

# NEWSLETTER

Number 55

1 April 2010



## 91<sup>st</sup> ANNUAL MEETING of the PACIFIC DIVISION

Southern Oregon University

Ashland, OR

13 – 17 June 2010

*"The Art of Science"*

**Meeting Update**

### AAAS, Pacific Division 91<sup>st</sup> Annual Meeting

The AAAS, Pacific Division and its affiliated societies and sections will hold its 91<sup>st</sup> annual meeting this June on the campus of the Southern Oregon University. The theme of this year's meeting is *The Art of Science*. The Division's Program and Special Events Committee is working hard to assemble a program of exceptional scientific merit and interest, and is pleased to announce the inclusion of a science-related art exhibit that will run through the summer in various galleries on the Southern Oregon University campus.

All scientists, professors, teachers, students, and others are invited to present the results of their research, either orally, as posters, or as works of art at this meeting. All registrants for the meeting may attend the technical sessions as well as participate in the many other activities that are being planned. Some activities, notably field trips and selected workshops, require advance registration and payment of additional fees. Dr. Roger G. Christianson, Department of Biology, Southern Oregon University, is chair of the Division's organizing committee for this year's annual meeting.

This *Newsletter* contains updated information on the scientific program, a call for abstracts, directions for preparation of abstracts,

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## SOUTHERN OREGON UNIVERSITY AND VICINITY

### The University

Southern Oregon University (SOU) is a contemporary, public liberal arts university focused on student learning, accessibility, and civic engagement that enriches both the community and bioregion. The university is recognized for fostering intellectual creativity, for quality and innovation in its connected learning programs, and for the educational benefits of its unique geographic location.

SOU was the first university in Oregon—and one of the first in the nation—to offset 100 percent of its energy use with clean, renewable power. The Environmental Protection Agency (EPA) listed SOU as one of the nation's Top 20 "Green" Colleges and Universities, and President Cullinan has signed the American College and University Presidents Climate Commitment.

Named a "hidden gem" of higher education by The New York Times, SOU has been designated a Center of Excellence in the Fine and Performing Arts by the Oregon University System (OUS). It is one of twenty-one institutions across the nation selected for membership in the Council of Public Liberal Arts Colleges (COPLAC).

Enrolling approximately 5,100 students, SOU addresses regional needs through its academic programs, partnerships, public service, outreach, sustainable practices, and economic development activities.

Students choose from more than 100 areas of study, including 34 majors in the sciences, the arts, business, and education. The university's student-to-faculty ratio of 21:1 allows for small, individualized classes and close mentoring relationships between students and faculty. All classes are taught by faculty—not graduate students. As many as 93 percent of SOU faculty hold the highest degrees in their fields.

SOU serves the whole of southern Oregon and the northernmost counties of California. It is engaged internationally through a strong proportion of students from other nations, many exchange programs, and longstanding sister university alliances, the flagship being the Universidad de Guanajuato, Mexico.

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**Executive Director's Report on the 176<sup>th</sup>  
National Meeting of AAAS  
San Diego, CA**

The 176<sup>th</sup> national meeting of AAAS took place this past 18 – 22 February at the Convention Center in San Diego, CA. Situated next to the waterfront, the views were superb, the program was excellent, and the weather behaved itself quite well, in contrast to the consecutive and massive snow storms that pelted the East Coast just prior to the meeting's beginning.

The meeting opened on Thursday evening with the President's Address, a very interesting running dialog on events and people that shaped Peter Agre's life and eventually led him to win the Nobel Prize in Medicine and Physiology and head up the Johns Hopkins University Malaria Research Institute. Following this stirring talk was a reception with fabulous food, and



plenty of opportunities for attendees to make new acquaintances and remake old ones.

The meeting continued on for three and a half days full of plenary and topical lectures, numerous symposia, several poster sessions, workshops, seminars, and the great variety of programs associated with a national meeting of AAAS. More information about the meeting can be found at [www.aaas.org](http://www.aaas.org) and clicking on the "Annual

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## **APPROACHING DEADLINES**

**Mark your calendar today!**

### **20 April.....**

- ♦ **Abstracts for presentations at the 91<sup>st</sup> Annual Meeting** must be received by the appropriate chair(s) and the Pacific Division office. See page 23 of this *Newsletter* for more information.
- ♦ **Last day to receive the best discounts on registration fees**--Advance Registration forms must be in the Pacific Division office by this date. See page 27 of this *Newsletter*.

### **1 May.....**

- ♦ **Completed proposal packets for student research awards** from the AAAS Pacific Division Alan E. Leviton Student Research Award Fund are due into the Pacific Division office by 5:00 p.m. Pacific Time. Incomplete packets or packets arriving after this time will not be considered. Additional information: <http://www.sou.edu/aaaspd/Students/StudentResearchGrants.html>
- ♦ **Proposals for student travel grants** to help defray costs for students traveling to the annual meeting to present their research, either orally or as posters, are due into the Pacific Division office. More information: <http://www.sou.edu/aaaspd/Students/TravelGrants2010.html>

### **15 May.....**

- ♦ **Deadline to request on-campus housing** for the meeting. Please refer to pages 7 and 26 of this *Newsletter* for more information.
- ♦ **Last day to request play tickets.** Please refer to page "Oregon Shakespeare Festival" on page 13 of this *Newsletter* for more information.

### **20 May.....**

- ♦ **Last day to request a refund of meeting fees** paid. Please turn to "Registration," starting on page 7 of this *Newsletter*, for additional information.

### **31 May.....**

- ♦ **Advance registration ends**--Advance Registration form must be in the Pacific Division office by this date. Starting 1 June, all registrations will be at the on-site rate.

# ***DON'T FORGET...***

## **SCIENCE-ART EXHIBIT**

**Tell Everyone!  
Spread The Word!!**

Planned in conjunction with the Pacific Division's meeting in Ashland is a science-art exhibit. The response to the call for submissions has been truly overwhelming. The exhibit will be spread among several different venues on the Southern Oregon University campus, and will continue through the summer. Mark this on your "must see" list while attending the 91<sup>st</sup> Annual Meeting of the Pacific Division this June!

## **TEACHERS K - 14**

The first twenty K - 14 teachers to register *in advance* (meeting registration received no later than 31 May 2010) for this meeting will, upon request, receive a **\$75 stipend** to help defray their costs to attend! The stipend is not available to those who register on-site for the meeting. For those who request the stipend, a \$75 check will be included with their registration materials, which may be picked up at the meeting's Registration Center.

## **PACIFIC DIVISION Heads to San Diego, CA in 2011**

The Pacific Division will be meeting on the campus of the University of San Diego for our 92<sup>nd</sup> Annual Meeting, 12 - 16 June 2011. Joining us will be the 7<sup>th</sup> triennial meeting of the World Mummy Congress, their first time meeting in the United States. Combining the World Mummy Congress with other plans already underway should produce a very interesting and exciting meeting. Be sure to mark your calendar for our 92<sup>nd</sup> Annual Meeting and keep an eye on the Pacific Division web site, [pacific.aas.org](http://pacific.aas.org), for details as they develop.

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Whether they are revolutionizing the wine industry, discovering new microbial species in Crater Lake, or predicting and confirming ferroelectric materials, Southern Oregon University faculty and students are pursuing world-class research that is putting southern Oregon on the scientific map. SOU offers undergraduate students rare opportunities to

engage in graduate-level investigations under the mentorship of distinguished researchers. Interdisciplinary projects such as the acid mine drainage (AMD) research conducted by the Biology, Chemistry, and Geology Departments exemplify the rich academic community and the synthesis of expertise present at SOU. As its faculty and students engage in vanguard investigations, Southern Oregon University will continue to fuel the local economy and knowledge base through dedicated, interdisciplinary research rooted in the region.

SOU's main campus in Ashland is largely residential in character. On-campus housing includes three complexes with residence halls and superb dining, family housing with childcare service, and a facility for visiting groups participating in the university's educational enrichment offerings.

### **The Region**

Southern Oregon University is located in a uniquely diverse geographic, geological, and ecological area. It is distinguished by the Rogue, Umpqua, and Klamath Rivers; Crater Lake and Shasta National Parks; many lakes; and the convergence of three mountain ranges: the Cascades, the Siskiyou, and the Coast Range. Such qualities give rise to the university's distinctions in environmental studies, as well as its tremendous recreational opportunities—including golf, rafting, fishing, sailing, hiking, skiing, biking, horseback riding, and camping.

Art and culture, recreation, tourism, retail sales, natural resources, and the burgeoning healthcare services are the driving forces of the region's economy. Technology industries are diversifying the economy as new companies move into the area, start-up firms emerge, and technology advances locally. There are three medical centers that offer world-class healthcare services.

The region hosts five fairs and thirteen festivals, in addition to nearly thirty art galleries and more than two dozen cultural and art museums. The most notable festivals are the Oregon Shakespeare Festival (OSF) in Ashland and the Britt Music Festival in Jacksonville. Among the theater venues for visiting and local performances is Medford's Craterian Ginger Rogers Theatre. Recreational facilities include 151 public and 110 commercial campgrounds, seventeen golf courses, three racetracks, two ski areas, two ice-skating rinks, and four horse stables. There are sixty-four registered guided tours in southern Oregon.

### **Ashland and SOU**

Southern Oregon University is located in Ashland at the base of the Siskiyou Mountains in the Rogue Valley. It is about a five-hour drive or a one-hour flight from Portland to the north or from San Francisco to the south. With a population of 20,000, the town boasts eighty-five restaurants and ninety-three lodging facilities, sixty-six of which are bed and

breakfasts. Its restaurants, delis, bakeries, banks, bookstores, ice-cream parlors, vintage movie theater, specialty shops, and clothing stores are within easy walking distance of the campus. The annual Ashland Independent Film Festival (AIFF) is a popular attraction, as is the ScienceWorks hands-on museum. A bicycle path leads from SOU to downtown Ashland and beyond. The city offers an ideal setting for picnics and strolls in the beautiful Lithia Park, with its duck ponds, paths, arboretum, and creek.

Ashland is surrounded by forests, mountains, lakes, and rivers that provide spectacular areas for outdoor sports and ecological studies. With an average rainfall of twenty inches, Ashland benefits from a mild four-season climate. Although the valley floor is generally free of snow, winter recreational facilities are just a thirty-minute drive away at Mount Ashland Ski and Snowboard Resort, which sits at 7,500 feet elevation. Just minutes away, Emigrant Lake offers waterslides, sailing, and a park. Several mountain lakes are within an hour or less drive from Ashland.

SOU and the community are focal points for rich cultural activities and organizations. Ashland is home to the Oregon Shakespeare Festival, one of the top five regional theatres in the nation and top three worldwide rotating repertory theatres with Shakespeare at their core. OSF was created in 1935 by Angus Bowmer, a theatre professor at Southern. The festival draws more than 380,000 patrons annually. The university's Schneider Museum of Art hosts major art exhibitions and youth programs, and the Center for the Visual Arts (CVA) exhibits artworks by faculty, students, and visiting artists. SOU is home to the Southern Oregon Repertory Singers, the Rogue Valley Symphony, and Chamber Music Concerts. Its Performing Arts Department also provides frequent concerts, recitals, and productions by exceptional faculty and students.

### **Ashland Campus**

SOU occupies a 175-acre campus with fourteen academic buildings, thirteen residence halls, family housing, a student union, and multiuse facilities. All classrooms on campus are accessible to disabled students. Beautifully landscaped grounds and architecturally pleasing buildings provide a



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## ***THE PACIFIC DIVISION SEEKS...***

### **Judges for Student Presentations**

Student presentation judges are being sought to help judge student presentations (both oral and poster) at the Pacific Division's annual meeting. Except in exceptional circumstances, previous experience with evaluating student presentations is required. Judges must be available for a judges meeting Sunday evening, 13 June, and must also be able to judge presentations Monday and/or Tuesday, 14 and 15 June. For additional information, please contact Roger Christianson, 541-552-6747 or rchristi@sou.edu. If you are interested in helping with this very important aspect of the annual meeting, be sure to mark the appropriate box on the Advance Registration Form (on page 27 of this *Newsletter*) and you will be sent an application form.

### **Nominations for At-Large Council, Executive Committee and Section Chair Positions**

Are you or is someone you know interested in becoming more involved with the Pacific Division, either in Governance of the Division or perhaps chairing one of the Division's sixteen Sections? Nominations are now being accepted for three year at-large positions on the Council, five year positions on the Executive Committee, and a few section chairs, especially for the Atmospheric and Oceanographic Sciences, Computer and Information Sciences, Earth Sciences, and Psychology Sections. For more information, please contact Roger Christianson at 541-552-6747 or rchristi@sou.edu.

