CAS Alumni & Development

home page

college at a glance

giving to CAS

alumni

CAS news

CAS home page

### ALUMNI & DEVELOPMENT UNIVERSITY OF OREGON COLLEGE OF ARTS & SCIENCES

## CAS NEWS



### Cascade Autumn 2005

*Cascade,* the biannual publication of the College of Arts & Sciences, features recent activities and ground-breaking research by faculty members and demonstrates the many ways students and graduates benefit from their UO education.

What does the <u>new SAT</u> measure? Who is the most <u>intelligent person</u> you know, and why?
Who is the most <b>intelligent person</b> you know, and why?
<b>News Briefs</b> The Dean's Letter: <u>Fall Laurels</u> • <u>The Dean's Club</u>
A GEM for Teachers of Chemistry
UO Study Indicates Global Warming Trend
Synthesizing Gold Nanoparticles
Forum Addresses Healthcare, Outsourcing
Study on Preschool Attention
A New Way to Fix <u>Nitrogen</u>
New Cardiovascular Research Tool
CAS Kristy Lawton: Aspiring Neuroscientist
Scholarships Elliott Hinds: Experimental Hindsights



Distinguished Professors	George Evans, Accounting for Irrationality
	The Idea of <mark>Evlyn Gould</mark>
	From Sorting to Splicing, Tom Stevens
Natural Science	Honoring the Hundredth Time
	Timeline: One Hundred Years
	Students in Physics Research
Social Science	Team Belize: Learning in the Field
Humanities	Teaching Chinese K-16
	Celebrating Theatrical Possibility
Alumni Profiles	Paul and Janice Jones: International Aid Team
	Patrick Gray: Ceaseless Scholar
	William Drozdiak: International Leader
	Jan Eliot: Cartoonist Extraordinaire
	Online Class Notes
COLLEGE OF ARTS AND SCIENCES University of Oregon COMMUNICATE INNOVATE LEAD 1245 University of Oregon • Eugene, OR • 97403-1245 (541) 346.3950 • FAX (541) 346.3282 • <u>alumnidev@cas.uoregon.edu</u> Copyright © 2005 <u>University of Oregon</u> Updated November 13, 2005	
(341) 340.3930	<ul> <li>FAX (541) 346.3282 • <u>alumnidev@cas.uoregon.edu</u></li> <li>Copyright © 2005 <u>University of Oregon</u></li> <li>Updated November 13, 2005</li> </ul>

http://cas.uoregon.edu/alumnidev/cascade/2005autumn/index.html (2 of 2)6/19/2007 9:37:25 AM

giving to CAS

alumni

CAS news

CAS home page

college at a glance

## ALUMNI & DEVELOPMENT UNIVERSITY OF OREGON COLLEGE OF ARTS & SCIENCES

# CAS NEWS

### What does the new SAT measure?

by Allison Pedrazzi

When, at age seventeen, I burst into my brother's room, glowing with self-satisfaction over my SAT score, he did his best to dull the shine: "Yeah? Well, that doesn't mean you're smart." Indeed, by today's new 2400point scale, it wouldn't have.

Regardless, my brother's distrust of the Scholastic Aptitude Test results reflects a wider cultural attitude. Since its inception in 1926, people have asked: Is the SAT an effective tool? What do the results really tell us? Who is it biased against?

#### Analogies:SAT::Writing:

Answer this mock test question here.

The new writing portion of the SAT will most likely...

a. Instill high school students with new respect for the importance of writing.

b. More accurately predict a student's success in college.

c. Encourage high schools to teach a formulaic, five-paragraph essay structure.

d. Have no effect on academia as a whole.

Throughout the decades,

changes to the SAT reflect how the answers to those questions have continued to evolve. Last March, a new wrinkle was added—to the test and to the debate.

The new SAT I includes a mandatory writing section, upping the perfect score from 1,600 to 2,400, and it does away with some of the old faithfuls, including (my favorite) the analogy questions. The "Verbal" section is now known as "Critical Reading," and those with math anxiety have even more to worry about: Algebra II curriculum is now fair game.

In a radical move, quantitative comparisons have become a thing of the past.

Though the quantitative questions have been criticized for being inaccurate, biased and susceptible to coaching, will a more qualitative test be any better? The new changes are welcomed by many, but the test has, of

CAS Alumni & Development



course, continued to raise questions about how we are choosing to evaluate students and their likelihood for success.

Most agree that writing is an invaluable skill in today's information and communication-based society, but can a twenty-five minute essay portion really evaluate these skills? Anne Laskaya, the UO's director of composition, feels the writing portion is only "somewhat better than a multiple choice test."

"Students are actually making meaning with language by putting together words and sentences," she said, "not just responding to other's meaningmaking." However, she does have some concerns about how the new test might shape the high school curriculum. Will English teachers overcompensate, preparing their students only for a superficial and timeconstrained writing exercise?

Ted Spencer, director of undergraduate admissions at the University of Michigan, doesn't think so. According to him, the new SAT will encourage high school teachers in a good way: "We see the inclusion of writing on the SAT as one way to support teachers who are working to instill the importance of writing in their students." But, like Laskaya, the National Center for Fair and Open Testing worries that "[it] will actually encourage educators to focus on how to write formulaic five-paragraph essays rather than developing students' writing skills more broadly."

"Teaching to a test makes education dead," said Laskaya. "The diversity of approaches and personalities that students encounter in different teachers is what makes for a more supple mind."

David Hubin, executive assistant president of UO, is a former chair of the national SAT committee that evaluated the last big change: the development of the SAT II tests. "Introducing writing proceeds from a very positive impulse," he said. From his perspective, the new changes focus the test more on the skills currently being taught in schools, while abandoning its more esoteric elements.

With the SAT that has been in place, he said, you have people studying things that are "idiosyncratic to the test rather than really learning the reasoning ability or the content area that's necessary to be intellectually successful." He also believes the answers to quantitative comparison questions are almost always counterintuitive and, therefore, counterproductive: "Life is not based on, 'If A looks larger, it's not.' That is not a skill that transfers."

Therefore, Hubin thinks of the writing component as "a stride in the right direction" and a move toward a "closer curricular relationship."

UO Director of Admissions Martha Pitts is also supportive of the new writing portion, which, in addition to essay, contains multiple choice questions very



similar to the former Test of Standard Written English. "For students who were on the margin, [the TSWE] was the single best indicator of success at the University of Oregon."

However, UO experts are realistic about what it means to bring writing into the testing room. "When it becomes artificially constrained and time constrained," said Hubin, "that's not real writing."

And Laskaya believes that if the essay portion were longer—at least an hour—it would better recreate the timed writing conditions of midterm examinations. "If we're going to value writing," Laskaya suggests, "Let's really value it."

The SAT's College Board, according to Hubin, has focused throughout its history on producing an even score distribution. But he points out that "you can get a bell curve on a trivial task just by making people do it quickly."

"[The SAT] showed that it could effectively distribute people along a curve. That it measured something, and measured it consistently. But there wasn't enough attention to the question: 'Are we really measuring the cognitive attributes that we want to measure, or have we simply found some proxy that tells us we're measuring it? And, do we know what talents the test is overlooking?'"

So what does the SAT measure? The College Board initially called the SAT an "aptitude" test, claiming that it reflects a student's reasoning ability. However, some people have argued for a more "achievement oriented" exam. The Canadian Adult Achievement Exam, for example, helps determine an individual's "present educational level and readiness for literacy instruction, general academic upgrading, core skills development and vocational selection"—not a person's innate capabilities.

But can either type of test really predict collegiate success? Even the College Board acknowledges that "no test can accurately predict with one hundred percent certainty what your grades will be in college." They acknowledge the importance of personal motivation but go on to claim that scores do "help estimate how well students are likely to do at a particular college."

Ultimately, it all comes back to my brother's questions: Can a test predict someone's potential success in college—or, for that matter, in life? Where does determination come in? Is it a mistake to correlate a student's "aptitude" with his or her intelligence?

Intelligence is "the ability to solve problems, or to create products, that are valued in one or more cultural settings," says Howard Gardner, an affiliate professor at Harvard University. In an article from the early '80s,



Gardner defined at least seven types of intelligence, including the more traditional notions of mathematical or verbal intelligence, but also including body, or kinesthetic, intelligence, and inter- and intra-personal intelligence. Research has shown that individuals are most successful when they focus on utilizing their particular intelligence-strengths, and when they can use more than one type of intelligence in the learning process.

So, should we include a free throw contest in our application for admission? Not necessarily. When we discuss "kinesthetic learning" for example, we are more likely discussing the benefits of note-taking than a truly impressive backhand in tennis. However, further research on the human brain and psychology might change the way we understand intelligence, and it should be remembered that there are far more components of academic success than "book smarts."

