We have to draw a blueprint for the kind of network needed to deliver and manage large-scale, distributed renewable energy resources," Heydt says. "We will need to develop controls for power systems that can provide several routes for delivering and redistributing power from clean-energy sources."

Such systems, which have the potential to reduce the need for transmission lines, will likely be able to operate with smaller generation stations than necessitated by current power systems.

Golden says the project will enable ASU to further establish

and expand its leadership in sustainable engineering and science.

"We will be addressing the complex system interactions involved in creating and implementing a sustainable energy future," Golden says. "That means examining technological advances in light of their environmental, economic and social impacts on a domestic and global scale."

The \$18 million grant to North Carolina State University and its partners, including ASU, is a five-year commitment that is renewable for an additional five years.

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EUREKA grants provide funds to fuel 2 biomedical research projects at ASU

(Continued from page 1)

Discovering 'hidden' proteins

During his four-year research project, Chaput will lead a Biodesign Institute team on a project that plans to search the human genome for regions of DNA that contain important, but as of yet unidentified genetic information.

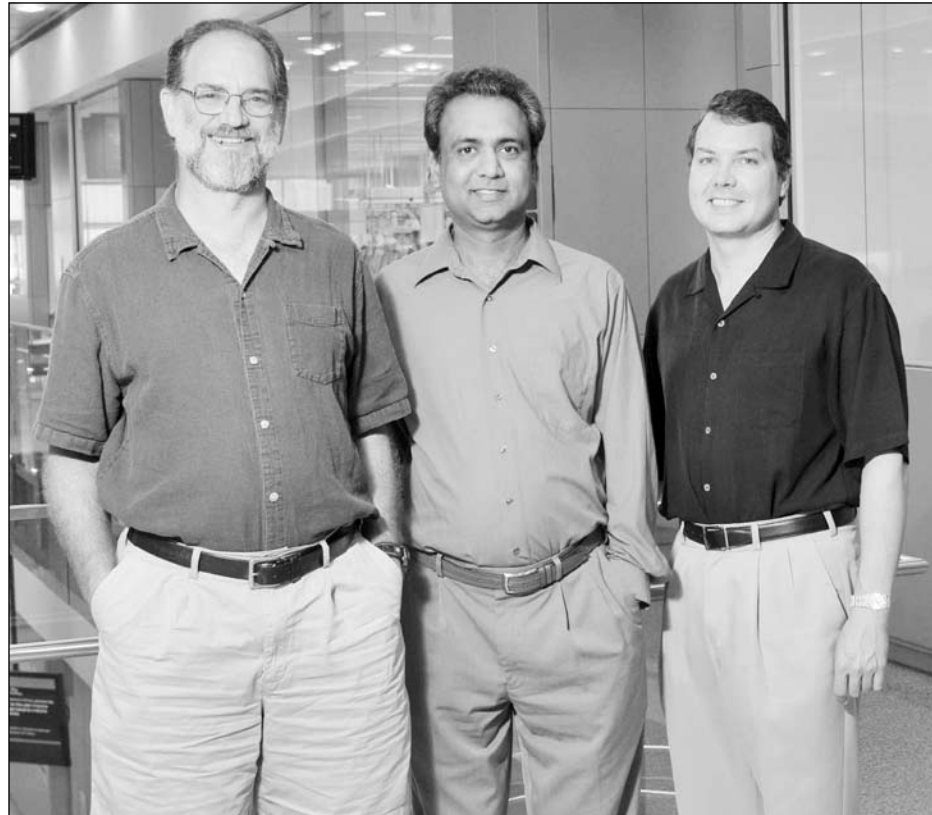
If successful, Chaput's project may confirm the possible existence of novel protein-coding regions that remain hidden in the shadows of the classic proteome. Determining how and when such proteins are made could have a major impact in diseases, such as cancer, by helping us to understand how cellular function is deposited in our genomes.

Within the code of life, three polymers – DNA, RNA and proteins – provide nearly all of the information content. Each is made from a slightly different set of chemical building blocks, and the exact sequence of these blocks within each chain carries out the instructions of the genetic code. Fifty years ago, Francis Crick, co-discoverer of the DNA double helix, first postulated the "central dogma" of molecular biology, where DNA information is transcribed to make RNA, and RNA is translated to make proteins.