## ***CONGRATULATIONS SARINE SHAHMIRIAN***

Sarine Shahmirian was a student at Chaminade College Preparatory High School in West Hills, CA, last year when she performed research on propargyl methyl esters that won her the First Place Award of Excellence in Chemistry and Biochemistry at our San Francisco meeting. We were recently informed that she has been named one of the 40 Finalists of the Intel Science Talent Search 2010. Congratulations, Sarine! We wish you all the best as you pursue your goal of becoming a doctor.

pleasant environment for academic endeavors, student club activities, and opportunities to think and study together with peers and faculty. SOU recently completed a major renovation and expansion of Hannon Library, nearly doubling the size of the facility. The expanded building features ample study spaces, seminar rooms, reading areas with fireplaces, and a coffee shop, as well as integrating contemporary learning technologies.

Ashland and SOU house many special facilities and services, such as the nation's only Fish and Wildlife Forensics Laboratory and the nationally recognized Jefferson Public Radio (JPR). Southern Oregon University hosts one of the largest Native American powwows in the area and a popular Hawaiian Luau, both of which are coordinated by student multicultural groups. It offers the only Native American Studies certificate and minor programs in Oregon, in addition to providing a popular education program for Native American youth in the summertime. Among its extensive array of programs for youth is the award-winning Academia Latina program for middle school Hispanic and Latino children. SOU also has an established reputation for the size and scope of its lifelong learning programs.

### SOU Statistics

In the 2008–09 academic year, SOU boasted a total enrollment of 5,100 students. Students from Oregon represented 70.5 percent, while eighty students came from countries around the world. The average class size was twenty-five. 📄

-SOU Publications Services

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Of particular interest to members in the Pacific Division was Carl Maida (Past President of the Pacific Division) and Betty Calinger (AAAS Education and Human Resources) hosting a site visit to the Gary and Jerri-Ann Jacobs High Tech High Village in San Diego to a group of more than thirty individuals, including NSF Graduate STEM Fellows in K-12 Education. This first of the High Tech High network of schools was founded in fall 2000. The concept has been so successful that High Tech High is now comprised of an integrated network of schools spanning grades K-12, housing a comprehensive teacher certification program and a new, innovative Graduate School of Education.

High Tech High was also represented at the Convention Center as Jay Vavra (Pacific Division Council member and Biology teacher at High Tech High) presented a well-received topical lecture, “The Case for Original Science Research in the High School Class-



Pacific Division booth at the AAAS National Meeting. PD Executive Assistant Angie Christianson talking with man. PD Past President Anne Sturz talking with woman.

room.”

Once again, the Pacific Division was represented in the exhibit hall with a booth. Besides raising meeting attendees’ awareness of the divisions of AAAS, we always use the booth as a draw to our annual meeting. This year our science-art exhibit was the theme of the booth, attracting an incredible amount of interest. We want to thank Shoshanah Dubiner, a local Ashland artist, for loaning us several examples of her biology-oriented artwork for display in the booth. Her work will also be on display during the science-art exhibit at Southern Oregon University this summer.

As usual, Family Science Days filled the exhibit hall with excited children, youth, and parents on Saturday and Sunday. A wide variety of activities awaited participants, and all seemed to have a wonderful time.

As Executive Director of the Division, I reported to the AAAS Board of Directors on the activities of the Division this past year and our plans for 2010. Although ten minutes isn’t much time, I was able to augment my written report with a brief PowerPoint presentation highlighting our recent meeting in San



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and information about registration, housing, transportation, special events, and field trips.

Following is a list of the Pacific Division's sections that are sponsoring a variety of sessions at the meeting. The names and addresses of session chairs are found on page 22 of this *Newsletter*.

### PACIFIC DIVISION SECTIONS SPONSORING SESSIONS AT THE ASHLAND MEETING

Agriculture and Horticultural Sciences  
Anthropology and Archaeology  
Atmospheric and Oceanographic Sciences  
Cell and Molecular Biology  
Chemistry and Biochemistry  
Computer and Information Sciences  
Earth Sciences  
Ecology, Organismal Biology and Environmental Sciences  
Education (Science and Technology)  
General and Interdisciplinary  
Health Sciences  
History and Philosophy of Science  
Industrial Sciences and Technology  
Mathematics  
Physics and Materials Science  
Psychology  
Social, Economic and Political Sciences

### REGISTRATION

All persons planning to attend the meeting should use the Advance Registration Form on page 27 in this *Newsletter* to pre-register in order to receive the best registration rate. On-site registration will be available, but with higher fees. Early advance registration fees (through 20 April) for the full-meeting are \$85 for professionals; \$45 for retirees/emeritus and current post-docs; \$30 for current students and spouses of registrants; and \$45 for unemployed individuals. K-12 and community college teachers are encouraged to attend the meeting for a reduced professional registration fee of \$45. Advance one-day professional registration is available for \$65. After 20 April, higher registration fees will be charged: full-meeting professional, \$100; K-12, community college teachers, post-docs, retirees/emeritus, and unemployed, \$52.50; and students and participating spouses, \$35. One-day professional registration during this period is \$75. Advance registration closes on 31 May. All requests for advance registration must be received in the Pacific Division office by this date to avoid the higher, on-site fees. Beyond 31 May, on-site registration will be charged for both pre-meeting and on-site registrations. On-site registration fees for the full meeting will be: professional, \$115; K-12, community college teachers, post-docs, retirees/emeritus, and unemployed, \$60; and student and participating spouses, \$40. One-day on-site professional registration will be \$85. Note that if you attend more than one day, you must pay the full registration fee. Program organizers and presenters registering in the professional category may purchase a full-meeting professional registration at the reduced, one-day rate. To be eligible for this discount, the individual must be listed as an organizer or co-organizer of a program or have submitted an abstract for presentation

at the meeting that has either been approved or is pending approval. Be sure to include this information on your registration form.

The first twenty K-12 and community college instructors that register in advance for this meeting will receive, upon request, a \$75 stipend to help defray their expenses of attending the meeting. The stipend is not available to teachers who register on-site. Note that to receive the stipend, you must check the appropriate box on the Advance Registration Form.

Students have the opportunity to apply for travel awards of up to \$150 each to help defray their costs for the meeting. See page 3, "Approaching Deadlines," of this *Newsletter* for additional information.

Field trips: Due to limited seating in the vehicles and the need to inform some destinations of the number of people arriving, pre-registration for all field trips is required. If you are interested in one or more of the excursions, it is recommended that you register early. At least one member of a family group requesting field trip reservations must be a paid meeting registrant. Participants who are not registered for the meeting will be charged a one-time \$10 field trip registration fee in addition to the fee for the field trip.

Please send your Advance Registration Form and accompanying payment to AAAS Pacific Division, Southern Oregon University, 1250 Siskiyou Blvd., Ashland, OR 97520. Alternatively and with a credit card, you may phone (541-552-6869) or fax the information (541-552-8457 – a dedicated fax line).

**PLEASE NOTE: Requests for refunds must be in writing and received in the Pacific Division office no later than 20 May 2010. A \$15 handling fee will be applied. An additional 3.5% deduction will be applied to the total amount for credit card refunds. No refunds will be granted after 20 May.**

### CAMPUS HOUSING PACKAGES

On-campus housing for this meeting is in Cox Hall. There are two types of rooms available, "classic" dorm rooms and "suites." The classic dorm rooms share a bathroom, which is located down the hall. Each floor of Cox Hall has two large bathrooms, one for men and one for women. Each bathroom has three sinks, three shower stalls and four toilet stalls. Each shower stall has a small dressing area associated with the shower. Flip flops are a good idea for visits to the bathroom. Each of these classic rooms has two extra-long, twin-sized beds, two desks, two chairs and two closets. The rooms do not have refrigerators, microwaves or telephones. All bedding, including pillows and towels, are provided. Those driving and wanting to park on campus will need to purchase a parking permit for \$27 (refer to the Housing Request Form on page 26 of this *Newsletter*).

The suites in Cox hall each have private bathrooms, mini-refrigerators, microwaves and telephones. They typically have two double-sized beds, though a few have a queen bed. The rooms are set up similar to hotel rooms, though they don't have televisions. Some suites have showers and others have tubs and showers.

Cox Hall has very limited internet and computer availability. There is one computer in each of the lounges on the first and second floors. Limited wireless connectivity is available on the ground floor of the building but it's spotty. [Wireless availability is much better on campus where the meeting will take place, and computers are available in the Library.]

There is a communal kitchen area on the ground floor of Cox Hall with a stove, microwave and refrigerator. There is also a microwave

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Division Executive Directors taking a break at the Council meeting. L to R: David Nash (Southwest and Rocky Mountain Division), Jorge Colón (Caribbean Division), Roger Christianson (Pacific Division).

Francisco and our up-coming meetings in Ashland (2010), San Diego (2011) and Boise (2012—still being negotiated).

At the Sunday morning Council meeting, it was announced that Nina Fedoroff (science and technology adviser to the U.S. Secretary of State and the U.S. Agency for International Development) was recently elected to be President of AAAS, starting in 2011. It was also announced that Steve Mayo (Bren Professor of Biology and Chemistry; Vice Provost, California Institute of Technology) and Sue Rosser (Provost, San Francisco State University) were elected to the Board of Directors. Peter Agre (AAAS President) reported on activities of the Board over the past year, and Alan Leshner (AAAS CEO) reported on activities of AAAS in general over the past year. Agre also reported on the several international delegations this past year, to Syria, China, Cuba and North Korea. He voiced the hope that AAAS can provide a way to break through in ways no other organizations can to people in countries that have limited or no diplomatic ties to the U.S. through diplomatic visits of U.S. scientists to these countries. He reported that the visits this year were well-received and that opportunities exist for further exchanges.

Two items of potential interest to Pacific Division members came up toward the end of the Council meeting. First, after considerable discussion on both sides of the debate, the Council voted to ask the Board to approve four nights of housing for Council representatives rather than the current two. This would bring all Council members to par with section officers, and encourage Council members to be present for more of the meeting and also to take a more active role in their section meetings. It was estimated that the cost of this request for this meeting, if all Council members took advantage of the extra days (room and board) and billed them to AAAS, would be about \$34,000. The second item related to the election of fellows. It was

noted that in the last few years there has been a steady increase in the number of three-fellow nominations and also the number of fellows elected. Issues include multiple different submissions by the same individuals and the amount of work this adds to the committees sifting through them, and whether too many fellows are being elected. It was noted that the number of fellow positions available in any one year is 5% of the total membership, and that if people are concerned about the number of fellows being elected (251 in 2000; 532 in 2009) the way to reduce the number is by reducing the percentage, not interfering with the process. It was voiced that if the percentage is to be reduced, it should be done before the number of fellows elected hits the upper limit [which could occur within the next couple of years if the current trend continues]. It was decided to form a sub-committee to examine this issue and bring a report to the Council meeting next year. And once again, that was enough fun for one day. 📧

—Roger Christianson  
Executive Director, AAAS Pacific Division

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and small refrigerator in the first floor lounge of Cox Hall. All rooms in Cox Hall have individual air conditioning units, and the building has an elevator.

All outside doors to Cox Hall are locked at 7:00 p.m. University age and older guests are provided an outside door key. All guests are provided a room key. A \$60 fee is charged for lost keys (in order to replace the lock). Housing staff is available from 7:00 p.m. to 7:00 a.m. to help guests.

**Important note about smoking and alcohol on the Southern Oregon University campus:** All indoor areas on campus, including Cox Hall, are smoke-free. Also, alcohol is not allowed in public areas on campus.

*Room/board packages* include specified meals at the Cascade Food Court. Guests will be issued meal cards with which they gain access to the Food Court. Meals are served buffet style and are “all you wish to eat.” Desserts and drinks are included. Cards are good for everything except prepackaged food items.

The following room/board packages are available for meeting attendees: *Three-nights* (in on Sunday, 13 June and out on Wednesday, 16 June), including six meals: breakfast and lunch MTW (Monday, Tuesday and Wednesday); *Four-nights* (in on Sunday, 13 June and out on Thursday, 17 June), including seven meals: breakfast MTWTh and lunch MTW. *Additional nights* may be added prior to the beginning and after the end of the room/board packages. Extra nights do not include any meals.

Prices for room/board packages are as follows:

*Three-night packages*

classic dorm room, single occupancy: \$210

classic dorm room, double occupancy, per person: \$155

#### Four-night packages

- classic dorm room, single occupancy: \$270
- classic dorm room, double occupancy, per person: \$192
- suite, single occupancy: \$440
- suite, double occupancy, per person: \$290

*Additional nights (added to package only—not available separately; do not include any meals)*

- classic dorm room, single occupancy: \$51
- classic dorm room, double occupancy, per person: \$32
- suite, single occupancy: \$93
- suite, double occupancy, per person: \$55

Please note that on-campus housing, especially the suites, are in limited supply. We suggest that you request your on-campus housing early in order to not be disappointed. The application form for on-campus housing is on page 26 of this *Newsletter*. If you are an individual and would like to request double housing, we will be pleased to assign you a same gender roommate. Please be sure to note this on your housing application form.