For potential Ducks, Assistant Vice President/ Director of Admissions Martha Pitts seeks to dispel some of the mystery and anxiety that surrounds the SAT. When Pitts hosts Parents' Nights, she asks parents what they believe to be the single most important factor in admissions. "Three out of five times, the first answer I get is SAT scores." In reality, SAT scores can only be used to *help* students qualify for admission consideration at the UO. No student is ever denied admission to the UO solely because of low SAT scores. "For us, the SAT is additional information that helps us make a decision about students who are on the borderline," said Pitts. "Students and their parents worry far too much about the SAT."

Personally, I agree that students can go overboard. When I took the SATs, I sat next to a girl who confessed to me that it was her second time. The first time she took the test she had a panic attack and threw up. Dave Hubin jokingly told me this behavior would fall under "error variance," that is, when something that you don't intend to measure is affecting the score. "We don't want to be measuring a student's facility with a particular instrument or their level of anxiety," he said.

It is in the best interest of students, therefore, to relax.

Future Ducks, at least, can be comforted by the knowledge that the test can only help them. Once the UO has had a chance to evaluate this new test, the admissions office hopes that student scores will be able to help guide student advising and placement. For instance, the writing portion may provide additional information that will allow the university to recommend Academic Learning Services, said Pitts. In this way, perhaps the test can help every type of learner to succeed. CAS Alumni & Development

home page

college at a glance

giving to CAS

alumni

CAS news

CAS home page

## ALUMNI & DEVELOPMENT UNIVERSITY OF OREGON COLLEGE OF ARTS & SCIENCES

CAS NEWS

#### **Question:**

# Who is the most intelligent person you know, and why?



Alex Belcsak freshman "My dad. He has the

answers."



Jenny Bedell-Stiles senior

"My mom, because she went to graduate school while mothering three children ... I think it not only takes a lot of intelligence but drive to do that."



Sarah Cuddy sophomore



John L. Gonzales sophomore



Eric Brown junior



"Maynard Keenan—he is very analytical and thought provoking, and has great artistic ability."

"Al Romanski, the retired general of the Armed Forces in Europe. He was wise, had common sense and was very intelligent."

"My mom is a scientist. There is nothing she can't figure out and she won't give up on anything."



COLLEGE OF ARTS AND SCIENCES University of Oregon

#### COMMUNICATE INNOVATE LEAD

1245 University of Oregon • Eugene, OR • 97403-1245 (541) 346.3950 • FAX (541) 346.3282 • <u>alumnidev@cas.uoregon.edu</u>

Copyright © 2005 University of Oregon

Updated November 12, 2005

giving to CAS

alumni

CAS news

CAS home page

college at a glance

## ALUMNI & DEVELOPMENT UNIVERSITY OF OREGON COLLEGE OF ARTS & SCIENCES

# CAS NEWS

The Dean's Letter Fall Laurels Joe Stone, Dean of Arts and Sciences

"Poet's Corner" in Westminster Abbey, across from the Houses of Parliament in Britain, is renowned for the funerary memorials to British poets and other literary figures—from Austen, Byron and the Brownings to Scott, Shakespeare and Tennyson. Less well known is "Scientist's Corner" where, standing in one spot, one can read the epitaphs of leading British scientists: Newton, Joule and Kelvin, among others.

Some University of Oregon faculty help



the words of poets reach across the years and into the minds and hearts of our students, while others teach them to appreciate the beauty and power of science. Our faculty are innovators and creators in their own right. In nearly every corner of campus—whether in environmentally friendly green chemistry or in ground-breaking neuroscience, in Mandarin Chinese language courses or backstage at the <u>theatre</u>—CAS researchers extend our knowledge and challenge our ideas about the world.

Because our teaching and research mission comes alive everyday through the efforts and accomplishments of our faculty, we take the time to honor a few exceptional faculty in this issue. In addition, I'd like to highlight a few other awards that reflect the world-class caliber of our faculty:

• Karen Ford, professor of English, received a yearlong fellowship from the American Council of Learned Societies to work on a book about race and form in American poetry;

• Wendy Larson, professor of East Asian Languages and Literatures, received a Stanford humanities research fellowship for a book on sexuality and revolutionary identity in Chinese fiction and film;



• Karen Guillemin, assistant professor of biology at the Institute of Molecular Biology, received one of the American Society of Microbiology's (ASM) highest awards for young researchers in recognition of her outstanding contributions to the study of "beneficial microbes";

• and Jeff Ostler, head of the history department, received the Western History Association's Caughey award for the best book of the year in his field.

And this national recognition is not limited to our faculty:

• Ph.D. student George Slavich was honored as the nation's best graduate researcher in psychology by the American Psychological Society.

For good reason, I often think of the fall issue of Cascade as the "awards" issue because the season presents an opportune time for us to honor the accomplishments of our alumni and students as well.

However, we do allow some room for a more retrospective gaze—particularly through the influences of the 20th century giant of science, Albert Einstein, on the development of UO physics. This September, thousands of students, faculty and community members gathered to convene the new school year and celebrate the World Year of Physics with a lecture by string theorist Jim Gates.

Though it was an active summer—with the UO hosting high school and university teachers at its national green chemistry conference, entertaining crowds of local children on the lawns of "Mad Duckling Theatre," and analyzing the increase in Oregon's sunshine from its rooftops—I find that the campus only gains momentum as the temperature drops and the leaves begin to fall.

This fall, the College of Arts and Sciences welcomed forty new faculty and more than 3,300 new students to campus. Thirty-two of these are students who have been displaced by Hurricane Katrina and are receiving tuition waivers from the UO to continue their educations.

I continue to be proud not only of the achievements, but also of the compassion and dedication of our academic community. As alumni, you can be proud, too. Your support helps us enliven the learning experience for students in the arts and sciences year after year.

giving to CAS

alumni

CAS news

CAS home page

college at a glance

### ALUMNI & DEVELOPMENT UNIVERSITY OF OREGON COLLEGE OF ARTS & SCIENCES

# CAS NEWS

### The Dean's Club

In an effort to improve our students' access to quality education and more effectively support our faculty's ability to teach, the College of Arts and Sciences is pleased to inform you of the Dean's Club. Members are invited to participate in a day-long tour of some of our campus's most exciting learning laboratories—in science, theatre, archaeology and more.

After this behind-the-scenes peek into the educational opportunities available to students, Dean Joe Stone will take you to lunch with a few of the faculty and students who have directly benefited from the CAS Gift Fund. A \$500 annual contribution to the College of Arts and Sciences Gift Fund automatically entitles you to the benefits of membership. As our partners in improving undergraduate education at the college, you'll also receive an annual letter from the dean outlining the past year's successes and challenges.

Most importantly, Dean's Club members will have the satisfaction of knowing that they are helping the College of Arts and Sciences develop new strategies and programs that benefit its students. More than 200 alumni and friends are already helping the arts and sciences thrive with their membership. We thank them—and thank you—for your continued support.



COLLEGE OF ARTS AND SCIENCES University of Oregon

#### COMMUNICATE INNOVATE LEAD

1245 University of Oregon • Eugene, OR • 97403-1245 (541) 346.3950 • FAX (541) 346.3282 • <u>alumnidev@cas.uoregon.edu</u>

Copyright © 2005 University of Oregon

Updated November 12, 2005

college at a glance

giving to CAS

alumni

CAS news

CAS home page

## ALUMNI & DEVELOPMENT UNIVERSITY OF OREGON COLLEGE OF ARTS & SCIENCES

# CAS NEWS

### A GEM for Teachers of Chemistry

Teachers of chemistry everywhere now have free access to the most current and complete information about how to "do" green chemistry, thanks to the efforts of Julie Haack and other UO green chemists. During last summer's ACS Joint Green Chemistry Conference in Washington, D.C., Julie Haack, assistant department head of chemistry at UO, unveiled GEMs, a curricular resource for "Greener Education Materials".



Haack says the database will support education across chemical disciplines and among diverse educational audiences (K–12, colleges and universities). Designed to be interactive, Haack says new submissions will be continually added, and online discussions will contribute to the ongoing development of the project as a living resource.

Initiated by a CAS program grant through the CAS Dean's fund, the fouryear project was subsequently funded by the National Science Foundation's Division of Undergraduate Education. Its development has involved extensive consultation with teachers in schools as well as at the community college and university level.

http://greenchem.uoregon.edu/gems.html

giving to CAS

alumni

CAS news

CAS home page

college at a glance

## ALUMNI & DEVELOPMENT UNIVERSITY OF OREGON COLLEGE OF ARTS & SCIENCES

# CAS NEWS

### **UO Study Indicates Global Warming Trend**

During the 2005 Solar World Congress in Orlando, Frank Vignola and doctoral student Laura Riihimaki presented a first step toward testing and refining regional climate models for the Pacific Northwest that will help track global warming.