The bounty of the Human Genome Project has identified nearly 25,000 genes. It's estimated that the human body could make more than a million different proteins, the majority of which remain to be discovered. This entourage of proteins, the proteome, is ultimately responsible for everything good or bad that is related to human health and disease.

Chaput's team, which includes fellow Biodesign colleagues Sudhir Kumar and Bertram Jacobs, has produced tantalizing clues that suggest there may be many proteins hidden within the DNA sequences of our genome. Together, they will combine their expertise in molecular and cellular biology, bioinformatics and virology to uncover how and when such proteins are made.

"We have developed a combined experimental-bioinformatics approach that allows us to quickly search entire genomes for sequences that enhance the translation of a downstream gene," Chaput says. "By determining the identity and location of these motifs, it should be possible to determine when specific genes are being made and possibly discover new genes that contribute to our proteome. Since many of these genes will likely be made by nontraditional



One of the ASU research teams chosen to receive million-dollar grants to pursue the next frontiers in biomedical research includes, from left, Bertram Jacobs, Sudhir Kumar and John Chaput. Chaput's team has produced clues that suggest there may be many more proteins hidden within the DNA sequences of our genome than have so far been identified.

methods, this technology will also allow us to investigate new mechanisms of protein translation."

The motifs they hope to identify help recruit ribosomes, the protein translation machinery of the cell, to the correct translation start site on the RNA message. By identifying these landing sites, the team can use bioinformatics to learn where these motifs are located in the genome.

This information will enable Chaput's team to create an annotated map of the human genome showing all possible locations where protein translation could occur.

Neural nanomachines

Research to be led by Diaz will focus on assembling nanomachines designed to deliver electrical signals to neurons on command. Applications of the technology would include bio-sensing and delivery devices that could be used to detect and treat a variety of human neurological disorders.

Diaz, an associate professor in the Department of Electrical Engineering and the Center for Nanophotonics in ASU's Ira A. Fulton School of Engineering, will work

with professors Thomas Moore and Hao Yan in the Department of Chemistry and Biochemistry. Yan also works in the Center for Single Molecule Biophysics in the Biodesign Institute.

The team's goal is to gain new insights into the pathological obstruction of neural signals and the development of new and more precise neural-stimulation technology.

With existing technology, viewing the "microscopic dynamics" of what is occurring in the human body at a cellular level "is like observing human activity on Earth from an orbiting satellite," Diaz says.

Even with the development of laser tweezers and nanoelectrodes, "most of our cellular bio-chemistry knowledge is still extracted from circumstantial evidence," Diaz says.

The method Diaz's team proposes would permit "direct interaction with cells at the local level." That would be achieved with a nanoscale structure that could be injected into the body, targeted to attach itself to certain clusters of cells and then controlled by chemical reactions triggered by light delivered either through the skin or via microscopic optical fibers.

The team will molecularly assemble a nanodevice that is best described as a remotely powered and remotely controlled pacemaker.

It will be built on a DNA chassis that includes antennae for receiving power and commands from the outside world, and batteries to store and deliver that power.

The antennae are built of noble metal nanospheres that take advantage of the plasmon resonance to amplify and focus light with nanometer precision.

Artificial electrocytes – electric organ cells that work like batteries, such as those that naturally occur in fish such as electric eels – will be constructed from liposomes (fat cells) that will have ion pumps and ion gate molecules incorporated into their lipid membranes.

The whole structure will have to be encapsulated in a DNA "cage" to prevent the components from being short-circuited by the body's fluids.

Under the correct wavelength of light, the power-receiving antennae would amplify the incident light to drive the electric charging of the artificial electrocyte.

The structure would include a set of plasmonic antennae. These are microscopic metal nanostructures that behave as antennae in the presence of photons (light) the way metal antennae behave in the presence of radio waves.

The antennae would be tuned to a different wavelength and coupled to the ion gates in the membranes to serve as light-activated switches to perform a "gate-opening" process that triggers the discharge of the artificial electrocyte chain, thus delivering an electrical impulse that can stimulate neurons.

The group hopes to prove the functionality of each component independently and to demonstrate that the entire assembly works as designed.

These nanostructures could lead to advanced neuro-imaging sensors operating at the cellular scale. Such nanosensors delivered to their targets by chemical tags, or during surgical intervention, could reveal new details about the transmission of neural signals and of their pathological interruption.

The light-powered artificial electrocyte could become a critical tool for improving microsurgery, and advancing the understanding of cellular biology.