*Parking for those staying in Cox Hall:* The cost for a parking permit for those wanting to park an automobile on campus during their stay in Cox Hall is \$27 for a permit good for one week. This permit allows 24-hour in and out privileges in any campus parking lot marked red or green, including the lot immediately in front of Cox Hall. Please request your parking permit on the housing form at the time you request your housing (refer to page 26 of this *Newsletter*). There is a limited amount of on-street parking in the vicinity of Cox Hall. Automobiles parked on the street must be moved periodically in order to avoid citation by the Ashland Police Department.

### LOCAL HOTELS AND MOTELS

Ashland boasts many fine hotels and motels, many of which can be accessed for reservations through websites such as [expedia.com](http://expedia.com) or [hotels.com](http://hotels.com). If you are interested in staying at a bed and breakfast in Ashland, go to this website: <http://www.bandbashland.com/>.

The first three hotels listed below are provided to help identify ones close to the meeting. The fourth is in downtown Ashland, about a 10 to 15 minute walk from the University. Please make your reservations for housing directly with the hotel/motel of your choice. Note that the AAAS, Pacific Division lists the following hotels for information only, not as an endorsement for any specific commercial enterprise.

Please be aware that the Oregon Shakespeare Festival will be just starting its full summer session at the time of our meeting and that hotel room availability may become quickly limited. We suggest, to ensure availability of your choice of accommodations, that you make your reservations early rather than waiting. Rates listed are examples collected on 4 March 2010 for the dates of the meeting.

**Ashland Motel.** 1145 Siskiyou Boulevard, Ashland, OR.  
*Telephone:* 541-482-2561.

*Website:* [www.ashlandmotel.com](http://www.ashlandmotel.com)

*Rate:* \$77 – \$100 (2 persons)

*Proximity to meeting:* across the street; a 5 minute uphill walk

**The Palm.** 1065 Siskiyou Boulevard, Ashland, OR

*Telephone:* 1-800-691-2360

*Website:* [www.palmcottages.com](http://www.palmcottages.com)

*Rate:* \$99 – \$113 (2 persons)

*Proximity to meeting:* across the street; a 5 minute uphill walk



**Cox Hall, location of on-campus housing for this meeting.**

**Flagship Inn.** 1193 Siskiyou Boulevard, Ashland, OR *Telephone:* 1-800-547-6414

*Website:* [www.ashlandflagshipinn.com](http://www.ashlandflagshipinn.com)

*Rate:* \$92 – \$119 (2 persons)

*Proximity to meeting:* across the street; a 5 minute uphill walk

**Ashland Springs Hotel.** 212 E. Main Street, Ashland, OR

*Telephone:* 541-488-1700 or 1-888-795-4545

*Website:* [www.ashlandspringshotel.com](http://www.ashlandspringshotel.com)

*Rate:* \$159 (2 persons); identify yourself as part of the AAAS, Pacific Division meeting

*Reservation deadline:* 30 April 2010

*Proximity to meeting:* approximately 3/4 mile; a very pleasant and slightly uphill 15 minute walk

### TRAVEL TO THE MEETING

*By automobile from the south:* Southern Oregon University is located about 14 miles north of the California border on Interstate 5. Coming from the south, take Exit 14 from I-5. Turn left at the STOP sign and follow Hwy 66 (Ashland Street) toward town. At the third signal (Siskiyou Boulevard), be in the left lane and proceed forward by bearing to the right.

- If you are heading to on-campus housing, turn left at the first signal (Indiana St). In about 1/3 block turn left into the parking lot (looks like an alley but opens into a parking lot). Cox Hall faces the parking lot.

- If you are heading onto the SOU campus for the meeting, turn left at the second signal (Mountain Avenue). Proceed up the hill and turn left into the parking lot, just before the STOP sign.

*By automobile from the north:* take Exit 19 from I-5. Turn right at the STOP sign and proceed to the signal (Hwy 99). Turn left at the signal (Highway 99) and continue driving about three quarters of a mile past

downtown Ashland to Mountain Avenue (a signalized intersection).

- If you are heading to on-campus housing, pass Mountain Avenue and continue to the next signal, Indiana Street. Turn right onto Indiana and then left about 1/3 block later into the parking lot (looks like an alley but opens into a parking lot). Cox Hall faces the parking lot.

- If you are heading onto campus for the meeting, turn right onto Mountain Avenue. Proceed up the hill almost to the STOP sign and turn left into the parking lot.

*By Air:* Ashland has a small airport that is not served by commercial carriers. However, Medford, situated about 15 miles to the northwest of Ashland, is served by several major airlines. Car rentals (Avis, Budget, Enterprise, Hertz, and National/Alamo) are available at the airport. The airport is also served by several taxi and shuttle companies. Additional information may be found on this website: <http://www.co.jackson.or.us/Page.asp?NavID=2532>. The airport is about a 25 minute drive from the University.

### ON-CAMPUS PARKING

On-campus parking will be available at no charge in Green Lot 30, which is on the east side of Mountain Avenue (left side if going uphill toward Ashland Street), at the corner of Ashland Street. Entrances to this lot are from Mountain Avenue. Lot 30 is close to and kitty-corner from Science Hall, where the majority of the meeting will take place. Do not park in any other lots because you will be ticketed by campus Parking Services unless you have previously purchased a parking permit (see "Parking for those staying in Cox Hall" on page 9 of this *Newsletter*). Persons staying in Cox Hall and purchasing a parking pass may park in any Red or Green lot on campus.

### REGISTRATION CENTER

The Registration Center will be set up in the lobby of the main entrance to Science Hall on the Southern Oregon University campus. Hours of operation are expected to be:

*Sunday:* 2:00 p.m. – 6:00 p.m.

*Monday:* 7:30 a.m. – 4:30 p.m.

*Tuesday:* 7:30 a.m. – 4:00 p.m.

*Wednesday:* 7:30 a.m. – 3:00 p.m.

### MEETING ROOMS AND PRESENTATION TIMES

This year's technical sessions will meet primarily in Science Hall but may also make use of rooms in the Hannon Library and other buildings on the Southern Oregon University campus. All meeting rooms are equipped with LCD projectors and computers running Windows XP and Microsoft Office 2007. Speakers requiring other specialized equipment such as slide or overhead projectors must make their requests known when they submit their abstracts. If available, specialized equipment will be provided. If rental costs are incurred, payment will be the responsibility of the requestor. The meeting rooms and times of presentations for the program will be published in the "Program with Abstracts" issue of the Proceedings (Vol. 29, part 1), which will be given to those who register for the meeting. Speakers may obtain final confirmation of the time and place of their presentation by visiting the Pacific Division web site ([pacific.aaas.org](http://pacific.aaas.org)) starting 1 June 2010.

### COMPUTERS AND POWERPOINT PRESENTATIONS

Meeting rooms at Southern Oregon University are outfitted with computers running Windows XP and PowerPoint 2007, connected to standard data projectors. If you are planning to use PowerPoint for your presentation, you must make sure that it will run on the Windows platform. Only CD-ROMs and thumb/USB/flash drives may be used to load presentations onto the computers. If you are preparing your presentation on a Macintosh computer, make sure it will load to a computer running Windows XP. Be aware that a PowerPoint developed on a Mac may look and/or behave differently on a Windows PC and vice versa.

### CALL FOR PAPERS AND ABSTRACTS

Members of AAAS and its affiliated societies, students, teachers, and other scientists are encouraged to participate in the annual meeting and present papers. Those wishing to present an oral or poster paper at one of the sessions should follow the instructions in the Call for Papers and Abstracts on page 23 of this *Newsletter*. Abstracts should be submitted via e-mail to the chair (and co-chair) of the appropriate Pacific Division Affiliated Society or Section and also to the Pacific Division office. See page 22 of this *Newsletter* for the list of sections and their chairs/co-chairs. Be sure to include the word ABSTRACT and your last name in the subject line of the e-mail submission and don't forget to copy the Pacific Division office ([rchristi@sou.edu](mailto:rchristi@sou.edu)) on all submissions. Doing this will assure that you will receive an automatic e-mail reply confirming your submission. Please note: *the deadline for receipt of abstracts is 20 April 2010*. Submissions will be given their final reviews in late April, with decisions regarding acceptance being sent via e-mail shortly thereafter. If you would like to discuss your submission with the chair of the section to which you are submitting it, please refer to page 22 of this *Newsletter* for the list of sections, chairs, and contact information. If your abstract contains special characters, be sure to fax a printed copy with the special characters clearly marked and notations indicating the font used to the Pacific Division office, 541-552-8457, in addition to submitting it via e-mail.

### STUDENT AWARDS FOR EXCELLENCE

The AAAS, Pacific Division offers each affiliated society and section participating in the annual meeting the opportunity to recognize outstanding student participants through the presentation of Awards of Excellence and cash prizes of \$150 for first place and \$75 for second place. Additionally, each winner receives a one-year student membership in AAAS, which includes weekly issues of Science magazine. Societies often supplement these awards with their own cash prizes.

In 2010, seven Division-wide awards are available: Laurence M. Klauber Award for Excellence (unrestricted); Geraldine K. Lindsay Award for Excellence in the Natural Sciences; J. Thomas Dutro, Jr. Award for Excellence in the Geosciences; Presidents' Award for Excellence (unrestricted); Rita W. Peterson Award for Excellence in Science Education; Best Poster Award (for posters only but otherwise unrestricted); and the AAAS Robert I. Larus Travel Award, which provides travel and other expenses for the awardee to attend the national meeting of AAAS in Washington, D.C., 17 – 21 February 2011, for the purpose of presenting their winning presentation as a poster. These Division-wide awards are given to those students whose presentations

are judged the most significant in the advancement or understanding of science, and are generally chose from among the first place winners of the sectional competitions.

To be eligible for a sectional or Division-wide award, a student must register for the meeting, present the paper or poster, and be the principal research investigator. Student presentations, oral and poster, are judged on their abstracts, content, style of delivery or presentation, and audiovisual aids and/or handouts (if used). The evaluation forms for both oral and poster presentations are posted on the Division's meeting web page. Students who are eligible for Awards of Excellence are invited to be the Division's guests at the annual Banquet Tuesday evening, 15 June. Festivities that evening include the presentation of student awards. If you are one of these students, please be sure to fill in the appropriate boxes on the Advance Registration form to let us know you will be attending the dinner.

**IMPORTANT NOTE:** *All judging for student awards ends by 3:00 p.m. on Tuesday, at which time the judges go into closed session to determine the winners. If you are a student wishing to compete for an Award of Excellence and your oral symposium presentation is scheduled later Tuesday afternoon or Wednesday, you must, in addition to presenting orally as part of the symposium, prepare a poster for presentation at a poster session earlier in the week. That way your presentation will be judged and you will be in the pool of potential prize winners. A dual entry of this type may only occur if your presentation is part of a symposium. All oral contributed paper sessions are scheduled to ensure that student presenters are judged prior to the cut-off on Tuesday afternoon.*

### SPECIAL EVENTS

The following special events are planned for the meeting.

**Sunday Afternoon.** At 4:15 p.m., members of Southern Oregon University's Native American Student Union (NASU) will begin drumming and will offer a blessing for the meeting. At 4:30 p.m. a Salmon Bake, co-sponsored by the NASU, will begin. The menu includes wild salmon ceremonially prepared by members of the NASU, green salad, fresh corn on the cob, fresh green beans, rice pilaf, dessert and drinks (iced tea, lemonade and water). Please note that the fresh vegetables are subject to availability and may be substituted if necessary. Cost is \$20 per person. Please purchase your tickets to this event in advance (see the Advance Registration Form on page 27 of this *Newsletter*) as there may be no tickets available at the time of the event. Note that if you are planning to go on the Sunday Wineries field trip, you should arrive back on campus in time to attend this event. However, if you are attending the Oregon Shakespeare Festival production of Hamlet, the play is likely to not be over until sometime between 5:00 and 5:15 p.m., putting you back on campus after 5:30 p.m. and making it difficult to participate in the Salmon Bake. However, we anticipate the drumming to continue beyond 5:30 p.m., so please join us for that part of the festivities.