Frank Vignola at a solar electric monitoring station

In sharp contrast to reports of increased global dimming, the researchers reported a 10 to 15 percent increase in solar radiation at sites in Burns, Hermiston and Eugene over the last 25 years, according to an initial analysis of data collected since 1979 by the university's Solar Radiation Monitoring Laboratory.

"Oregon is a state famous for rain but in fact, Oregon is getting much more sunshine," said Frank Vignola, the laboratory's director and the study's coauthor. "In fact, about two-thirds of the Northwest gets as much or more solar radiation than Florida. The northwestern corner of Oregon, which includes the population center in Portland, gets about 20 percent less."

The recent study also found that Oregon winters are becoming cloudier. However, solar radiation levels during December average 75 percent less than July, so sunnier summers more than offset the increase in winter cloud cover.

"Now that we've characterized the trend, we can use this data with regional climate models to tell us how global warming is affecting the region and improve our success at predicting climate change in the Northwest," Riihimaki said.

Though monitoring is done globally, no other site has measured solar radiation continuously for such a long period. "We are working with the largest and highest quality continuous record in the world," Vignola said.

college at a glance

giving to CAS

alumni

CAS news

CAS home page

## ALUMNI & DEVELOPMENT UNIVERSITY OF OREGON COLLEGE OF ARTS & SCIENCES

# CAS NEWS

### **Synthesizing Gold Nanoparticles**

Featured on the cover of the Sept. 5 issue of *Inorganic Chemistry,* Jim Hutchison's study reveals a new method for generating a library of functionalized gold particles both quickly and easily.

"Basic research of this type is the key to finding out what kinds of new electronic, optical and pharmaceutical products actually will come to market," said Hutchison, who directs the university's Materials Science Institute. Nanomaterials and technologies are projected to become a trillion dollar industry by 2010 and affect every industrial and consumer product sector.



Jim Hutchison's recent discovery holds great promise for research and development at the nanoscale.

One of the keys to understanding the sizedependent properties and applications of

nanoparticles is generating collections of molecules, or libraries, which contain particles of various sizes for physical study. Earlier this year in the Journal of the American Chemical Society, Hutchison's laboratory reported success in generating a similar library of larger particles.

Hutchison co-authored the *Inorganic Chemistry* article with doctoral student Gerd Woehrle. Woehrle is now finishing post-doctoral work at the Max Planck Institute in Germany.

college at a glance

giving to CAS

alumni

CAS news

CAS home page

### ALUMNI & DEVELOPMENT UNIVERSITY OF OREGON COLLEGE OF ARTS & SCIENCES

# CAS NEWS

### Forum Addresses Healthcare, Outsourcing

More than 120 business leaders, community members, and UO faculty gathered at the World Forestry Center on October 18 to examine the volatile issues surrounding healthcare that impact our economy as well as the international economic issues directly effecting Oregon business.

Expert speakers from the private sector, state government and the university presented "Healthcare Investment —Dollars In, Pennies Out?" Other panelists considered India and China's economic influence on the Northwest in the session called "What Will Keep the U.S. Competitive?"

Sponsored by the College of Arts and Sciences and the Department of Economics, the purpose of the Oregon Economic Forum is to present relevant economic problems in an unbiased format. This was the second annual economic forum in Portland.



COLLEGE OF ARTS AND SCIENCES University of Oregon

COMMUNICATE INNOVATE LEAD

1245 University of Oregon • Eugene, OR • 97403-1245 (541) 346.3950 • FAX (541) 346.3282 • <u>alumnidev@cas.uoregon.edu</u>

Copyright © 2005 University of Oregon

Updated November 12, 2005

college at a glance

giving to CAS

alumni

CAS news

CAS home page

## ALUMNI & DEVELOPMENT UNIVERSITY OF OREGON COLLEGE OF ARTS & SCIENCES

# CAS NEWS

### **Study on Preschool Attention**

According to psychology professor emeritus Michael Posner's latest study, the use of special computer games improved healthy youngsters' ability to pay attention.

The capacity to tune out distractions and pay attention only to useful information develops between the ages of 3 and 7, said Posner, who researched "executive attention" in this age group by measuring electrical signals from healthy children's brains.

Posner, along with colleagues at Cornell University, wondered if it's possible to speed the normal development of these neural networks. Together they adapted computer exercises used to train monkeys for space travel into games that would test the capacity of 4- and 6-year-olds to complete complex tasks amid deliberate distraction.

The researchers measured their subjects' brain activity with electroencephalographs, administering tests of attention and intelligence before and after the training.

Though the 4-year-olds showed no change, the brains of the 6-year-olds showed significant changes after the computer training compared with untrained playmates who watched videos, Posner reported in the journal Proceedings of the National Academy of Sciences.

However, Posner is cautious not to make too many conclusions about the ability to accelerate brain development with these preliminary results. "The fundamental question is can we improve attention in preschool ages and can that be helpful," he said. "We're a long way from the final answer to that, or even a good answer."

Posner's findings are important, however, because they begin to show how healthy youngsters' brains work at different tasks and different ages. The collaborative study has been highlighted in the San Francisco Chronicle and on ABC news.

giving to CAS

alumni

CAS news

CAS home page

college at a glance

## ALUMNI & DEVELOPMENT UNIVERSITY OF OREGON COLLEGE OF ARTS & SCIENCES

# CAS NEWS

### A New Way to Fix Nitrogen

University of Oregon chemists have produced ammonia from nitrogen at room temperature under normal atmospheric pressure, marking a significant step toward achieving one of chemistry's coveted goals.

The method uses a simple compound of iron and hydrogen as the electron source in the "fixing" reaction. Devised by University of Oregon chemistry professor David Tyler and two graduate students, John Gilbertson and Nate Szymczak, the process was carried out in ether solutions. However, all steps but one also have



John Gilbertson, David Tyler and Nate Szymczak have made great progress in nitrogen production

been shown to work in water. "The conversion of nitrogen to ammonia in water ... is the holy grail of nitrogen fixation," Tyler said.

When nitrogen is converted to ammonia, it becomes available as a nitrogen source for plant growth—and as such is the fertilizer that drives the world's food supply.

Although it could be decades before it becomes cost-effective, Tyler's method is "simpler than any other solution put forward to date," he said. "Other procedures involve ... exotic electron sources or they require elevated temperatures."

Gilbertson and Szymczak are participants in the Integrative Graduate Education and Research Traineeship (IGERT) program at the UO, funded by the NSF since 2000.

## ALUMNI & DEVELOPMENT UNIVERSITY OF OREGON COLLEGE OF ARTS & SCIENCES

# CAS NEWS

### **New Cardiovascular Research Tool**

The installation of a new "environmental chamber" will allow University of Oregon scientists to replicate an extreme range of environmental conditions in their quest to test and understand the human body's response to everyday stresses.

The cardiovascular research tool is a 12-footsquare room capable of simulating altitude up to 18,000 feet, holding temperature constant at a set point between 14 and 122 degrees Fahrenheit, and controlling humidity anywhere from 10 to 95 percent. The chamber is so finely tuned that it can swing from the coldest to hottest setting in 30 minutes.

"The presence of the environmental chamber at the University of Oregon will assure the next generation of researchers is well versed in both cutting-edge molecular methods and in traditional integrative, exercise, and



Gregg McCord, an MS student with Chris Minson, serves as test subject for studies on temperature change and hypoxia

environmental physiology," said John Halliwill, an assistant professor of human physiology. His research includes a special focus on sleep apnea which can set the stage for high blood pressure.

Halliwill co-directs the university's Exercise and Environmental Physiology Laboratories with Chris Minson, an associate professor of human physiology and two-time recipient of the American Physiology Society's Outstanding Young Investigator Award. "The chamber allows us to monitor minute changes in the vascular and respiratory systems of subjects both at rest and when exercising," Minson explained. "It's already opening up new realms for our research mission."

A \$250,000 Department of Defense grant and a \$50,000 gift from Dave and Nancy Petrone of San Mateo, Calif. funded construction of the chamber. Major studies currently underway in the University of Oregon Department of

CAS news CAS home page

home page

giving to CAS

college at a glance



Human Physiology are funded by the National Institutes of Health and the American Heart Association.

COLLEGE OF ARTS AND SCIENCES University of Oregon

#### COMMUNICATE INNOVATE LEAD

1245 University of Oregon • Eugene, OR • 97403-1245 (541) 346.3950 • FAX (541) 346.3282 • <u>alumnidev@cas.uoregon.edu</u>

Copyright © 2005 University of Oregon

Updated November 12, 2005

## ALUMNI & DEVELOPMENT UNIVERSITY OF OREGON COLLEGE OF ARTS & SCIENCES

# CAS NEWS

### **Undergraduate Research Opportunities**

Two Scholars Find a Path in Science— CAS Scholarships Help Them Follow It.