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Partnership between ASU, Grist delivers 'green' information to students

(Continued from page 1)

don Guardian, and it has been cited and praised in other media outlets, from *Vanity Fair* to the *New York Times* to National Public Radio. Grist has proven particularly adept at appealing to college students and young people in their 20s and 30s.

This summer, the *Princeton Review* named ASU as one of the nation's 11 greenest colleges and universities based on ASU's environmental practices, policies, and course offerings. In addition, the Sierra Club has announced that ASU is one of the top 10 coolest green schools, placing the university on its "10 That Get It" list.

ASU has made an unprecedented commitment to sustainability, and it permeates the entire university. For example, ASU opened the nation's first School of Sustainability in 2007, as part of its Global Institute of Sustainability. The school, which brings together multiple disciplines, aims to train a new generation of scholars and practitioners focused on sustainability and to develop

practical solutions to some of the world's most pressing environmental, economic and social challenges, especially as they relate to urban areas.

"We've developed a different kind of program focused not on a particular field or methodology but on designing a new, sustainable world that includes a variety of social, technological and cultural institutions," says Jonathan Fink, the Julie Ann Wrigley director of the Global Institute of Sustainability.

The School of Sustainability offers graduate and undergraduate degrees, a professional certificate program, and classes for business students earning a concentration in sustainability.

The Global Institute of Sustainability and the School of Sustainability were established through a gift from Julie Ann Wrigley.

"The greening of the university is part of an overall strategic plan that will increase the value of an ASU degree," says ASU senior Chris Samila, founder of the "Green Summit," a student-organized conference and expo that has grown into the largest sustainability-focused event in Arizona. "There are billions of dol-

lars to be saved and made in redesigning our society to be more in balance with the environment. Grist's content will help students better understand the opportunity and challenges we're facing."

In 2007, Crow helped found the American College and University Presidents Climate Commitment, a high-visibility effort to address global warming by neutralizing greenhouse gas emissions and accelerating research and educational efforts directed at re-stabilizing the Earth's climate. More than 550 college and university presidents have signed the commitment to date.

The agreement with Grist deepens ASU's commitment to respond to climate change and promote campus sustainability by keeping students, faculty, and staff informed about the important environmental issues and events shaping their world. Grist intends for the ASU agreement to be the first of many such partnerships with colleges and universities across the country.

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Education alums earn 'Circle of Honor' acclaim

By Steve Des Georges

ASU's College of Teacher Education and Leadership (CTEL) is talking the talk and walking the walk, boosting its "Leadership in Making a Difference" reputation with a pair of state education honors recently awarded to college graduates for their excellence in K-12 leadership.

Kris Vanica, principal at Dreaming Summit School in Litchfield Park, and Pam Sitton, who was principal at Black Mountain Elementary School in the Cave Creek School District before moving to the district level in Scottsdale in July, have been recognized as Circle of Honor recipients by the Arizona Department of Education (ADE).

"Leadership is second only to classroom instruction among all school-related factors that contribute to what students learn at school," says Rene Diaz, executive director of ADE's Arizona Leadership Project. "It is difficult to have an effective school without an effective principal."

"Both these principals, Kris and Pam, have led their schools to sustained high scores under their leadership. They have provided exceptional service to their school communities. They know the importance of high expectations, accountability, follow-through and compassion."

The Circle of Honor program, which was established in 2006 by Arizona Superintendent of Public Instruction Tom Horne, is designed to recognize the top 1 percent of principals in K-12 grade schools. In its first year, CTEL doctoral student Denise Donovan earned Circle of Honor recognition.

Suzanne Painter, associate professor and chair of CTEL graduate programs and professional development, chaired the initial Circle of Honor committee that was formed to assess what needed to be done to provide recognition for high-performing principals.

"Kris and Pam are key educational leaders who have made a difference by leading their schools to excellence in student achievement," Painter says. "There is a great deal of difference-making that goes on in schools, and it's due to the exemplary leaders and teachers like Kris and Pam. These awards are the result of a rigorous selection process."

Vanica, who received her master's in administration and supervision at the West campus college in 1996, got her start in the Litchfield school in 2003, when she was named planning principal for the Dreaming Summit school that was still on an architect's drawing board. The school opened in 2004, and she has been the principal of the 900-student, K-5 campus since then. Over the past three years, the school has improved its "performing plus" standing to "highly performing" under ADE's elementary achievement profile.