**Sunday Evening Plenary Program.** Starting at 6:45 p.m. will be a panel discussion of a variety of topics surrounding the science-art exhibit which is being held in conjunction with the Pacific Division annual meeting. The discussion will bring together scientists, humanists, curators, and artists to discuss some core issues implicit in the exhibit, such as:

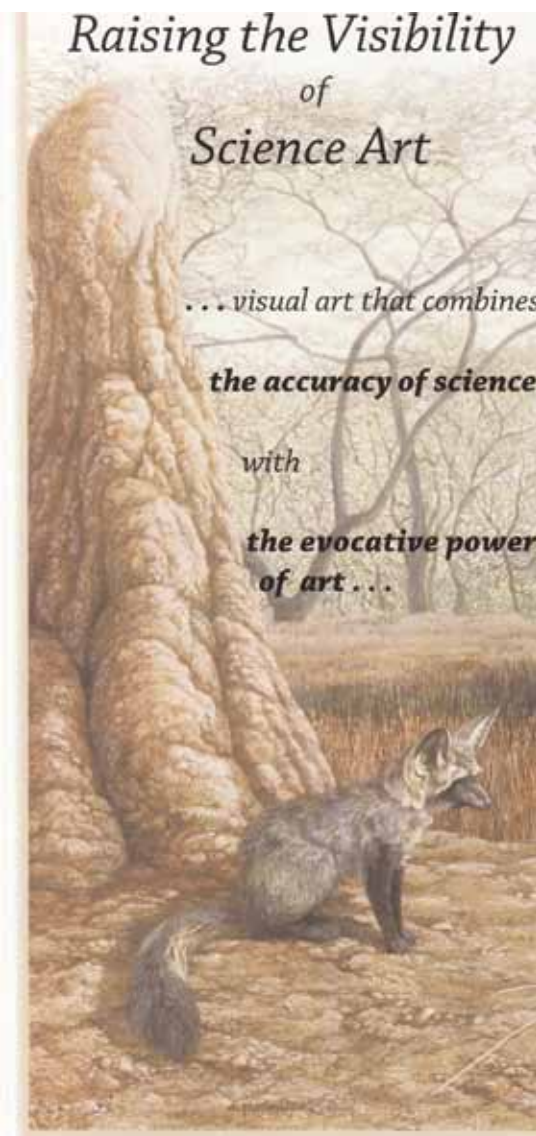
- What did curators and judges of science-themed art look for in order to select art for the show?
- How aware or informed about science did most of the entries appear?
- Given the long tradition of science illustration, some of it recognized as art in its own right, what new elements of science illustration can be considered art in itself?
- What draws artists to science topics more—the visual and representational possibilities of science ideas or theories, or the conceptual theories

### Science Art-Nature

**Science Art-Nature**, a nonprofit organization (founded by Stanford University scientists, Don Kennedy and Paul Ehrlich, artists Tony Angell and Darryl Wheye, and nonprofit consultant Pamela Meadowcroft) **looks forward to providing an online Science Art exhibit with support from the Stanford Institute for Creativity and the Arts (SiCa).**

The exhibit will feature artwork relevant to the research presented at the AAAS Pacific Division meeting, "The Art of Science," Ashland, Oregon, 13-17 June, 2010.

To access the exhibit during the Ashland meeting, go to [scienceart-nature.org](http://scienceart-nature.org).



*Bat-eared Fox Portrait, Carel Brest van Kempen/Science Art*  
Termite specialists, these foxes, have exceptional teeth and excavate complex tunnel networks.



Science Art-Nature  
P.O. Box 18754  
Palo Alto, CA 94309-8754  
[scienceart-nature.org](http://scienceart-nature.org)

themselves?

- How much do artists borrow and modify science illustrations as sources of art?
- What contribution to science understanding does/can science-themed art provide?
- How much science gets communicated or lost in artistic renderings of science ideas?
- Must artists have backgrounds in science to make capable science-based art?
- Do scientists find artistic renderings or embellishments of science ideas distortions or clarifications?
- What future collaborations might emerge between scientists and artists?
- (question for the audience) What is your opinion of the art selected?

**Sunday Evening Welcome Wagon and Cracker Barrel Reception**, immediately following the plenary session. Hosted by the Pacific Division and its affiliated societies and sections, all registrants and their families are invited to enjoy the conviviality of this event on 13 June, starting about 8:00 p.m. and running to about 9:30 p.m. A selection of soft drinks, beer, chips, pretzels and good conversation will be available. Please wear your registration badge.

**Monday Noon Public Lecture.** TBA

**Monday Evening Plenary Lecture.** TBA

**Monday Evening President's Reception.** 14 June, 8:00 p.m. Southern Oregon University President Mary Cullinan will welcome conference attendees at an informal hosted reception from about 8:00 p.m. – 9:30 p.m. All registrants and their families are invited to enjoy

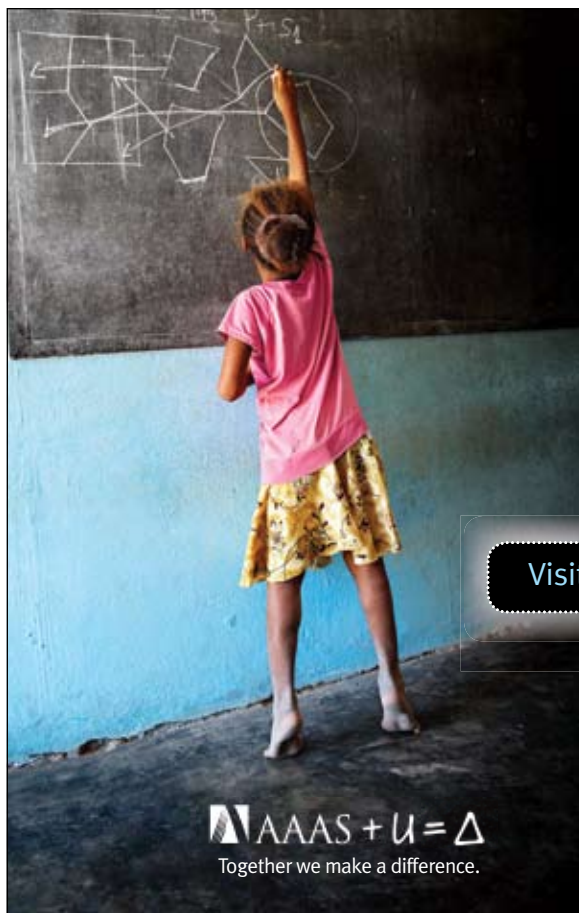
this relaxed occasion. Non-registered family members are welcome, but must be accompanied by a registrant. Please wear your registration badge.

**Tuesday Noon Public Lecture.** “Science Education for New Civic Engagements and Responsibilities (SENCER): An NSF-funded Science Education Reform Project.” Please refer to the next section, “Public Lectures and Sessions,” for more details about this talk.

**Tuesday Evening Student Awards Banquet.** Tuesday evening will be an exciting time for students as Division representatives will announce the names of student winners of sectional Awards of Excellence and also winners of the Division's Laurence M. Klauber Award for Excellence (unrestricted), Geraldine K. Lindsay Award for Excellence in the Natural Sciences, J. Thomas Dutro, Jr. Award for Excellence in the Geosciences, Rita W. Peterson Award for Excellence in Science Education, the President's Award for Excellence (unrestricted), the Best Poster Award (for poster presentations only but otherwise unrestricted), and the AAAS Robert I. Larus Travel Award, which provides for travel and other expenses for the awardee to attend the 2011 annual meeting of AAAS in Washington, D.C., 17 – 21 February, in order to present his/her winning presentation as a poster.

The evening is planned to begin at 6:00 p.m. with a reception. Dinner service will begin about 6:45 p.m. After dinner will be the presentation of student awards, followed by the Presidential Lecture, presented by Dr. John Hafernik (Department of Biology, San Francisco State University and President of the Pacific Division). The evening should end by about 9:30 p.m.

Banquet attendees can choose between three entrees: Vegetarian



## AAAS + your gift = a better world

The future of Rwanda is threatened by a severe shortage of highly educated professionals, teachers, technicians, and civil servants. AAAS is addressing this shortfall by working with Rwandan officials on a math and science curriculum to educate the next generation.

That's just one example of how AAAS makes a difference—especially when people like you are part of the equation. Your entire gift to AAAS goes into our Fund for Excellence to help us change the world for the better—on key issues such as global warming and the teaching of evolution.

Visit [aaas.org](http://aaas.org) and click **Make a Gift** on the left.

**Want your money to support a specific program?  
Want to provide for AAAS in your will?**

Contact our Director of Development, Juli Staiano, at 202-326-6636 or [development@aaas.org](mailto:development@aaas.org).

Lasagna (lasagna with fresh ricotta, mozzarella and parmigiana cheeses); Broiled Salmon with Dill Butter (salmon filet broiled and served with dill butter); and Roast Top Round of Beef. It is currently planned that all entrées will come with pear and toasted walnut spring salad; baked potato with butter, sour cream and chives; asparagus; freshly baked rolls and butter; dessert; and a choice of lemonade or iced tea. Please note that details may change as we approach the banquet date. If a substitution must be made, every effort will be made to insure that the replacement is comparable to that which is listed above. Banquet tickets are \$30 each and may be purchased on the Advance Registration Form (see page 27 of this *Newsletter*). The deadline for ordering banquet tickets is 31 May 2010, the close of advance registration for the meeting.

Students in competition for Awards of Excellence are invited to be guests of the Division for this event. Be sure to check the appropriate box on the Advance Registration Form (see page 27 of this *Newsletter*) indicating your plans to attend and you will be provided a ticket at no cost. *Note that if you request a complimentary ticket we expect you to attend the banquet. Please don't dishonor the Division's generosity in offering you this opportunity to fully participate in the meeting with minimal out-of-pocket expenses by asking for a ticket and then not showing up!*

**Wednesday Morning Business Meeting of the Council of the Pacific Division.** The Council of the AAAS, Pacific Division will hold its annual breakfast business meeting at 7:00 a.m. on Wednesday, 16 June. The Council will elect officers, Executive Committee and Council members, discuss programs for the 2011 and 2012 annual meetings, and transact such other business as is required by the Division's By-Laws. This is an open meeting and Pacific Division members with an interest in the governance of the Division are invited to attend.

**Wednesday Noon Public Lecture.** "Thinking About Forever: An Interactive Prototype for a Sustainable Educational Facility." Please refer to the next section, "Public Lectures and Sessions," for more details about this talk.

## PUBLIC LECTURES AND SESSIONS

The following public lectures are planned. Additional ones may be scheduled as time permits. All members of the public are invited to attend these lectures at no charge (except for the Presidential Lecture, for which there is a charge to attend the banquet—for information, see "Tuesday Evening Student Awards Banquet" in the preceding section of this *Newsletter*).

**Sunday Evening Plenary Session.** 13 June, 6:45 p.m. Panel Discussion on Science-Art Exhibit. Please refer to the full description under "Special Events" at the bottom of page 11.

**Noon Public Lecture.** 12:15 p.m. Details to be announced.

**Monday Evening Plenary Lecture.** 14 June, 7:00 p.m. Details to be announced.

**Tuesday Noon Public Lecture.** 15 June, 12:15 p.m. Drs. Amy M. Shachter (Department of Chemistry and Biochemistry, Santa Clara University, Santa Clara, CA) and Steve Bachofer (Department of Chemistry, Saint Mary's College, Moraga, CA) will present "Science Education for New Civic Engagements and Responsibilities (SENER): An NSF-funded Science Education Reform Project." Following this talk, they will lead an afternoon workshop on the topic for those desiring to delve deeper into this project.

**Tuesday Evening AAAS, Pacific Division Presidential Lecture.** Following the presentation of student awards at the Student Awards Banquet, Dr. John Hafernik (Department of Biology, San Francisco

State University, San Francisco, CA and President of the Pacific Division) will present the Presidential Lecture.

**Wednesday Noon Public Lecture.** 16 June, 12:15 p.m. Dr. Bill Wiecking (Hawai'i Preparatory Academy, Kamuela, HI) will present a lecture titled, "Thinking About Forever: An Interactive Prototype for a Sustainable Educational Facility." The main topic of this talk will be the new green Energy Lab on the Hawai'i Preparatory Academy campus. Dr. Wiecking was very instrumental in the development and design of this facility, for which the school is currently seeking LEED platinum certification.

**Please watch the Pacific Division web site for updates on these and other lectures as they are added.**

## SCIENCE-ART EXHIBIT

The Pacific Division is sponsoring a science-art exhibit in conjunction with this year's meeting. Submissions have far exceeded our expectations and we are very excited about the artwork that will be on display at seven or more venues on the Southern Oregon University campus from June through early September. More details will appear in the Proceedings, which every registered attendee receives. Plan on setting aside some time during your visit to Southern Oregon to view the tremendous array of science-related artworks on exhibit.