#### **Aspiring Neuroscientist**

Like many freshmen, when Kristy Lawton first came to Eugene from her small hometown of Aurora, OR, she was impressed by the size and resources of the university and knew it would take some time to adjust. She found her academic niche quickly, however—a field that combined her interests in animals, biology and psychology—and last spring, she was singled out as one of the highest achieving undergraduate or graduate students in the sciences.

Now a senior in the biology department, Lawton received the 2005 Henry V. Howe Scholarship, which she believes will help



Kristy Lawton

her achieve her short and longer-term goals in science. Selected for her work on microscopic organisms and locomotory behavior in the Lockery Lab, Lawton hopes to attend graduate school to continue on her research path.

Neuroscience became her research focus after taking Introduction to Animal Behavior with biologist Shawn Lockery, she said. "[The class] was so interesting; it pretty much cemented my future." Although you can't see the animals that Lawton works with now, her results might have applications to other animal biology: "If you can understand the basics of how things work with simple organisms, you can apply that to more complex organisms."

Research is not Lawton's only passion, however. After completing her undergraduate degree, she hopes to travel to Japan through the Japanese Exchange Teacher (JET) program. For her, the adventure of teaching in a new culture would be an appealing foray before graduate school. But, no matter what she ends up doing, Lawton knows she wants to hold jobs that challenge her to continue learning.

home page college at a glance giving to CAS alumni CAS news CAS home page



"I enjoy learning a lot," she says, "not just doing a job."

#### **Experimental Hindsights**

Strong science programs and hands-on undergraduate research opportunities first attracted Elliott Hinds to the University of Oregon. Now a junior and newly-named Fugelsang scholar, Hinds notes how pleased he was when he found out that he didn't have to wait for his upper division courses to get into the lab.

After an organic chemistry class in his freshman year, the professor, John Keana, asked Hinds what he wanted to do with his education and encouraged him toward the chemistry research bench. Now a research assistant for Dr. Michael Haley, Hinds says he's exposed daily to



**Elliott Hinds** 

the rigors of graduate-level research—sometimes "stressful, but worth it."

Labs have provided Hinds with his most positive and productive learning environment at the UO. But then, he's always liked testing his ideas and even built his own zip line as a child—an "experiment" which, he remembers, held a few unfortunate consequences for his little brother. "I didn't know it was science when I was little," Hinds says. "I was just figuring things out."

In his undergraduate work, Hinds has continued to be fascinated with applied science, and has begun to consider an interdisciplinary degree in chemistry, math and physics, in part due to the influence of UO physicist Heiner Linke. From Linke, Hinds learned the fundamentals of turning heat into electricity, a science that could eventually make refrigeration less expensive. Yet, even more than the specific knowledge he's gained, Hinds values how science has changed his way of thinking: "[Science] is learning that is fun but makes you work hard, too."

Noted in particular for a strong work ethic, Hinds is a perfect example of the type of scholar that George and Susan Fugelsang hoped they could help with their scholarship. "How much you put into a class is how much you get out of it," he says. "I don't want my education to be a piece of paper at the end." The mentors he's worked with as an undergraduate have inspired Hinds to become a professor himself: "I really care about education, and it makes me want to give back."

—KY

giving to CAS

alumni

CAS news

CAS home page

college at a glance

## ALUMNI & DEVELOPMENT UNIVERSITY OF OREGON COLLEGE OF ARTS & SCIENCES

# CAS NEWS

### Distinguished Professors George Evans, Accounting for Irrationality

Evans wonders how policymakers and individuals differ in their economic expectations.

How do we predict the future? How do our expectations of the future affect the decisions we make? UO economist George Evans wants to understand how businesses and people truly formulate the economic expectations that lead them to make certain decisions. This is especially important to Evans because he feels previous theory has given individuals too much credit for sophisticated, rational decision-making. "What I'm worried about is the difficulty individuals have—both businesses and people or households —in their ordinary decision-making. The difficulties they have in forecasting the future are quite important for the macroeconomy," Evans says.

Macroeconomics looks at the economy in aggregate. "It's the area of economics that looks at things like business cycles, what determines the nation's unemployment rate, balance of trade, inflation rate—so it's really looking at the economy as a whole," Evans says.

Inextricably linked with questions of the future is the process by which people form expectations. After all, an individual's or business's ordinary decision-making is based on expectations. If a

person is planning for retirement, buying a house or investing in education, he must look forward decades, or at least years. Businesses considering changes constantly need to predict the state of the economy. "Expectations are absolutely central to macroeconomics," Evans says.



Evans is also working to understand the ways in which individuals, businesses and policymakers may differ in their expectations and predictions. Macroeconomics is influenced by policymakers in two general areas: monetary policy, which controls the money supply and interest rates; and fiscal policy, or government spending and taxes. Policymakers try to forecast the future as well. "But," asks Evans, "how smart are they, and do they forecast in the same way businesses and individuals do?" These issues are of great concern in stabilizing today's economy.

Prior to coming to the UO in 1994 as the first John B. Hamacher Professor of Economics, Evans divided his time between the U.S. and the U.K. He has held appointments at the Universities of Stirling and Edinburgh in Scotland and the London School of Economics, as well as Stanford University.

–SB



COLLEGE OF ARTS AND SCIENCES University of Oregon

#### COMMUNICATE INNOVATE LEAD

1245 University of Oregon • Eugene, OR • 97403-1245 (541) 346.3950 • FAX (541) 346.3282 • <u>alumnidev@cas.uoregon.edu</u>

Copyright © 2005 University of Oregon

Updated November 12, 2005

giving to CAS

alumni

CAS news

CAS home page

college at a glance

## ALUMNI & DEVELOPMENT UNIVERSITY OF OREGON COLLEGE OF ARTS & SCIENCES

# CAS NEWS

### Distinguished Professors The Idea of Evlyn Gould

#### Gould discusses the Idea of Europe and interdisciplinary scholarship

For the better part of three decades, Professor Evlyn Gould has been exploring what happens when academic disciplines collide. Though she began college as a dance major, Gould soon added French, the language of ballet, to her repertoire. A study abroad opportunity and graduate work in Berkeley's cutting edge French program (considered radical for its new philosophical ideas) further influenced her development, revitalizing the way she looked at literature and opening her to other modes of expression. She became interested in dance as a literary problem, which resulted in her first book, Virtual Theater, in 1989. This work examined two pieces of art based on Mallarme's poem "The Afternoon of a Faun"—an orchestral piece by Claude Debussy which Vaclav Nijinsky then choreographed.

Gould's interest in this type of intersection led to



an interesting collaboration in the early '90s: a group of professors, all concerned with European civilization, came together to ask, "How is it that we all talk about Europe, but don't talk to each other?" and set about creating a course in which they would discuss current events and research in front of their students. "[We would be] showing the cracks in our knowledge, showing the disciplinary assumptions that we make about our object of study," Gould says.

From that discussion "The Idea of Europe" was born—an interdisciplinary course combining many fields, including history, literature, classics, music and geography. *Engaging Europe* (eds. Gould and Sheridan), a collection of essays stemming from course lectures, followed in the spring of 2005. The Europe project also influenced *The Fate of Carmen* (1996), in which Gould examined non-musical aspects of the famous story.



Currently, Gould is exploring the Dreyfus affair, a political scandal of the late 19th century. The "affaire" divided French society and became, arguably, the first major media campaign of the 20th century. Gould is examining four diverse individuals, all of whom were significantly influenced by the affair: Emile Zola, Marcel Proust, Maurice Barres and Bernard Lazare. "Rather than what a historian would do, focusing on the affair itself, what I'm really trying to do is bring together very extreme positions," Gould says. "The affair becomes an 'empty center' and I'm interested in the cultural positions and opinions around it."

Throughout her career, Gould's projects have approached their areas of focus from unique directions. She notes, "I see in my own career that I've managed to pick out little pieces that had not quite been talked about yet or dealt with in the most popular arenas. I try to look at what happens when I crash disciplines together."



COLLEGE OF ARTS AND SCIENCES University of Oregon —SB

#### COMMUNICATE INNOVATE LEAD

1245 University of Oregon • Eugene, OR • 97403-1245 (541) 346.3950 • FAX (541) 346.3282 • <u>alumnidev@cas.uoregon.edu</u>

Copyright © 2005 University of Oregon

Updated November 12, 2005

giving to CAS

alumni

CAS news

CAS home page

college at a glance

## ALUMNI & DEVELOPMENT UNIVERSITY OF OREGON COLLEGE OF ARTS & SCIENCES

# CAS NEWS

### Distinguished Professors From Sorting to Splicing, Tom Stevens

#### Shares the evolution of his research discoveries

In the early 1990s, Tom Stevens found himself on a tangent—a tangent that led to one of the most exciting discoveries of his career. Roughly ten years after establishing a chemistry lab at the UO associated with the Institute of Molecular Biology, Stevens' research on protein targeting took an interesting turn. The lab had been focusing on the mechanism by which proteins within a cell are directed to their appropriate destinations. But while working on a particular yeast protein involved with targeting, the researchers noticed that a protein sequence had removed itself from the protein construct and that the neighboring protein sequences had reconnected. This "splicing" process usually occurs at the RNA level. Stevens says, "We now see it throughout the microbial world but it doesn't appear very often in the eukaryotic world." The lab had stumbled upon



the first discovery of protein splicing, which they continued to work on for the next five years, from 1990 to 1995.