"Being hired as the planning principal was an incredible opportunity," says Vanica, who lists the appointment as a

career high point. "Then, to put together a team that worked with the architects and builders, ordered all the furniture and equipment, and hired every teacher, staff member and support personnel – and to see all this come true – was something you just can't imagine."

"Now I have a responsibility to bring the best out in those I serve and to make a lasting difference. This includes helping teachers and staff find their own leadership skills and styles to boost student achievement."

She credits much of her success to lessons learned at ASU.

"I had so many incredible teachers at the West campus," she says. "They challenged my intellect and made me examine myself. I explored topics that were directly aligned to my degree, and the classes not only supported my career choice, but gave me the tools

that were absolutely necessary for my becoming the very best leader for students, staff and the community."

Sitton, meanwhile, joined the Scottsdale Unified School District July 1. She is the executive director of elementary schools and excelling teaching and learning, overseeing the progress of 17 schools and their principals. She was the principal at Black Mountain Elementary School, a K-5 campus with 600 students, for seven years.

Under Sitton's leadership, during the past three years the school has improved its elementary achievement profile from "performing" to "highly performing" to "excelling."

"This recognition is really all about the school, the teachers in the classrooms, the parents, and our students," says Sitton, who received her education master's degree at the West campus in 1998 and earned her doctorate from Capella University in 2006. "This is a collaboration, and that is what it has to be to realize continuing success. You must work with others to move ahead."

"I've had a wonderful team behind me with a dedication and the ability to influence many young lives."

Sitton says she is "absolutely prepared" for her new assignment with the Scottsdale district, and she considers it a logical next step.

"I gained a lot of practical knowledge about what it takes to be a principal," she says of her years at ASU. "There are facilities considerations, budget considerations and more that take place outside the classroom, as well as the learning focus, that demand your attention as a principal."

"After I graduated from the West campus, I was immediately hired as an assistant principal in the Madison School District. I served for one year in that capacity and two years as the principal, and I felt like I had been well-prepared for the responsibility that came with the positions."

Vanica and Sitton were presented their Circle of Honor awards at a ceremony in Tucson.

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Pam Sitton



Kris Vanica

Honors College expands, opens office at Downtown Phoenix campus

By Corey Schubert

Barrett, the Honors College, has expanded to open an office at the Downtown Phoenix campus.

Known as "Barrett Downtown," the new location in suite 164 of University Center establishes Barrett at all four ASU campuses.

Barrett Downtown welcomed 30 new freshmen this fall to join another 110 returning students in the College of Public Programs, the Walter Cronkite School of Journalism and Mass Communication, and the College of Nursing and Healthcare Innovation.

Barrett is a selective, predominantly residential college that educates academically outstanding undergraduates from across the nation. Students enrolled in Barrett are part of the honors community and a disciplinary college of their choice.

"The schools and colleges at the Downtown Phoenix campus have traditionally received lots of interest from Barrett students," says Mark Jacobs, dean of Barrett, the Honors College. "It is thus a very happy outcome that Barrett and the Downtown deans could co-sponsor a vibrant honors college office and study center downtown. I am extremely pleased that our joint effort allowed this to happen."

Services at the Downtown Phoenix campus include Barrett advising, the Barrett Writing Center, computing facilities, a thesis library and a student lounge. Honors students have a residential community in the new Taylor Place residence hall, where monthly faculty-student dinners bring together all Barrett students with faculty from the downtown programs.

The newly formed student organization, the Barrett Leadership and Service Team Downtown (BLAST'D), will organize service, cultural and social events and engage Barrett students in a variety of Downtown Phoenix activities.

Barrett Downtown offers priority registration, academic honors advising from honors faculty and staff, unique classes available only to Barrett students, and rich travel opportunities, including domestic and summer study abroad programs.

"Barrett Downtown takes advantage of our urban location and complements the downtown academic programs," says Laura Peck, associate dean for Barrett, the Honors College and an associate professor of public affairs at the ASU Downtown Phoenix campus. "Our services, activities and events will enrich the experiences of our Barrett students downtown."

A monthly Barrett Downtown Speaker Series features topics of interest to honors students and is open to the public. Generally, the honors experience at ASU involves a two-semester foundations course called "The Human Event," honors coursework with Barrett and disciplinary faculty, and a culminating honors thesis.