## OREGON SHAKESPEARE FESTIVAL

The Pacific Division is pleased to offer meeting registrants the opportunity to attend theatrical productions of the Oregon Shakespeare Festival (OSF). Two of the plays are evening performances, starting at 8:30 p.m., and one is a matinee, starting at 2:00 p.m. Two types of seating are available for each showing. "Economy seating" is generally toward the rear of each theatre, though for the performance of Hamlet there are a few tickets up front and to the far side. Economy seating tickets are \$21 each and are in very limited supply (eight to ten tickets available for each performance). "Best available" for Hamlet and Henry IV, Part One are all in the "A+" section (most expensive), while best available tickets for Cat on a Hot Tin Roof span the "B" (very few), "A" and "A+" categories. These tickets are \$60 each and, again, we have only a limited supply of them (24 to 26, depending on the play). If you are planning to take in a play or two or three while at the meeting, we suggest you register early in order to not be disappointed by finding out that we have sold all of the tickets for a particular play.

### Important notes:

1. *Theatre ticket sales will end on 15 May.* Any unsold tickets will be returned to the Festival and will be available for purchase only through the Festival, generally at higher prices.
2. OSF does not make will-call available for group ticket sales. *Those who purchase tickets for one or both of the Saturday and Sunday plays must plan on stopping by the Ashland Springs Hotel (212 E Main Street, Ashland) to pick up their tickets, which will be available at the front desk starting at noon on Friday, 11 June.* Packets not picked up by 3:00 p.m. on Sunday, 13 June will be transferred to the Registration Center at Southern Oregon University.
3. Be aware that *once a play has started, no additional seating is allowed until intermission.* It is very important that you arrive with plenty of time to park your vehicle and get seated before a play begins.

### Cat on a Hot Tin Roof

Saturday, 12 June. 8:30 p.m. in the Angus Bowmer Theatre.

*The sultry smell of desire.* It's a long, booze-filled night under Big

Daddy's plantation roof in 1950s Mississippi. Maggie "the Cat" still burns hot for her ex-football star husband Brick, but he only has eyes for the bottom of a whiskey bottle. Meanwhile, Big Daddy is dying, and the family vultures are swarming for a big slice of the inheritance pie. Couched in the earthy language of the deep South, this uncompromising, intensely human portrait of a family shows why Williams is one of America's greatest playwrights. (Strong language, mature themes)

Age Recommendation (OSF): Best suited for children 14 and up who can handle the mature themes.

### **Hamlet**

Sunday, 13 June. 2:00 p.m. in the Angus Bowmer Theatre.

*Something is rotten.* In Denmark, a king is dead. His brother, Claudius, has snatched the throne and the widowed queen. Life goes on—for everyone but Hamlet. The prince, fixated on his uncle as the murderer, is charged by his father's ghost to avenge the wrong. Disconnected from the foul world around him, Hamlet strains under the weight of his task. OSF's first production in a decade of Shakespeare's disturbing and psychologically rich masterpiece digs into the enigma of a man's mind.

Age Recommendation (OSF): This play is suitable and highly recommended for mature 12-year-olds and up.

### **Henry IV, Part One**

Wednesday, 16 June. 8:30 p.m. in the Elizabethan Theatre.

Fit to be king? Prince Hal will be king some day, but right now he's hanging with a crowd of lowlifes, led by the round-bellied and irresistibly magnetic John Falstaff. Hal's having the time of his life, but King Henry wishes his son were more like the valiant Hotspur, head of the rebellious Percy family gunning for the throne. For Henry and his line, it's a life-or-death military struggle for England's political future. Will Hal rally to the cause and marshal leadership qualities worthy of a crown?

Age Recommendation (OSF): Scenes of politics and battle alternate with comic depictions of Prince Hal's forays into petty theft and debauchery with his companions at the Boar's Head Tavern. It is suitable for children 10 and up who are able to handle the bawdiness of the Boar's Head Tavern.

## **FIELD TRIPS**

All field trips are open to meeting registrants and their families. At least one member of a group must be registered for the meeting. Unregistered family members will be charged an additional one-time-only \$10 field trip registration fee. This fee is paid only once for this meeting, regardless of how many field trips a non-registrant participates in.

Due to limited space, advance registration is required for all field trips. Reservation and payment of field trip fee(s) are included on the Advance Registration Form (see page 27 of this *Newsletter*).

A full refund will be granted if a trip is cancelled by the Division. If a registrant cancels via e-mail or written notification received in the Pacific Division office no later than 20 May 2010, the registrant will receive a refund of the fee(s) paid less a \$15 processing fee. If paid by credit card, an additional 3.5% of the original charge will be deducted from the amount being refunded to help pay for fees charged to the Division by credit card companies. With the exception of the Division cancelling a field trip, no refunds will be granted after 20 May.

**(1) Sunday, 13 June: 10:00 a.m. – 4:00 p.m. *Winemaking in the Rogue and Applegate Valleys, Southern Oregon.*** Organized by Steven Petrovic (Department of Chemistry, Southern Oregon University), this excursion is planned to visit three wineries in the Rogue and Applegate

Valleys of southern Oregon. Included will be tours of the operations, barrel tasting of wines, and talks on how soil type, aspect and temperature control planting and irrigation practices. Participants will also be exposed to how winemakers approach winemaking for red and white varietals.

Includes transportation and box lunch. Cost: \$50.

**(4) Wednesday, 16 June: 8:00 a.m. – 10:00 p.m. *Endemics of Oregon Caves National Monument.*** Led by Chris Oswald and Steve Cross (Department of Biology, Southern Oregon University), this excursion travels north on Interstate 5 to Grants Pass, where it turns west on Highway 199 to Cave Junction. From Cave Junction, it travels east the last 20 or so miles on Oregon Highway 26. Tours of the cave are considered moderately strenuous and are not recommended for people with heart, breathing, or walking problems. The half-mile route includes more than 500 stairs (most of which are steep and uneven) and a total climb of 230 feet. The lowest passageway you will have to duck under is about 45 inches tall. Children must be at least 42 inches tall and be able to demonstrate their ability to climb a set of test stairs, unassisted, to go on the full tour of the cave. After our tour of the cave we will take a leisurely break to eat box lunches, followed by a hike on one of the many trails to explore the rich old-growth forest, a region recognized to be one of the most geologically unique and botanically diverse in the United States. Before leaving Oregon Caves we will have dinner at the Chateau, an historic 76 year old structure that is truly one of the great lodges of the National Parks. Dinner is on your own (entrées are priced at roughly \$20 to \$32). Following dinner we'll head back to Ashland, arriving about 10:00 p.m.

The National Monument sits at approximately 4,000 feet elevation. Daytime temperatures are likely to be cool, so come prepared! It is recommended that participants wear good hiking boots or tennis shoes in order to traverse the cave and also for the trail hike afterwards. Don't neglect the warning about the strenuous nature of hiking the cave in the paragraph above!

Includes transportation, box lunch, entry to Oregon Caves National Monument and transportation. Cost: \$60.

**(2) Thursday, 17 June: 8:00 a.m. – 5:00 p.m. *Geology of Mount Shasta.*** This trip, led by Robert Christiansen (USGS retired, Menlo Park, CA) will travel south from Ashland, passing through a small part of the Klamath Mountains province that represents the oldest geologic terranes of the Southern Oregon-Northern California region, to the area of Mount Shasta, one of the most active volcanoes of the Cascade Range. The Cascades, the only active volcanic arc in the conterminous U.S., were formed by subduction of the Farallon lithospheric plate, which was born along the Gorda-Juan de Fuca oceanic spreading center. Most of the Cascades arc in Oregon and California consists of relatively small shield-shaped volcanoes, each of them erupted in rather brief periods of time and consisting largely of lavas with a limited range of basalt to basaltic-andesite compositions. By contrast, a relatively few larger volcanoes of the arc have a wide range of compositional types—mainly dacites and andesites—and are complexly evolved, long-lived stratocones that consist both of lavas and of fragmental, more explosively erupted volcanic rocks.

Mount Shasta is the largest strato-volcano of the Cascade chain. At nearly 500 km<sup>3</sup>, it is comparable in volume to such well-known volcanoes as Fuji-san (Japan) and Cotopaxi (Ecuador). The peak rises to an elevation of 4,317 m (14,162 feet), more than 3,200 m (10,500 feet) above its base, and dominates the landscape in much of northern California.

The trip will include several stops to observe the Shasta Valley, Mt. Shasta itself and a variety of geological features associated with



# Using *Atlas of Science Literacy*

## AAAS PROJECT 2061 PROFESSIONAL DEVELOPMENT WORKSHOP FOR EDUCATORS

### Who should attend?

- K-12 science and mathematics teachers, administrators, and curriculum specialists
- Textbook adoption committee members
- University faculty (sciences, mathematics, education)
- Curriculum and assessment developers
- Educators and staff at informal science institutions

### When and where?

June 17-19, 2010  
Southern Oregon University  
1250 Siskiyou Blvd.  
Ashland, OR 97520

### How to register?

Use the registration form on the reverse side.

For more details visit:

[www.project2061.org/workshops](http://www.project2061.org/workshops)



### About *Atlas of Science Literacy*.

*Atlas* is an exciting two-volume resource that brings together nearly 100 strand maps developed by Project 2061 of the **American Association for the Advancement of Science** and co-published with the **National Science Teachers Association**. Strand maps present conceptual connections among the ideas and skills that all students need to learn in science, mathematics, and technology. Maps graphically display how students might progress in their understanding of topics such as gravity, natural selection, weather and climate, and statistical reasoning from kindergarten through grade 12.

### About the *Atlas* workshop.

This three-day workshop will give you a new perspective on standards-based reform and a new tool for the work that lies ahead. You will use *Atlas* and other Project 2061 resources to enhance your understanding of science

literacy and to improve your curriculum, instruction, and assessment. The workshop will help you to:

- **Understand the *Atlas* Maps** To gain insights into the nature and purpose of maps, you will explore the "backmapping" process used to create the maps by trying it yourself on selected topics.
- **Clarify Standards** To shed light on local, state, and national standards, you will use *Atlas* maps to see how the connections among ideas and skills are a key to helping your students learn and a critical part of science literacy.
- **Change Classroom Practice** To understand how students progress in their mastery of ideas and skills, you will use *Atlas* maps to decide whether an instructional activity or assessment takes account of what your students already know and where they are going next.
- **Improve Curriculum** To design a more coherent and effective curriculum, you will learn how to use maps to think through the scope, sequence, and coordination of learning goals and to select materials, teaching strategies, and assessments that are well aligned to them.

With a mission of "Advancing Science, Serving Society," AAAS is the world's largest general science organization, publisher of the peer-reviewed journal *Science*, and an authoritative source that bridges gaps among scientists, policymakers, and the public. Project 2061—the education reform initiative founded by AAAS in 1985 to help all students become literate in science, mathematics, and technology—created the nation's first set of K-12 science learning goals, *Benchmarks for Science Literacy*, in 1993.

**SPACE IS LIMITED; REGISTER TODAY AND SAVE!**

**AAAS/PROJECT 2061 WORKSHOP REGISTRATION FORM**  
**Using *Atlas of Science Literacy***  
**Co-hosted by Southern Oregon University and AAAS Pacific Division**  
**Ashland, OR—June 17-19 2010**

Contact Person \_\_\_\_\_

Title/Grade \_\_\_\_\_ o Math o Science

School/District \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Phone \_\_\_\_\_ Fax \_\_\_\_\_ Email \_\_\_\_\_  
(Needed for Confirmation)

Team Members \_\_\_\_\_  
(List the names of all your team members. Each team member must complete a separate registration form.)

**REGISTRATION FEES**

Fee includes breakfast & lunch during the workshop. Fee does not include hotel accommodations.

	<b>Early-Bird*</b>	<b>Regular</b>
<b>Teams</b>	\$375/person	\$400/person
<b>Individuals</b>	\$425	\$450

**\* To qualify for the Early Bird discount, registrations must be received three weeks prior to the first day of each workshop.**

**PAYMENT AMOUNT**

Registration Fee (from fee list above) \$ \_\_\_\_\_

Books: Each participant is required to have a copy of each of the following books for use at the workshop. If you already own these books, please bring them with you to the workshop. If you do not own all of these books, order them below and pick them up at the workshop. Please call 202-326-6666 for more information.