During this time, researchers from Stevens' lab also continued their work on understanding protein targeting, sometimes called protein sorting. Stevens compares this mechanism to a railway system: "The sorting process begins in a compartment called the endoplasmic reticulum. From the ER, proteins are translocated to a number of different destinations. [The ER] is similar to a train station... some things never leave, some things leave and go to the next compartment, some things go to the next compartment and keep going." Each protein has its own targeting signals; Stevens and his fellow researchers have spent years working to understand these signals and how they are recognized by the "machines" that stamp the protein's ticket and figure out which train the protein is supposed to take.

Like scientists around the world, Stevens uses yeast as a model system.



"It's one of the premiere simple, straightforward eukaryotic cell model systems," Stevens says. "Invariably we find that the same network of proteins that works in a particular way in yeast, works the same way ... in humans to do very similar functions. So the economy of information that one gets by studying these simple model systems is immense."

Stevens describes his field as an "interface between chemistry, biochemistry and molecular genetics, understanding how nature [and cells] work ... at the biochemical, mechanistic level." He works to apply the quantitative aspects of science to the biological sciences, to better understand the chemistry of life.

—SB



COLLEGE OF ARTS AND SCIENCES University of Oregon

COMMUNICATE INNOVATE LEAD

1245 University of Oregon • Eugene, OR • 97403-1245 (541) 346.3950 • FAX (541) 346.3282 • <u>alumnidev@cas.uoregon.edu</u>

Copyright © 2005 University of Oregon

Updated November 12, 2005

## ALUMNI & DEVELOPMENT UNIVERSITY OF OREGON COLLEGE OF ARTS & SCIENCES

# CAS NEWS

### Honoring the Hundredth Time

#### **One Hundred Years**

#### 1905

home page

giving to CAS

alumni

CAS news

CAS home page

college at a glance

A young physicist in Bern, Switzerland proposed that space and time are connected—connected in such a way that, for instance, moving clocks run more slowly than stationary clocks. The prediction seemed absurd. But experiments proved Albert Einstein correct. Einstein published this and two other revolutionary theories during what is now called his "miraculous year."



"I think and think for months and years. Ninety-nine times, the conclusion is false. The hundredth time I am right." —Albert Einstein

### 2005

The centennial year of Einstein's contributions has been designated as

World Year of Physics. On campus this fall, "Einstein's Lesson for the Third Millennium" was the 2005 convocation address, delivered by nationally renowned string theorist Jim Gates. In *Cascade,* we celebrate with these reflections upon the last century of physics at the University of Oregon.

# TESTING THE THEORIES 1879–1900

**1879:** The first physics lab was established at UO—with an impressive \$2000 to spend on equipment—only eight years after Harvard began its lab program.

**1895:** The Department of Physics was established. Professor George H. Collier, a natural philosopher, is voted into emeritus status and replaced by Charles Friedel.





**1897:** President Charles H. Chapman, a mathematics Ph.D. from Johns Hopkins University, convinces the Board of Regents to invest a small sum for the purchase of more modern scientific lab equipment. 1900s: Small research rooms in the basement of Deady Hall were acquired for students doing research projects. In addition there was a battery and switchboard room as a center of circuits to all parts of the building.

#### BUILDING A CURRICULUM 1900s–20s

Catalog clips, circa 1900:

**Curricular Harmonies:** A new physics course "The Theory of Sound" complements the new School of Music's offerings: "Considerable attention is given to the scientific basis of harmony and music, and to the Physics of musical instruments."

**Steaming Along:** A new course on thermodynamics was "introductory to the study of the steam engine."

**Hold the Line, Please:** Faculty begin to incorporate into the curriculum the idea of "electric waves and their application to wireless telegraphy."

"Of particular interest to the architect," **Light and Color** was added in 1918 to deal with "some of the problems of illumination and color."

**Meteorology:** "a study of the physics of the atmosphere, including the use of meteorological instruments, the study of air and ocean currents, the distribution of temperature and moisture, the study of weather reports and maps, and some practice in forecasting."

#### SURVIVING THE LEAN YEARS 1930s-40s

**1932:** The first Ph.D. was awarded to Hilbert J. Unger.

**1932:** During a period of consolidation due to the invention of the OUS System in 1929, the course offerings and size of the faculty are reduced. The Board of Higher Education restricts Physics to the lower division of the UO's curriculum.

**1941:** "The mandate was rescinded in '41 but it took a very long time before the department caught its breath."





—Bernd Crasemann

#### SEEING A RESURGENCE 1950s–60s

**1953:** The National Science Foundation was established, specially designed to help faculty in isolated spots get funding for travel to  (1940s) "The wireless telegraph is not difficult to understand. The ordinary telegraph is like a very long cat. You pull the tail in New York, and it meows in Los Angeles. The wireless is the same, only without the cat."
 —Albert Einstein

conferences and meetings with research collaborators.

**1953:** Sputnik flown. Increased national interest in science.

**1957:** Terrell Hill, a world-famous thermo-dynamic theoretical chemistry researcher, left the Naval Research Institutes in Washington to come out west to the UO. "[Hill] knew everybody who was anybody... He had marvelous parties at his home to help recruit [the best scientists]. They would come in with their noses up in the sky because we were in the woods and all, but he had a way of making martinis like a chemist!"



(1960s) "No I-5. No e-mail... One really was in the middle of the wilderness." —Bernd Crasemann, hired 1953

Aside from recruiting, Hill also helped invent the model of a research institute, which provided central equipment, facilities, and research support to faculty.

**1961:** The Institute for Theoretical Science, the second oldest institute at the UO, was established.

**1961:** Gregory Wannier (of the Wannier Threshold Law) begins teaching at the UO.

**1965:** Professors Russ Donnelly and E.G. Ebbinghausen discover the site for Pine Mountain Observatory, still the only professional astronomical observatory in the state and one of the few in the world that is open to the public at night.

**1968:** George Streisinger (Institute of Molecular Biology) and Russell Donnelly (Head of the Department of Physics) recruit Brian Matthews from his research appointment at the National Institutes of Health.

#### ESTABLISHING OUR STRENGTHS 1970s–80s



The department's junior faculty begins to help shape the direction of the UO's research strengths in physics:

#### High Energy Physics:

theoretical, Rudolph Hwa (1971); theoretical, Nilendra "Desh" Deshpande (1975); theoretical, Davison Soper (1977); experimental, Jim Brau (1988)

**Optics:** Michael Raymer (1988)

**Biophysics:** molecular, Matthews (1969); molecular, John Moseley (1979); Materials Science:



1970s: Russell Donnelly with Professor Kwangjai Park, conducting laser experiments and measurements on air pollution. "We were shooting light at smoke stacks from a pick-up truck," said Donnelly.

experimental, David Cohen (1981); theoretical, Dietrich Belitz (1987)

#### BUILDING ON SUCCESS 1990s–00s

Today, the University of Oregon's Department of Physics boasts thirty-three faculty members, eight emeriti, and three research associates and earns nearly five million dollars in federal research funding. A sample of its more recent successes are highlighted below:

**High Energy Physics:** Brau takes a leading role in the design of a particle accelerator, known as an international linear collider, which may provide new capabilities to explore the nature of matter and its interactions (1998).

**Optics:** Hailin Wang hired to the UO from Bell Labs (1995) and the Oregon Center for Optics is established (1997). The Murdock Trust grant helps the UO build and equip a research lab quiet enough and clean enough to allow researchers to probe and control the behavior of atoms, semiconductors and nanometer-thin metal films. The lab's new lasers have the ability to control atoms with light pulses as short as ten femtoseconds, or exactly one hundredth of a millionth of a millionth of a second (2004).

**Biophysics:** Matthews, a National Academy Scientist known for his discovery of the structure of the protein



1990s: An illustration showing how a dark matter particle might appear in a colliding beam experiment at the International Linear Collider. (Norman Graf, Stanford Linear Accelerator Center)

CAS Alumni & Development



switch molecule "cro," is named an HHMI Investigator and awarded a six million dollar grant to further develop his lab (1990). Stephen "Jim" Remington receives the prestigious Career Award from the American Cancer Society for determining the crystal structure of the Green Fluorescent Protein, which has become a common trace or tag element that allows researchers to understand changes inside a cell (1992).