For information, call Jill Johnson at (602) 496-0557 or visit the Web site <http://honors.asu.edu>.

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ASU expert: World's main energy source is likely to change

Editor's note: This publication first appeared in [Knowledge@W. P. Carey](mailto:Knowledge@W.P.Carey). To visit the [Knowledge@W. P. Carey](http://knowledge.wpcarey.asu.edu) site, go online to <http://knowledge.wpcarey.asu.edu>.

By Debbie Freeman

"We won't ever run out of oil, just like we never ran out of whales."

That's the main message from an expert who has studied change in the world's primary energy source over time. He understands why gas and oil prices are sky high and explains it's all just part of the historic cycle needed for a major energy shift.

Gerry Keim, associate dean of ASU's W. P. Carey School of Business MBA Program, did extensive research on one important change in this vein – when people switched from using whale oil to petroleum as a fuel for artificial light, before we had readily available electricity. Parallels to the current energy situation are very clear.

"When we had to move away from whale oil in the mid-1800s, we had no idea what a substitute would be," Keim says. "But as demand and tight supply drove prices up, people became more enterprising and found alternatives – and, obviously, we never ran out of whales."

Keim explains there's a cycle with the primary energy source at any time. For example, in the 1800s, people in the Boston area simply watched from shore to spot whales in the ocean. Then, they would boat out to the right spot and hunt the whales. However, as demand for whale oil grew, the United States saw a huge increase from about 200 whaling ships in the 1840s to about 600 ships in the

"I'm very confident we'll develop substitutes for oil and gas on the supply side, and demand will significantly fall, but government has to resist calls for price ceilings for this to work."

– Gerry Keim, associate dean of ASU's W. P. Carey School of Business MBA Program

1860s. The number of whales close to shore declined, and the price of whale oil more than tripled over those 20 years.

This price hike caused consumers to start cutting back on their whale oil use, and it caused people to start investing in finding alternative energy sources. Rewards were offered in newspapers for anyone who could come up with a way to make lamps that could burn surface petroleum oil. By 1889, people had created lamps that burned petroleum and found a way to drill underground for oil.

The number of whaling ships dropped to just 70, and the price of whale oil dramatically fell from \$2.55 per gallon down to 75 cents per gallon.

Keim says this is the way things will work now, as we try to find a new primary energy source, as long as prices are allowed to fluctuate.

"I'm very confident we'll develop substitutes for oil and gas on the supply side, and demand will significantly fall, but the government has to resist calls for price ceilings for this to work," he says.

During the oil crisis in the 1970s, people waited in long lines at gas stations because the Nixon administration used price controls to limit the price of gas, Keim says. That conflicted with the natural cycle that happens when there are energy shortages and changes.

"If we all paid the real price of using oil, then the transition to other energy sources would happen ever faster," Keim says. "That means market prices should reflect all costs and benefits of using fossil fuel, including the environmental costs, and some could make a case that there are national security costs as well. If oil prices reflected some of these costs, then some alternative energy sources would be able to compete with petroleum today."

Keim says that, in the meantime, we will never run out of oil – as long as it's a privately owned resource. That's because the owners want to continue profiting. For example, Keim points out that you don't see any shortage of chickens, which are privately owned, but you do see a shortage of certain types of

fish and seafood caused by the overfishing in international, public waters. You also never see people letting livestock overgraze their own private land, but it happens on public land.

Keim adds that people also will keep reducing the demand for oil because of the high prices. He says we've already seen the number of hybrid cars soar, and Americans used 4 percent fewer gallons of gas in the past six months while prices were sky-high. People are using public transportation more often, and they're better organizing their drives to make the fewest possible stops. These cutbacks in demand are part of the reason that prices have recently fallen.

As for a replacement primary energy source, Keim is betting on solar power, wind power and electricity. Solar and wind power are readily available in some parts of the country, and a grid system can be created to maximize their use in other areas. Electricity already has an existing infrastructure for delivery, so there would be no need to build a network of fueling stations. Domestic supplies of natural gas can also play a big role over the next decade or so.

"I'm confident we'll have real alternatives in 10 to 15 years," Keim says. "Smart people and lots of money will be invested as oil prices stay high and we need substitutes. We'll start using the existing alternatives more efficiently, and we'll discover new technologies no one's even dreamed up yet."

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