*Science for All Americans* \_\_\_\_\_ copies @ \$18.95 each \$ \_\_\_\_\_

*Benchmarks for Science Literacy* \_\_\_\_\_ copies @ \$34.95 each \$ \_\_\_\_\_

*Atlas of Science Literacy, Vol. 1 **only*** \_\_\_\_\_ copies @ \$59.95 each \$ \_\_\_\_\_

*Atlas of Science Literacy, Vol. 2 **only*** \_\_\_\_\_ copies @ \$59.95 each \$ \_\_\_\_\_

*Atlas of Science Literacy (two-volume set)* \_\_\_\_\_ copies @ \$99.95 each \$ \_\_\_\_\_

*Designs for Science Literacy* \_\_\_\_\_ copies @ \$59.99 each \$ \_\_\_\_\_

Total Fees (registration fee + book costs) \$ \_\_\_\_\_

**PAYMENT METHOD (select one)**

- Check enclosed (Payable to AAAS/Project 2061).
- Invoice my organization:
- Purchase Order attached.
- Charge to:  Visa  MasterCard  
 Discover Card  American Express

Organization Name \_\_\_\_\_ Cardholder Name \_\_\_\_\_

Address \_\_\_\_\_ Card Number \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Expiration Date \_\_\_\_\_

Zip \_\_\_\_\_ Attn \_\_\_\_\_ Cardholder Signature \_\_\_\_\_

**Workshop Location:**

Southern Oregon University  
 1250 Siskiyou Blvd.  
 Ashland, OR 97520

**Workshop date:**

June 17-19, 2010

**Return this form to:**

AAAS Project 2061  
 Professional Development  
 Programs  
 ATTN: Cheryl Latson  
 1200 New York Avenue, NW  
 Washington, DC 20005  
 Phone: 202-326-6632  
 Toll-Free: 888-PDP-2061  
 FAX: 202-842-5196

**Accommodations:**

All workshop participants are responsible for the booking and payment (or cancellation) of their own accommodations.

You may find [www.hotels.com](http://www.hotels.com) a useful tool for selecting your Ashland, OR lodging.

**Cancellation Policy:**

Registration fees are refundable if cancellations are received 15 days prior to the workshop. A \$50 processing fee will be charged. After the cancellation deadline, no refunds will be given. Participant substitutions may be made. While cancellations by AAAS Project 2061 are rare, in the event a workshop is cancelled only registration and book fees (in full) will be reimbursed. Participants who have incurred travel or other related costs will be responsible for those expenses.

it. Most stops require little walking beyond exiting the vehicles. Of the eight stops planned, stop 3 requires about a half mile round trip of walking on a well marked Forest Service trail; Stop 5 requires about 100 yards of walking each way over somewhat irregular ground; and stop 6 is a little over a half-mile round trip on an unpaved road across level ground. Stop 8 offers the option of longer walks, up to a mile or so, depending on the time available at the end of the trip (before the return to Ashland), but no walking is necessary. The last two stops are on Mount Shasta at elevations of about 6200 and 7800 feet respectively.

No special equipment is needed, although good walking shoes and jackets appropriate for the elevations at the last 2 stops are desirable.

Includes transportation and box lunch. Cost: \$50.

**(3) Thursday, 17 June: 8:00 a.m. – 5:00 p.m. *Serpentine Geology and Botanical Diversity of Eight Dollar Mountain and the Illinois River Valley, Southern Oregon.*** Organized by Michael Parker (Department of Biology, Southern Oregon University, Ashland, OR), this trip will travel to the Illinois River Valley to explore unique and diverse plant communities in one of North America's most geologically-complex regions. From Jeffrey pine savannahs and shrublands to fens inhabited by rare, endemic orchids and carnivorous pitcher plants, we will explore the botanical riches of Eight Dollar Mountain and the scenic Illinois River corridor. We will also visit the Deer Creek Center for Field Research and Education, enjoying lunch on the patio with the spectacular panorama of the Siskiyou Mountains as a backdrop.

Note that this excursion will include short hikes over uneven ground. Sturdy walking shoes are recommended.

Includes transportation and box lunch. Cost: \$50.

## WORKSHOPS

### EVIDENCE-BASED RESEARCH, THE SCIENCE OF RESEARCH SYNTHESIS: IMPLICATIONS AND APPLICATIONS IN THE DELIVERY OF HEALTH CARE

Full-day workshop, organized by Francesco Chiappelli (Professor, UCLA School of Dentistry, Division of Oral Biology and Medicine, University of California, Los Angeles, CA). **Scheduled for all day Tuesday, 15 June.**

Evidence-based medicine/nursing/dentistry is a complex process of health care delivery that rests on three distinct scientific domains. First, evidence-based research seeks to evaluate pre-clinical and clinical research in order to obtain the "best available" evidence by means of systematic reviews and meta-analyses. Second, in the context of developing evidence-based clinical practice, the best available evidence is integrated in carefully crafted revisions of clinical practice guidelines. Third, the actual delivery of evidence-based health care rests on the integration of decision-making theories (e.g., utility theory) articulated so as to favor the integration of revised clinical practice guidelines into clinical intervention. Together, these three elements proffer evidence-based modes of treatment for optimizing clinical outcomes for the benefit of the patient. Thus, evidence-based health care rests fundamentally on the initial evaluative evidence-based research synthesis step for identifying the "best available" evidence. The goal of this workshop is to provide the audience with the basic skills and tools to perform evidence-based research.

If possible, participants should bring their laptop computer in order to connect to Pubmed or other websites as needed during the workshop. Wireless internet access will be available.

Limited to 24 participants. Please indicate your interest in attend-

ing this workshop by checking the appropriate box on the Advance Registration Form (see page 27 of this *Newsletter*).

### GEOMETRY AS A DESIGN TOOL

Full-day workshop organized by Rochelle Newman (Professor Emerita, Northern Essex Community College, Haverhill, MA). **Scheduled for all day Wednesday, 16 June.**

This all-day, hands-on workshop takes an interdisciplinary approach to exploring relationships that exist in the world of nature, the domain of forms and the arena of ideas. Space, common to Art, Mathematics and Nature, is the central focus. Examining the natural world, participants use geometry as the design tool for creating art works. Emphasis is placed on taking a concept through craft to a completed composition. The thread that weaves this activity together are the concepts of the Golden Ratio and the Divine Proportion.

No art or math experience is necessary, just a desire to play with ideas and materials. All supplies and hand-outs will be provided for a \$5.00 workshop fee.

Limited to 24 participants.

### SCIENCE EDUCATION FOR NEW CIVIC ENGAGEMENTS AND RESPONSIBILITIES (SENCER) WORKSHOP

Half-day workshop organized by Amy Shachter (Associate Provost, Office of Research Initiatives, Santa Clara University, Santa Clara, CA) and Steve Bachofer (Department of Chemistry, Saint Mary's College, Moraga, CA). **Scheduled for Tuesday morning, 15 June.**

Initiated in 2001, Science Education for New Civic Engagements and Responsibilities (SENCER)<sup>1</sup> is a national dissemination project funded by the National Science Foundation. SENCER has established and supported an ever-growing community of faculty, students, academic leaders, and others to improve undergraduate STEM (science, technology, engineering and mathematics) education for non-science majors by connecting learning to critical civic questions. In 2007, the SENCER project established five regional SENCER Centers of Innovation (SCI). The SCIs expand the work of SENCER by organizing regional workshops designed to foster a multi- and interdisciplinary approach to science education with a focus on civic engagement. SCI-West is organizing this workshop to provide opportunities for AAAS members to engage SENCER faculty, discuss SENCER approaches, and consider developing regional collaborations. The AAAS Pacific Division SENCER workshop will have four one-hour segments:

- SENCER Overview and Model Courses (Amy Shachter, Santa Clara University). A dynamic introduction to the SENCER project including an overview of an interdisciplinary set of SENCER Model courses.
- Designing a SENCER course (Amy Shachter, Santa Clara University). An interactive workshop that takes participants through a nine step program to design a SENCER science course.
- SCI-West Research Projects (Steve Bachofer, Saint Mary's College). An overview of a watershed and air quality research project models being developed by SCI-West including a discussion of ways to become involved.
- Assessment using the SENCER Self-Assessment of Learning Gains Instrument (Stephen Carroll, Santa Clara University). An introduction to the SALG instrument and how it can be used to understand perceptions of student learning gains.

Limited to 24 participants. Please indicate your interest in attending

<sup>1</sup><http://www.sencernet.net/About/projectoverview.cfm>

this workshop by checking the appropriate box on the Advance Registration Form (see page 27 of this *Newsletter*).

#### **A DISCUSSION ON THE VALUE OF ADVANCED PLACEMENT PROGRAMS FROM HIGH SCHOOL AND UNIVERSITY PERSPECTIVES**

One-half day workshop organized by William B.N. Berry (University of California, Berkeley, CA) and William Wiecking (Hawai'i Preparatory Academy, Waimea, HI). **Scheduled for Tuesday afternoon, 15 June.**

This discussion/workshop will begin to address the topic of the value of Advanced Placement courses at the high school level. Perspectives will come from high school students and instructors, university professors, and others interested in this very important issue. Three foci of the workshop will be:

- Benefits and drawbacks of high school AP programs from the student, parent, instructor and professor's perspectives.
- How can we best prepare our students for the future? Is AP part of the solution, part of the problem, or part of both?
- Field studies: a prototype for a new level of AP curriculum?

#### **PROMOTING MEANINGFUL LEARNING**

Half-day workshop organized by Kathleen Fisher (Professor Emerita, Department of Biology and Center for Research in Mathematics & Science Education, San Diego State University, and Co-founder & Chief Educational Officer, Semantic Research, Inc., San Diego, CA) and sponsored by Semantic Research Inc. (San Diego, CA). **Scheduled for Monday afternoon, 14 June.**

Semantica® is a commercial product developed by Semantic Research Inc. (SRI) in San Diego. It is descended from SemNet®, a semantic networking tool developed by the author's research group at the University of California, Davis in the early eighties. Earlier versions of Semantica / SemNet have been used widely, primarily in higher education, in business settings in the US and Europe, and in K-12 classes. The author and a graduate student introduced Semantica into High Tech Middle School in San Diego last year.

Research suggests that when students organize the knowledge they are acquiring in the form of a semantic network, their learning and retention are enhanced significantly. Further, students may also acquire desirable and lasting learning habits.

When a faculty member reviews a semantic network, s/he can often diagnose a student's particular learning problems and give very explicit feedback to improve that student's learning. This benefit is particularly pronounced with ESL students, who often haven't yet mastered the verbs critical for understanding the topic. For example, a student who doesn't know the difference between 'has a part' and 'is a part of' has difficulty mastering biology. In general, verbs are more challenging to learn than nouns and are learned later than nouns.

Workshop participants will take away a CD that contains the Semantica program (a \$79 value) they just learned, the Semantica Manual, sample semantic networks in various sciences and other subjects, and brief papers describing Semantica-based teaching, studying, problem-solving and grading strategies. Participants will be authorized to share their software with their students and install it in university/school classrooms.

Limited to 24 participants. Please indicate your interest in attending this workshop by checking the appropriate box on the Advance Registration Form (see page 27 of this *Newsletter*). Late-comers will be included if space is available.

#### **SCIENCE AND RELIGION: A PHILOSOPHICAL LOOK AT ISSUES AND APPROACHES**

Two half-day sessions, organized by Prakash Chenjeri (Department of Language, Literature and Philosophy, Southern Oregon University, Ashland, OR). **Scheduled for all day Wednesday, 16 June.**

This workshop will explore some of the critical issues that science and religion have contested, focusing primarily on the methodological and epistemological questions.

The two half-day sessions will include panel discussions and documentaries exploring the interaction between science and religion by looking at some of the landmark issues that have punctuated their relationship over the last five hundred years. Among the topics explored are: the nature of the scientific method; the trial of Galileo and its implications; the implications of Newton's mechanistic world view; the Darwinian revolution and the post-Darwinian controversies, in particular the debate over the 'intelligent design' argument; faith and reason; and cosmology and questions of origin. The sessions will also examine the question, "Does science make belief in religion obsolete?"

#### **TECHNICAL SESSIONS SYMPOSIA**

The following symposia are being planned for the annual meeting. Although most symposia are organized around invited papers, organizers often will consider adding one or more contributed papers if they are relevant to their programs. Should you wish to participate in one of these symposia, contact the symposium organizer directly. Should you wish to present a paper in one of the contributed paper sessions, refer to pages 22 and 23 of this *Newsletter*. Check the Division's web site, [pacific.aaas.org](http://pacific.aaas.org), for the latest information on symposia and other program events.

Please remember, at this time the listings contained herein are still subject to change. If you plan to attend the meeting largely for one symposium or technical session, check the Division's web site for updates to the program or phone the Division's office at 541-552-6869 to confirm the status of the session(s) before committing travel funds. As additional symposia are added to the program, they will be posted on the Division's web site.