Materials Science: the Center for Advanced Materials Characterization in Oregon (CAMCOR) is established to provide state-of-the-art facilities to materials researchers at UO as well as to regional industry (2001). Researchers also collaborate to form the Oregon Nanoscience and Micro-technologies Institute, established with a significant investment by the Oregon State Legislature in 2003.

"Electronics has been vastly important for the past four decades, but now we are developing a whole new set of technologies — photonics — that will take us far beyond the capabilities of elecronic devices. We want to control how electrons, the components of electricity, interact with photons, the components of light." —Hailin Wang, as quoted in the Winter '99 issue of Inquiry.

**Astrophysics:** Greg Bothun, observational astrophysicist, brings renewed energy to the Pine Mountain Observatory in Bend (1990).

Many thanks to Emeriti Professors Russell Donnelly and Bernd Crasemann who, with department head Dave Soper and student intern Megan McCornack, provided invaluable research assistance on this project. Historical photos courtesy of UO Special Collection and University Archives.

—JL

COLLEGE OF ARTS AND SCIENCES University of Oregon

COMMUNICATE INNOVATE LEAD

1245 University of Oregon • Eugene, OR • 97403-1245 (541) 346.3950 • FAX (541) 346.3282 • <u>alumnidev@cas.uoregon.edu</u>

Copyright © 2005 University of Oregon

Updated November 12, 2005

giving to CAS

alumni

CAS news

CAS home page

college at a glance

## ALUMNI & DEVELOPMENT UNIVERSITY OF OREGON COLLEGE OF ARTS & SCIENCES

# CAS NEWS

### **Practical Mechanics**

Students in physics research...

A student workshop, "Practical Mechanics", was established to repair laboratory equipment under the direction of Charles Friedel in 1900. This proved to be a valuable aid to the continuation of laboratory physics at the UO, while also expanding students' basic knowledge of how to make their own equipment.

Photo: 1920s

Bernd Crasemann remembers his students using "old-fashioned electronics" to set up experiments in atomic physics: "We actually had visitors say: 'You built yourself one of those?!' It was, in those days, a matter of twenty or thirty thousand dollars."

Photo: Harlan Lefevre with students Chuck Burke (right) and Ryan Sealock (back) set up the Van de graaff accelerator, a research tool for nuclear physics. (1960s)







Along with more than 50% of his graduating class, Goldwater Scholar Ian Sullivan conducted physics research while an undergraduate. Sullivan wrote computer programs and helped to redesign and rebuild an oscillating sphere in Russell Donnelly's Iab, enabling his team to discover new phenomena related to fluid flow. Published in *Physics of Fluids* 14: 4192-4205 (2002).



Photo: Ian Sullivan



COLLEGE OF ARTS AND SCIENCES University of Oregon

#### COMMUNICATE INNOVATE LEAD

1245 University of Oregon • Eugene, OR • 97403-1245 (541) 346.3950 • FAX (541) 346.3282 • <u>alumnidev@cas.uoregon.edu</u>

Copyright © 2005 University of Oregon

Updated November 12, 2005

## ALUMNI & DEVELOPMENT UNIVERSITY OF OREGON COLLEGE OF ARTS & SCIENCES

# CAS NEWS



On June 3, 2005, students of the University of Oregon, along with Associate Professor Douglas Kennett, gathered in front of Condon Hall to pose for a picture. Three weeks later, the group reunited in Belize, at San Estevan, an ancient Mayan village, for a six-week archaeological field school.

San Estevan is the first collaboration between the UO and SUNY Albany.

### Learning in the Field Team Belize



Doug Kennett and the students of Team Belize gather prior to departure

SUNY's Robert Rosenswig and UO's Kennett were working independently in Chiapas, Mexico, when they began discussing a collaboration focused on the emergence of Maya Civilization. Rosenswig and Kennett share a common archaeological interest in Mesoamerica, a region once home to the Toltecs, the Aztecs and the Mayans.

Rosenswig and his wife, Dr. Marilyn Masson, have been operating archaeology field schools in Belize for over seven years. In 2001, Rosenswig and Masson visited San Estevan and learned the site had been damaged by a road crew. After a bulldozer ransacked the site, lower sections of the mound were left uncovered.

"In most cases, we're digging with a shovel through layers to get to the earliest archaeological record," explains Kennett. "In this instance, the earliest record is exposed." The damage done to San Estevan provides a unique opportunity, and this summer, a core group of archaeologists, including Kennett and Rosenwig, and thirty students—the dominant group hailing from the UO—traveled to Belize in hopes of identifying San Estevan's earliest occupants. Of further interest to Kennett was how the villager's lives were integrated into the larger political system of Mayan civilization. As an archaeologist, Kennett is interested in how social inequality among people

CAS Alumni & Development



evolves. In relation to San Estevan, Kennett hoped to understand when this evolution occurred and how it might have impacted the village's earliest inhabitants.

For thirteen years, Kennett has focused his career on hunter/gatherer societies. Kennett's first book, The Island Chumash: Behavioral Ecology of a Maritime Society, examines how environmental changes contributed to the political and social complexities of hunter/ gatherer societies once inhabiting North America's west coast. His second book is a forthcoming collaborative effort called Behavioral Ecology and the Transition to Agriculture, in which Kennett and others consider the consequences of early human's transition to agriculture. This summer, Kennett traveled to San Estevan for the first time to understand how hunter/ gatherers became sedentary agricultural communities, and how this change contributed to "the emergence of societies where large numbers of people live



Three weeks later, Lenore proudly displays the trip's most valuable find, a war hammer

in a single community and there is a significant social, economic and political distinction between individuals."

Kennett notes similarities between "our situation now at a global scale and the ancient Mayan situation when forty state-level societies disintegrated." These state-level societies had dense populations, social stratification, labor specialization, monumental works and written records. According to Kennett, when any social and political system is taxed, it falls apart. "What archaeologists contribute ... what we find in the archaeology record," says Kennett, "is there have been a lot of state-level societies like the one we live in today, and they all collapsed under similar conditions." This often occurs when people learn how to work against their political and social system. "There can be devastation and death," Kennett admits, "things we don't like to talk about because it's depressing, but we talk about it in class."

In preparation for their experience at San Estevan, most students had taken a class with Kennett, either Introduction to Archaeology or World Archaeology. They also attended weekly tutorials to discuss aspects of field work. According to Kennett, archaeologists work in groups and, therefore, the discipline attracts students who are gregarious by nature. In addition to attracting those interested in humanity and history, archaeology appears to appeal to those with a love for detail and physical activity. At San Estevan, students listened to lectures and learned lab methodologies, but the majority of their time and energy was spent working on site. "As an archaeologist, you're out in the field excavating like someone digging a ditch," says Kennett. "It's detailed work. Hard work."



According to Kennett, San Estevan was the first time his students experienced the realities of field work: daily eight-hour excavations in eightydegree weather, which seems hotter in Belize's humid climate. At San Estevan, students lived and worked as archaeologists: loading and packing equipment, trekking between camp and ruins, preparing areas for excavation, taking photographs, and collecting data in an area populated by snakes, mosquitoes, and other bugs. "There can be unpleasant things about archaeology," says Kennett. "Some people are afraid of snakes."

Anna Mezger-Sieg, an anthropology major at the UO, prepared herself for San Estevan with a personal work-out regime. Rugby player Alexis Eudy felt she was prepared for strenuous field work. Eudy, a double major in archaeology and medieval studies, admitted to feeling nervous about the bugs but felt Kennett had properly briefed her on the importance of insect repellent and dressing appropriately for the conditions. When asked about particular archaeological goals at San Estevan, both Mezger-Sieg and Eudy confessed to wishing for the unlikely discovery of a burial chamber. They also hoped to find an archaic tool. Kennett believed that kind of find likely. "They'll recover prehistoric tools and then record the relationships between these tools and more permanent site features like house floors, hearths and garbage dumps," says Kennett.

Through mapping, digging, and recording, archaeologists reconstruct past human behaviors that help contemporary society understand their present and even their future. "Political and social systems disintegrate," says Kennett. "But human beings don't disappear. They're innovative."

In June, prior to departure for Belize, fourteen students gathered in front of Condon Hall and appeared optimistic. Mezger-Sieg, Eudy and others would return from San Estevan having connected with our human past. Thinking specifically about what she hoped to gain Mezger-Sieg said, "Perspective." Eudy pondered the same question and then replied, "Myself."