**(1) Forensic Science: A Balance of Art and Science.** Organized by Peter Schroeder (Department of Biology, Southern Oregon University, Ashland, OR; e-mail: [pschroeder@sou.edu](mailto:pschroeder@sou.edu)). Co-organized by Mary Carrabba (Department of Chemistry, Southern Oregon University, Ashland, OR; e-mail: [carrabbam@sou.edu](mailto:carrabbam@sou.edu)). **Scheduled for Wednesday morning, 16 June.**


Forensic science is the application of science to address legal inquiries related to civil or criminal activity in an effort to establish the authenticity of an artifact or event. In its application, forensic science typically utilizes many focused scientific disciplines, such as chemistry and biology. However, nonscientific disciplines, including art, are important elements of forensic analysis. This first session of a two-part symposium (see #2 below) will seek to explore the many ways art is encountered in the field of forensic science, from detailed images viewed through a light microscope to the telltale details in a piece of artwork suspected of being a forgery. The symposium will also include discussions of how art is used in facial reconstruction, age progression, and the forensic analysis of artifacts.

**(2) Wildlife Forensics.** Organized by Peter Schroeder (Department of Biology, Southern Oregon University, Ashland, OR; e-mail: [Page 18](mailto:pschroed-</a></p></div><div data-bbox=)



AAAS was here.

**Entry Point!**  
**Students with Disabilities**

To meet the challenge of the competitive economy in the new millennium, private industry and government research agencies must expand the pool of technical talent. AAAS started Entry Point!, a program that offers students with disabilities competitive internship opportunities in science, engineering, mathematics, computer science, and some fields of business. And this is just one of the ways that AAAS is committed to advancing science to support a healthy and prosperous world. Join us. Together  **AAAS + U = Δ** we can make a difference. [aaas.org/plusyou/entrypoint](http://aaas.org/plusyou/entrypoint)

er@sou.edu). Co-organized by Mary Carrabba (Department of Chemistry, Southern Oregon University, Ashland, OR; e-mail: carrabbam@sou.edu). **Scheduled for Wednesday afternoon, 16 June.**

Ashland, Oregon, the host city of the 91<sup>st</sup> Annual AAASPD Meeting, is home to the only federal wildlife forensic laboratory in the world. This second session of a two-part symposium (see #1 above) will center on either wildlife forensic science as conducted in the U.S. National Fish and Wildlife Forensic Laboratory or selected presentations on different disciplines encountered in a more typical crime laboratory.

**(3) Improvement of Introductory Biology Course Teaching and Student Learning via Diagnostic Question Clusters** *Symposium withdrawn from program.*

**(4) Progress in Vaccines and Therapeutics.** Organized by Kenneth Cornell (Department of Chemistry and Biochemistry, Boise State University, Boise, ID; e-mail: kencornell@boisestate.edu). **Scheduled for all day Monday, 14 June.**

In this symposium, investigators and their students are invited to present research on the synthesis and testing of therapeutic drugs, development of drug delivery platforms, and identification of drug targets for a variety of human and animal diseases. As well, presentations are solicited on research into the identification and production of vaccine antigens, and development and testing of vaccines and vaccine delivery paradigms to stimulate protective immunity to treat infectious disease and cancer.

**(5) Anthropological Approaches to Environmental Change.** Organized by Stephen Frost and Frances White (Department of Anthropology, University of Oregon, Eugene, OR; e-mail: sfrost@uoregon.edu). **Scheduled for all day Tuesday, 15 June.**

This symposium examines the responses of organisms to changes in their environment. Speakers will include specialists from the fields of human biology, evolutionary psychology, primatology, and paleontology, all of which focus on different, but related aspects of how organisms interact with their environments. We are interested in the environment broadly conceived to include the physical, biological, and social context within which organisms must function. Different specialists will focus on different types and levels of response from behavioral and phenotypic plasticity within the lifespan of individual organisms, to cultural change, and to adaptation over evolutionary time scales. The participants include both established scholars within their respective disciplines as well as graduate and undergraduate students.

Confirmed Presenters:

*E.H. Guthrie* (University of Oregon), *K. Harvati* (Eberhard Karls Universität, Tübingen, Germany) and *S.R. Frost* (University of Oregon) “Ecological Correlates of Dental Eruption in Haplorhines.”

*Frost, S.R., E.H. Guthrie* (University of Oregon), and *E. Delson* (American Museum of Natural History, New York and Lehman College, CUNY, Bronx, NY) “Evolution of the *Theropithecus oswaldi* Lineage through 3 Myr of Global Climatic Change.”

*Minton, I.R. and F.J. White* (University of Oregon) “Sexual Selection for Sex Differences in Bonobo Locomotor Strategies: Implications for Interpretations of Ardipithecus.”

*White, F.J., M.T. Waller, I.R. Minton and K.J. Boose* (University of Oregon) “The Importance of Bonobos to Evolutionary Models of Human Social Behavior: Ecological Correlates of Female Bonding, No Infanticide, and or Lethal Raiding.”

*Snodgrass, J.J.* (University of Oregon), *W.R. Leonard* (Northwestern University), *L.A. Tarskaia* (University of Nebraska and Russian Academy of Medical Sciences, Moscow, Russia), *T.J. Cepen, T.M. Klimova and V.G. Drivoshapkin* (FSRI Institute of Health, Republic of

Sakha/Yakutia, Yakutsk, Russia) “The Effects of Economic Development and Lifestyle Change on Cardiovascular Health Among an Indigenous Circumpolar Population.”

*Cepen, T., J.J. Snodgrass* (University of Oregon), *W.R. Leonard* (Northwestern University), *L.A. Tarskaia* (University of Kansas and Russian Academy of Medical Sciences, Moscow, Russia), *T.M. Klimova and V.G. Krivoshapkin* (FSRI Institute of Health, Republic of Sakha/Yakutia, Yakutsk, Russia) “Autoimmune Thyroid Disorders as a Consequence of Cold Adaptation Among the Yakut of Siberia.”

*Middtveit, E.C., H.H. McClure, J.J. Snodgrass, T.W. McDade, C.R. Martinez, J.M. Eddy, R.A. Jimenez, and L.E. Isiodria* (University of Oregon, Oregon Social Learning Center (Eugene, OR), Northwestern University, and Farmworker Housing Development Corporation, Woodburn, OR) “Body Composition and Lifestyle Correlates of Stress Biomarkers among Latino Immigrants in Oregon.”

*Liebert, M.A., J.J. Snodgrass, A.D. Blackwell, F.C. Madimenos* (University of Oregon), and *L.S. Sugiyama* (University of Oregon and University of California Santa Barbara) “The Effects of Market Integration on Blood Pressure, Glucose, Cholesterol, and Triglyceride Levels in an Indigenous Lowland Ecuadorian Population.”

*Madimenos, F.C., J.J. Snodgrass, M.A. Liebert, A.D. Blackwell* (University of Oregon), and *L.S. Sugiyama* (University of Oregon and University of California, Santa Barbara) “Physical Activity Levels in an Ecuadorian Forager-Horticulturalist Population Undergoing Market Integration.”

*Ridgeway, J.R., F.C. Madimenos, M.A. Liebert, A.D. Blackwell* (University of Oregon) and *L.S. Sugiyama* (University of Oregon and University of California, Santa Barbara) “Effects of Socio-economic Environment on Health of Indigenous Shuar of Amazonian Ecuador.”

**(6) Sixth Annual Symposium on Materials Science and Nanotechnology.** Organized by Panos Photinos, Ellen Siem (Department of Chemistry, Physics, Material Science and Engineering, Southern Oregon University, Ashland, OR; e-mail: aaap@sou.edu) and Shalini Prasad (Portland State University, Portland, OR). **Scheduled for Monday, 14 June.**

This symposium will include oral and poster presentations on materials research, and oral presentations on undergraduate curriculum development in materials science and nanotechnology. Contributions from graduate and undergraduate students are especially encouraged.

Persons interested in presenting in this symposium should contact the organizers at the above e-mail address.

**(7) Science-Humanities Cross-Fertilizations.** Organized by Robert L. Chianese (California State University, Northridge, CA; e-mail: Robert.Chianese@csun.edu) and Carl A. Maida (University of California, Los Angeles, CA; e-mail: cmaida@ucla.edu). **Scheduled for Tuesday, 15 June.**

This symposium is accepting papers that demonstrate how the sciences and humanities mutually benefit each other in specific ways, shaping each others’ fields, programs, outlooks, and products. We are also soliciting papers that deal with science-humanities cross-over figures who shape culture, consciousness, etc., such as Stephen Jay Gould, Leonardo DaVinci, and Galileo. If you are interested in submitting a paper to this symposium or would like more information, contact one or both of the organizers at their e-mail addresses listed above.

**(8) Ecotoxicology and Environmental Protection.** Organized by Chris Oswald (Department of Biology, Southern Oregon University, Ashland, OR; e-mail: oswald@sou.edu). **Scheduled for Tuesday, 15 June.**

This symposium focuses on the ways in which ecotoxicology as a discipline can help promote both specific knowledge of particular envi-

ronmental hazards, and general understanding of ecology and physiology. The field of ecotoxicology is an excellent tool for educating the public on the importance of environmental protection. The concept of direct effects of toxins on organisms provides a readily understood and appreciated starting point. The complex means by which toxins exert their deleterious effects are less familiar – ecosystem processes, trophic structure, community relationships, life history trait variation, biotransformation, etc. Lack of understanding of these important biological principles contributes in large part to the unwillingness of the public and policy makers to alter environmentally harmful practices. This symposium explores how communication of the findings of ecotoxicological research can be used to promote improved understanding of biological processes as well as specific risks associated with particular pollutants. Participants will present their research findings in this context, and discuss ways to get their message to the public. We will seek to identify biological concepts that are key to understanding the importance of environmental protection, and develop a framework for communicating these concepts within ecotoxicology.

#### Confirmed Presenters:

*Scott Hecht* (National Oceanic and Atmospheric Administration, Northwest Fisheries Science Center, Ecotoxicology and Environmental Fish Health Program, Seattle, WA), “Ecotoxicology and Endangered Species.”

*Jeffrey J. Jenkins* (Department of Environmental and Molecular Toxicology, Oregon State University, Corvallis, OR), “A Mechanistic Approach to the Evaluation of Pesticide Risks to Aquatic Species Native to the Pacific Northwest.”

*W.G. Landis, K.K. Ayre and A.J. Markiewicz* (Institute of Environmental Toxicology, Huxley College of the Environment, Western Washington University, Bellingham, WA) “Landscape Risk Assessment as a Science-Policy Integrative Tool for Environmental Management.”

**(9) Science and Art Consilience.** Organized by John D. Sollinger (Department of Biology, Southern Oregon University, Ashland, OR; e-mail: [sollingj@sou.edu](mailto:sollingj@sou.edu)). **Scheduled for Monday, 14 June.**

Fifty years after C.P. Snow’s famous “two cultures” lecture, there is a movement to bridge the divide between art and science with an intellectual borderland where their shared creativity and quest for discovery can be synergized. The patterns, harmonies, symbols, and perceptions that are shared across borders and disciplines, where knowledge and wisdom unite, define a new way of thinking, teaching and learning. This paradigm shift serves to spark extraordinary creativity and inspiration for students, educators and researchers. Presenters from various disciplines will relate how they fuse science and art, leading to new insights and models in their research and teaching. John Sollinger will provide an overview of the symposium, introduce the concepts connecting art and science, and relate how he and Pete Schroeder (Southern Oregon University) connect visual art and biology. This will be followed by a panel of speakers, who will introduce the University of California, Davis Art-Science Fusion Program. Wendy Silk, Terry Nathan, Donna Billick and Diane Ullman (all from the University of California, Davis) will each present topics such as networking, the 2009 UC Davis Centennial Colloquium, “The Consilience of Art and Science,” and project based learning using music, ceramics, graphics, textiles and photography as bridge between art and science. Ann Savageau (University of California, Davis) will discuss the connections between art, design and building sustainability. Catherine Chalmers (Independent Artist, New York), an artist who uses visual arts to build environmental literacy, will present her most recent video, “We Rule,” documenting the dominance and importance of

ants on the planet. A philosophical perspective on consilience will be presented by Prakash Chenjeri (Southern Oregon University).