—AV



COLLEGE OF ARTS AND SCIENCES University of Oregon

#### COMMUNICATE INNOVATE LEAD

1245 University of Oregon • Eugene, OR • 97403-1245 (541) 346.3950 • FAX (541) 346.3282 • <u>alumnidev@cas.uoregon.edu</u>

Copyright © 2005 University of Oregon

Updated November 12, 2005

giving to CAS

alumni

CAS news

CAS home page

college at a glance

## ALUMNI & DEVELOPMENT UNIVERSITY OF OREGON COLLEGE OF ARTS & SCIENCES

# CAS NEWS

### **Teaching Chinese K–16**

Representatives from the Department of Defense, the American Council on the Teaching of Foreign Languages, the Chinese Consulate and the National Security Education Program (NSEP) joined the Oregon Duck recently in his tour through the classrooms of Woodstock Elementary. While the kindergartners taught the Duck how to count to eight in Mandarin Chinese, 4th graders impressed the D.C. dignitaries with an animated discussion of simile and metaphor—also exclusively in Chinese.



Susan Kelly and Robert Slater, representatives from the Department of Defense, pose with the Oregon Duck at the celebration of the newly established Chinese Flagship Program in Oregon

Why the sudden convergence? On September 19, NSEP announced a \$700,000 annual grant that will enable Portland Public Schools and the University of Oregon to work together to establish a unique kindergartenthrough-college language program. NSEP's goal is to graduate linguistically and culturally competent students in the less commonly taught languages, and Oregon has officially become an educational center for Mandarin Chinese.

Carl Falsgraf, director of the Center for Applied Second Language Studies, was instrumental in helping the UO garner this major award. "The University of Oregon is a national leader in language assessment and Asian Studies," he said. "This grant just put that expertise into the national limelight."

It's estimated that the NSEP funding will eventually double the number of students immersed in the Chinese language in kindergarten through 12th grade. At the University of Oregon, the grant will provide fulltuition scholarships for up to twelve students.





"Our flagship students will have unparalleled opportunities to connect with communities of Chinese speakers through direct academic Kindergarten students at Woodstock Elementary show off their math skills to the Duck by counting in Mandarin Chinese

instruction as well as service learning programs," said Robert Slater, Director of the National Security Educational Programs.

The first class of scholarship students—trained in the Portland immersion program or participants of the "heritage speakers" program—will arrive on campus in Fall 2006. In addition to receiving training from the Department of East Asian Languages and Literatures, students will have access to the significant number of Chinese-speaking faculty working across the disciplines at the UO. "Our faculty have broad expertise about China—from imperial history to modern business, from Asian media to ancient artifacts," said Associate Dean Stephen Durrant, who is also a widely-respected Confucian scholar.

Each student will have the opportunity to choose his or her own area of academic interest and, in his or her junior year, will also have the opportunity to study it abroad. At Nanjing University in Beijing, they will be able to round out their Chinese language and cultural skills by taking classes in Mandarin or by getting an internship in a Chinese business or government office.

The aim is to have graduates equipped to thrive in the global economy and society. Professional competence in a language requires this type of indepth education, says Slater. "If someone applying for a job claimed a 'basic familiarity' with a skill, that just wouldn't be adequate—and it shouldn't be adequate for language skills either." Stephen Durrant, acting associate dean for the humanities, agrees that fluency is not easily earned. "We are finally following the model that other countries have followed in language instruction for years," he said. "Start it early then teach it continuously and in context."

"This flagship program is an indication of how important languages are to the future of the United States," said Susan Kelly, Special Assistant to the Deputy Under Secretary of Defense for Personnel and Readiness. "It is the first of its kind in the nation ... We are truly making history."

giving to CAS

alumni

CAS news

CAS home page

college at a glance

## ALUMNI & DEVELOPMENT UNIVERSITY OF OREGON COLLEGE OF ARTS & SCIENCES

## CAS NEWS



### **Celebrating Theatrical Possibility**

The UO's venerable Robinson Theatre will soon be undergoing renovations and expansions totaling 7.9 million dollars. The new James F. Miller Theatre Complex—named for a generous private benefactor and longtime Portland businessman—will include a new studio theatre, a costume and scene shop, lobby and classrooms, helping support the largest theatre program in the state. This transformation will be made possible by a combination of generous private donations, University of Oregon funds and Oregon Senate bill 5514. Much-needed upgrades to the fifty to 100-year-old facilities will include revamping the current building's obsolete infrastructure, ventilation and acoustics.

Theatre has been an integral part of campus life since the UO's first performance in 1876, and today's students continue the tradition, winning regional awards in lighting design, costume design and acting. Alumni and community members who wish to be involved may join the "Friends of University Theatre" group to assist in the final fundraising needed for completion of this project. As the new complex's namesake states, "I want other people to have the opportunity I never had."

The flexible new complex certainly guarantees opportunities for both students and faculty, allowing for innovative lighting, staging and directing techniques, new shop space to support scene and costume instruction, and the additional performance space needed to stage over a dozen productions each academic year. With the completion of the James F. Miller Theatre Complex, the UO will have the facilities necessary to train future artisans of our nation's theatre community. As Jack Watson, associate professor and head of the Department of Theater Arts promises, "...we will all have a new



sense of pride and purpose, a new momentum to allow us to not only maintain our current high standards, but also to raise those standards and explore new and exciting forms of production." The UO is proud to ask you to join us in celebration of our new facility.



COLLEGE OF ARTS AND SCIENCES University of Oregon

COMMUNICATE INNOVATE LEAD

1245 University of Oregon • Eugene, OR • 97403-1245 (541) 346.3950 • FAX (541) 346.3282 • <u>alumnidev@cas.uoregon.edu</u>

Copyright © 2005 University of Oregon

Updated November 12, 2005

giving to CAS

alumni

CAS news

CAS home page

college at a glance

## ALUMNI & DEVELOPMENT UNIVERSITY OF OREGON COLLEGE OF ARTS & SCIENCES

# ALUMNI

# Paul and Janice Jones

In 1983, UO alumni Paul and Janice Jones hosted a missionary from Thailand, Daniel Kalnin, who gave them a message that would change the course of their lives. With retirement on their minds, the Joneses asked Kalnin what they could do for people in his country. "You could teach our barefoot doctors," the missionary suggested, referring to the minimally trained health workers who provide free healthcare principally in northern Burma. For the Joneses, this advice proved to be the perfect opportunity for service and adventure.

Within six years of Kalnin's visit the couple had sold their house and joined a team through Compassion and Mercy Associates (CAMA Services) at a Cambodian refugee camp. By that time, their oldest daughter had moved with her husband to Indonesia to develop a written form of tribal language and their youngest daughter had married. Paul's



The humanitarian work of Paul and Janice Jones grew naturally out of their lifelong dedication to medicine

brother was a medical missionary in Cameroon and that also helped influence the Jones' decision to dedicate ten years of their lives to foreign aid work.

The Jones' work with international aid groups grew naturally out of their lifelong dedication to medicine. Influenced by a cardiologist brother, Paul earned his M.D. from Duke and enjoyed an eighteen-year neurology career at Sacred Heart. A high school interest test suggested Janice had an aptitude as a mechanical engineer, but as a woman in the 1950s she was encouraged to go into physical therapy instead. Dissatisfied, she entered nursing school at the UO. Jan stayed at home after Paul was in his

CAS Alumni & Development



internship and their second child was born. They eventually had five children. When the youngest child entered high school Jan decided to renew her nursing license in preparation for foreign service.

While abroad, the Joneses were struck by tremendous cultural differences. "One fellow walked twenty-one days just to get to the plane to fly down to where we trained them in Thailand," Paul recalled. They trained the Rawang people—a tribe in northern Burma—who sometimes travelled a thousand miles to learn about sutures, pulling teeth, and "how to treat major illnesses like malaria, tuberculosis, dysentery and the things that kill," Paul said.

Today, the Jones' house reflects their international inheritance. Sequined Thai elephants adorn the walls, a large teak-wood carved screen from Chang Mai decorates the living room and hand-woven baskets seem to be everywhere. The Joneses say they receive about three baskets a year as gifts of gratitude from their students. They've trained at least thirty-eight doctors, treated thousands of cases of malaria and worked as a team under two international relief organizations: CAMA Services and Samaritan's Purse International Relief.

Sitting in their home in Eugene, the Joneses can calmly recall the dangerous situations they've encountered, often finishing each other's sentences.

"We were in a refugee camp up above Kigali (Rwanda) and we could see the shelling going on down in Kigali," Janice explained. "A lot of people had fled from the city to get away from the slayings. We saw women and children that had been slashed with machetes on their neck and had gotten away."

Alongside the horrifying memories are equally impressive stories of triumph, such as their successful rejuvenation of an abandoned hospital. "The first week we had toilets like this," Paul said, pointing to a picture of a grotesque, black-stained, overflowing toilet. By the second week, however, they had completed enough work to begin admitting cholera patients. In the third week, the national doctors and nurses returned to work, and by the month's end hospital supervisors had returned. "We went from commode cleaners to consultants in four weeks, which I thought was a brilliant career move," Paul joked.

Despite being captured once and evacuated on three occasions because of hostile action, Paul and Janice's confidence in their cause is unwavering. Although they shared their religious faith with other cultures, they never considered themselves "forceful." They trained a few doctors, who then provided aid for entire villages. They brought healing to some of the most disadvantaged areas of the world. And when asked, they shared their purpose for doing so. "If your credibility is good, you can tell people ... what your religious beliefs are," Paul said and added, "But you have to do good work and be benevolent about what you do."



When they are not providing aid in other countries, the Joneses host international students at their home and volunteer at the University of Oregon's International Resource Center. Since none of their twelve grandchildren live in Eugene, they put their energy into helping foreign students navigate American culture.



COLLEGE OF ARTS AND SCIENCES

University of Oregon

#### COMMUNICATE INNOVATE LEAD

1245 University of Oregon • Eugene, OR • 97403-1245 (541) 346.3950 • FAX (541) 346.3282 • <u>alumnidev@cas.uoregon.edu</u>

Copyright © 2005 University of Oregon

Updated November 12, 2005

giving to CAS

alumni

CAS news

CAS home page

college at a glance

## ALUMNI & DEVELOPMENT UNIVERSITY OF OREGON COLLEGE OF ARTS & SCIENCES

## ALUMNI

Al: Alumni Intelligence Patrick Gray Ceaseless Scholar

#### **Most Nefarious Deeds:**

Responsible for helping to discover and patent a vaccine for Hepatitis B at UC San Francisco in 1979. Since its release in 1986, "RecombiVax" has been distributed to over one million people, including Patrick Gray himself prior to climbing Mount Kilimanjaro in 2001.



Patrick Gray is the 2005–2006 Distinguished Alumni Fellow in Natural Sciences

#### **University Ties:**

Graduated from UO in 1974 with a degree in Biology and returned to the university in 2001 to study in the Zebrafish International Research Center with John Postlethwait.

#### Aliases:

Pat has assumed many roles in his never-ending pursuit of knowledge. Father of Two, Groundbreaking Researcher, Published Biologist, Vice President of Science for biotech firm ICOS, Consultant for Venture Capital Firm, Vice President of Research for MacroGenics and now CEO of Nura, Inc., a neuroscience biotech, are a few of the titles he has held. In addition, this scientist is responsible for over thirty U.S. patents on twenty various technologies.

#### Accomplices:

Pat's partner in crime continues to be his high school sweet-heart and wife of thirty-one years. Professionally, he began his research with John Postlethwait, then working on the fruit fly Drosophila, now with Zebrafish.

#### **Stomping Grounds:**

A true Oregonian, Pat grew up in Roseburg, home of fruit flies, and came to Eugene to study at the UO. His enthusiasm to learn took him to Colorado,



London and San Francisco on various research projects, but he has since returned to the Northwest to make a permanent home in Seattle.

#### Influences:

Pat credits John Postlethwait for piquing his interest in science during his days at the UO, but it was his father's background as a county health officer that led to Pat's early aspiration to study medicine. This influence is evident in his work with vaccines and immunotherapeutics for cancer, autoimmune and infectious disease.



COLLEGE OF ARTS AND SCIENCES University of Oregon

COMMUNICATE INNOVATE LEAD

1245 University of Oregon • Eugene, OR • 97403-1245 (541) 346.3950 • FAX (541) 346.3282 • <u>alumnidev@cas.uoregon.edu</u>

Copyright © 2005 University of Oregon

Updated November 12, 2005

giving to CAS

alumni

CAS news

CAS home page

college at a glance

## ALUMNI & DEVELOPMENT UNIVERSITY OF OREGON COLLEGE OF ARTS & SCIENCES

## ALUMNI

### AI: Alumni Intelligence William Drozdiak International Leader

#### **Most Nefarious Deeds:**

Bill is President of the American Council on Germany, a nonprofit organization that encourages closer ties between the United States and Germany through exchange programs, fellowships, conferences and seminars.

#### **University Ties:**

Graduated from UO in 1971 with a degree in Political Science.



William Drozdiak is the 2005–2006 Distinguished Alumni Fellow in the Social Sciences

Played basketball for the university in the late sixties and early seventies (and then went on to play professionally in Europe).

#### Aliases:

While working for *Time* magazine, Bill was known as a "globetrotter," a traveling correspondent who covered London, Paris, Cairo and Beirut. Bill also worked for the *Washington Post* during the fall of communism in Eastern Europe and held a position as founding director of a think tank in Brussels, the Transatlantic Center, sponsored by the German Marshall Fund.

#### **Accomplices:**

Bill met his wife, Renilde, at the College of Europe in Bruges. Renilde is now the Consul General for Belgium and the couple has three children.

#### **Stomping Grounds:**

Bill returned to the U.S. last year after living abroad for fourteen years. One of his favorite memories is playing professional basketball in Italy, where "the crowds were very emotional, the food was great and the people were wonderful." Bill also particularly enjoyed his time in Spain.

#### **Current Mission:**



At ACG, Bill works on public policy issues, anticipates emerging challenges for transatlantic relationships and encourages innovative problem solving. At the moment, they are closely following the formation of the new German government. On October 10, 2005, Angela Merkel became Germany's first female chancellor.

#### Influences:

Bill claims it was UO Professor Emeritus Arthur Hanhardt who first got him interested in Germany and German politics. Bill views Ben Bradlee (of the *Washington Post*) as a mentor figure and admires the diplomacy of close friend Richard Holbrooke. Holbrooke is the former chief American diplomat to the United Nations.

#### **Remember When:**

This is the second time Bill has been honored by the University as an alumnus—the first being the Outstanding Young Alumni Award in 1985.



COLLEGE OF ARTS AND SCIENCES

University of Oregon

#### COMMUNICATE INNOVATE LEAD

1245 University of Oregon • Eugene, OR • 97403-1245 (541) 346.3950 • FAX (541) 346.3282 • <u>alumnidev@cas.uoregon.edu</u>

Copyright © 2005 University of Oregon

Updated November 12, 2005

CAS Alumni & Development

home page

giving to CAS

alumni

CAS news

CAS home page

### ALUMNI & DEVELOPMENT UNIVERSITY OF OREGON COLLEGE OF ARTS & SCIENCE

# ALUMNI



**AI: Alumni Intelligence** Jan Eliot **Cartoonist Extraordinaire** 

#### **Most Nefarious Deeds:**

Creator of internationally syndicated comic strip Stone Soup, featuring the exploits of the Stones, a modern, blended family. "Stone Soup" refers to a fairy tale in which community members contribute what little they have to a soup pot, and which ends in a rich feast none of the villagers thought possible. As Jan says, the story is about "...creating something from nothing. This is what parents, especially single parents, often must do."



Jan Eliot is the 2005-2006 Distinguished Alumni Fellow in **Humanities** 

### **University Ties:**

Graduated from UO Honors College in 1977 with a degree in Independent Studies, combining Women's Studies and English.

#### Aliases:

Jan has worn many hats on her journey towards syndication. Mother of Two, Potter, Bookmobile Librarian, Car Salesperson, Graphic Designer and Advertising Copy Writer are a few of the titles she has held. Throughout it all, she continued to work on Stone Soup, a perfect outlet for life's frustrations.



#### **Accomplices:**

Jan currently shares her headquarters with Lily and Sydney (dogs) and her husband, Ted (human).

#### **Stomping Grounds:**

Born in San Jose, California, Jan spent much of her childhood in Illinois, studying art at Southern Illinois University. She lived in Sitka, Alaska for one year before moving to rural Oregon and eventually settling permanently in Eugene.

#### **Current Mission:**

"...to reflect real life in her strip, because finding the humor in reality is the only way to survive it."

#### Influences:

Nicole Hollander, creator of *Sylvia;* Lynn Johnston, creator of *For Better or for Worse;* Bill Watterson, creator of *Calvin and Hobbes;* Claire Bretecher, a French cartoonist; and Charles Schulz, creator of *Peanuts.* Jan spoke at the opening of his Norman Rockwell Museum exhibition, *Speak Softly and Carry a Beagle: The Art of Charles Schulz.* Jan's grandmothers, one a published poet and one an artist, also inspired her to push to make a living at art, something both of them aspired to do.

#### **Remember When:**

Before she made it, Jan would copy her comic enough times to become dingy-looking, then paste it on top of another comic in the funny pages for the feeling of someday seeing her work in the newspaper.



COLLEGE OF ARTS AND SCIENCES University of Oregon

COMMUNICATE INNOVATE LEAD

1245 University of Oregon • Eugene, OR • 97403-1245 (541) 346.3950 • FAX (541) 346.3282 • <u>alumnidev@cas.uoregon.edu</u>

Copyright © 2005 University of Oregon

Updated November 12, 2005

CAS Alumni & Development



http://cas.uoregon.edu/alumnidev/alumni/search.html (1 of 2)6/19/2007 9:41:39 AM



http://cas.uoregon.edu/alumnidev/alumni/search.html (2 of 2)6/19/2007 9:41:39 AM