#### Confirmed Presenters:

*Donna Billick* (Co-Founder and Co-Director of the UC Davis Art/Science Fusion Program, University of California, Davis)

*Catherine Chalmers* (Independent Artist, New York, NY)

*Terry Nathan* (Professor of Atmospheric Science, UC Davis Art/Science Fusion Program, University of California, Davis)

*Prakash Chenjeri* (Associate Professor of Philosophy, Southern Oregon University)

*Ann Savageau* (Professor of Design, University of California, Davis)

*Wendy K. Silk* (Professor of Land, Air and Water Resources, UC Davis Art/Science Fusion Program, University of California, Davis)

*John D. Sollinger* (Professor of Biology, Southern Oregon University)

*Diane Ullman* (Professor of Entomology, Co-Founder and Co-Director of the UC Davis Art/Science Fusion Program, Associate Dean for Undergraduate Academic Programs, College of Agricultural and Environmental Sciences, University of California, Davis)

**(10) Citizen Science: Integrating Biophysical and Social Realities in the Management of the Ashland Watershed.** Organized by Mark A. Shibley (Professor of Sociology and Environmental Studies, Southern Oregon University) and Marty Main (Owner, Small Woodland Services, Inc.; Contract Consulting Forester for the City of Ashland; and Adjunct Professor, Southern Oregon University). **Scheduled for all day Tuesday, 15 June.**

The Ashland Watershed is a 15,000 acre watershed that provides water for the City of Ashland. Located in steep, highly erosive topography, the watershed contains a large, relatively unmanaged forest ecosystem with a number of critical values, including late successional forests and high populations of older forest-dependent species such as fishers and northern spotted owls. It is also a highly diverse ecosystem, ranging from 2,000 to 7,000 feet elevation and 20 to 60 inches of annual precipitation in just 9 linear miles. Located in the dry eastern end of the Klamath-Siskiyou province, the area is at elevated risk of uncharacteristic high severity disturbance from insects, disease, and especially fire. A unique arrangement of citizen involvement and community collaboration resulted in the development of a “Community Alternative” that ultimately was largely accepted by the US Forest Service as the preferred alternative for their Ashland Forest Resiliency Project. The AFR project plans to implement ecologically sensitive forest and resource management activities to improve the long-term resiliency of the forest ecosystem, while minimizing the potential for high severity disturbance. AFR will be implemented, beginning in 2010, through a unique partnership between the US Forest Service, the City of Ashland, The Nature Conservancy, and Lomakatsi Restoration Project, a local forest restoration company. This symposium will explore the diverse biophysical and social realities that are producing a unique approach to land and resource management in the Ashland Watershed.

## CONTRIBUTED PAPERS

Those wishing to submit papers for presentation at a contributed paper session (oral or poster) should refer to the Call for Papers and Abstracts on page 23 in this *Newsletter*, or download instructions from the Division’s web site ([pacific.aaas.org](http://pacific.aaas.org)). If your abstract contains special characters, be sure to fax a print copy of it to the Pacific Division office, 541-552-8457, with the special characters clearly marked and notations indicating the fonts used.

**The deadline for submitting abstracts is 20 April 2010.** If an abstract comes in after this date, it may not be listed in the program. Also, be aware that the abstract you submit will be published as written. It will not be edited. If it contains errors, they will appear as submitted. Be sure to keep the length of your abstract to no more than 250 words and use 10-point Times New Roman (or variation) font (no exotic fonts, please!). Don't forget to state clearly if yours is a student presentation so that it will be included in the judging competition. *Please keep in mind if you are a student who intends to be in competition for Awards of Excellence and you are part of a symposium with your presentation scheduled to end later than 3:00 p.m. on Tuesday afternoon (check with the planner of your symposium), you must also present your work as a poster in order to be judged.* Otherwise, you will not be eligible for student awards due to the conclusion of judging early Tuesday afternoon. Awards will be announced later that evening.

## POSTER SESSIONS

Posters will be assigned a display space of 40" tall X 60" wide (1 m X 1.5 m) and will be grouped by discipline and subject matter. Posters are to be mounted using map pins on foam core backings (supplied). In order to assure fairness, the Pacific Division Council took action stating that all student posters must fit within the assigned display space to be eligible for student Awards of Excellence. A request for or use of extra space will disqualify a student from the award competition.

Student posters will be judged for Awards of Excellence. Students must be present for a two hour period to allow judges the opportunity to discuss their work and to evaluate their posters.

With the permission of Dr. Carol Waite Conner and the Geological Society of America, the Pacific Division has reprinted Dr. Conner's article, "The Poster Session: A Guide for Preparation." It can be found on the Division's web site, <http://pacific.aaas.org>. Click on the 91<sup>st</sup> Annual Meeting home page and then Poster Preparation (listed in the left column). A second web site containing excellent information on poster preparation is <http://www.ncsu.edu/project/posters>.

## PACIFIC DIVISION SECTIONS ACCEPTING CONTRIBUTED PAPERS FOR PRESENTATION AT THE MEETINGS

**Agriculture and Horticultural Science.** Section Chair and Program Coordinator: Dr. Michael D. MacNeil, USDA Agricultural Research Service, Fort Keogh Livestock and Range Research Laboratory, 243 Fort Keogh Road, Miles City, MT 59301. Phone: 406-874-8213; e-mail: [Mike.MacNeil@ars.usda.gov](mailto:Mike.MacNeil@ars.usda.gov).

**Anthropology and Archaeology.** Section Chair and Program Coordinator: Dr. Stephen Frost, Department of Anthropology, University of Oregon, Eugene, OR 97403. Phone: 541-346-5161; e-mail: [sfrost@uoregon.edu](mailto:sfrost@uoregon.edu). Co-chair and Co-program Coordinator: Dr. Walter Carl Hartwig, Division of Basic Medical Sciences, Touro University College of Osteopathic Medicine, Mare Island, CA 94592. Phone: 707-638-5238; e-mail: [whartwig@touro.edu](mailto:whartwig@touro.edu).

**Atmospheric and Oceanographic Sciences.** Section Chair and Program Organizer: Dr. Anne A. Sturz, Department of Marine Science and Environmental Studies, College of Arts and Sciences, Dean's Office, F114, University of San Diego, San Diego, CA 92110-2492. Phone: 619-260-4545; e-mail: [asturz@san Diego.edu](mailto:asturz@san Diego.edu).

**Cell and Molecular Biology.** Section Chair and Program Orga-

nizer: Dr. Kenneth Cornell, Department of Chemistry and Biochemistry, Boise State University, Boise, ID 83725. Phone: 208-426-5429; e-mail: [kencornell@boisestate.edu](mailto:kencornell@boisestate.edu).

**Chemistry and Biochemistry.** Section Chair and Program Organizer: Dr. Owen M. McDougal, Department of Chemistry and Biochemistry, Boise State University, Boise, ID 83725. Phone: 208-426-3964; e-mail: [owenmcdougal@boisestate.edu](mailto:owenmcdougal@boisestate.edu).

**Computer and Information Sciences.** Section Chair and Program Organizer: Dr. Alan E. Leviton, Department of Herpetology, California Academy of Sciences, 55 Music Concourse Drive, Golden Gate Park, San Francisco, CA 94118. Phone: 415-321-8276; e-mail: [alevito@calacademy.org](mailto:alevito@calacademy.org).

**Earth Sciences.** Section Chair and Program Organizer: Dr. J. Thomas Dutro, Jr., U.S. Geological Survey (E-308), National Museum of Natural History, Washington, DC 20560-0137. Phone: 202-633-1322; e-mail: [dutrot@si.edu](mailto:dutrot@si.edu).

**Ecology, Organismal Biology, and Environmental Sciences.** Section Chair and Program Organizer: Dr. Richard Van Buskirk, Environmental Studies, Pacific University, 2043 College Way, Forest Grove, OR 97116. Phone: 503-352-2251; e-mail: [vanbuskirk@pacificu.edu](mailto:vanbuskirk@pacificu.edu). Co-chair and Program Co-organizer: Dr. Michael Parker, Department of Biology, Southern Oregon University, Ashland, OR 97520. Phone: 541-552-6796; e-mail: [parker@sou.edu](mailto:parker@sou.edu).

**Education.** Section Chair and Program Organizer: Dr. William B.N. Berry, Department of Earth and Planetary Sciences, 307 McCone Hall, University of California, Berkeley, CA 94720-4767. Phone: 510-642-3925; e-mail: [wberry@uclink4.berkeley.edu](mailto:wberry@uclink4.berkeley.edu).

**General and Interdisciplinary.** Section Chair and Program Organizer: Dr. Robert Chianese, (Emeritus) Department of English, California State University, Northridge, Northridge, CA 91330. Phone: 805-653-2520; e-mail: [robert.chianese@csun.edu](mailto:robert.chianese@csun.edu).

**Health Sciences.** Section Chair and Program Organizer: Dr. H. K. Choi, Department of Biology, California State University, Dominguez Hills, 1000 East Victoria Street, Carson, CA 90747. Phone: 310-243-3985; e-mail: [hchoi@csudh.edu](mailto:hchoi@csudh.edu).


**History and Philosophy of Science.** Section Chair and Program Organizer: Dr. Donald McGraw, P.O. Box 515, Ephraim, UT 84627. Phone: 619-947-5108; e-mail: [donaldmcgraw@mac.com](mailto:donaldmcgraw@mac.com).

**Industrial Science and Technology.** Section Chair and Program Organizer: Dr. Frank Jacobitz, Department of Engineering, University of San Diego, 5998 Alcalá Park, San Diego, CA 92110. Phone: 619-260-7820; e-mail: [jacobitz@san Diego.edu](mailto:jacobitz@san Diego.edu). Section Co-chair and Program Co-organizer: Mr. Henry Oman (Boeing Company, retired), 19221 Normandy Park Drive SW, Seattle, WA 98166. Phone: 206-878-4458; e-mail: [homan@ieee.org](mailto:homan@ieee.org).

**Mathematics.** Section Chair and Program Organizer: Dr. Curtis J. Feist, Department of Mathematics, Southern Oregon University, Ashland, OR 97520. Phone: 541-552-6577; e-mail: [feiste@sou.edu](mailto:feiste@sou.edu).

**Physics and Materials Science.** Section Chair and Program Organizer: Dr. Panos Photinos, Department of Physics, Southern Oregon University, Ashland, OR 97520. Phone: 541-552-6475; e-mail: [photinos@sou.edu](mailto:photinos@sou.edu).

**Psychology.** Section Chair and Program Organizer: Dr. J. Ken Nishita, California State University, Monterey Bay, 100 Campus Center, Seaside, CA 93955-8001. Phone: 831-582-3563; e-mail: [ken\\_nishita@csumb.edu](mailto:ken_nishita@csumb.edu).

**Social, Economic and Political Sciences.** Section Chair and Program Organizer: Dr. Carl A. Maida, UCLA Schools of Dentistry and Medicine, University of California, PO Box 951668 CHS, Los Angeles, CA 90095. Phone 805-492-5613; e-mail: [cmaida@ucla.edu](mailto:cmaida@ucla.edu). 



**91<sup>st</sup> Annual Meeting  
Ashland, OR  
13 – 17 June 2010**

**Last Call for Papers and Abstracts**

Members of AAAS and its affiliated societies, students, teachers and other scientists are encouraged to participate in the annual meeting of the Pacific Division of AAAS by presenting papers and/or posters. Persons wishing to present at one of the sessions should e-mail the title, abstract and other required information (see instructions below) as a Word or .rtf attachment to the chair of the appropriate society or section (see page 22 of this *Newsletter*) and also the Pacific Division office at [rchristi@sou.edu](mailto:rchristi@sou.edu). If your abstract contains special characters, please fax a copy of it to the Pacific Division office, 541-552-8457, in addition to the e-mail submission. **The deadline for abstract submission is 20 April 2010.** Students wanting to compete for an Award of Excellence must identify themselves as students on their abstract submissions so that judges will know to evaluate their presentations.

Oral contributed papers are scheduled every 20 minutes, allowing about 14 minutes for the talk, about five minutes for questions at the end, and a minute or so for PowerPoint change-over. If you are presenting in a symposium, please contact the symposium organizer for presentation details.

**Format your submission as follows:**

**Line 1:** Submitter's name

**Line 2:** Submitter's telephone number and e-mail address

**Line 3:** Presenter's name (if different from above) or "SAME" (if same as above)

**Line 4:** Presenter's telephone number and e-mail address (if different from above)

**Line 5:** Society, section or program to which you are submitting your presentation for review

**Line 6:** Type of presentation (ORAL or POSTER)

**Line 7:** Is the presenter a student? (STUDENT or NOT A STUDENT)

**Line 8:** Special equipment needs (other than standard computer equipment and PowerPoint)

**Line 9:** Paper title in title case and italics (e.g. *Paper Title in Title Case*), Author(s) name(s) in **ALL CAPS and BOLD**, Full address(es), including institution, mailing address, city, state and zip code, and e-mail address for presenter. (Follow example below for lines 9 and 10.)

**Line 10:** Text of abstract. Limit: 250 words.

**Example of a properly formatted abstract submission (lines 9 and 10)**

*Formatting an Abstract for Submission to a Pacific Division Section Chair and the AAASPD Meetings Office, SAMUEL P. KRAFTER<sup>1</sup>, YESIMAN AUTHOR<sup>1</sup>, and IDIDA ALLDE READING<sup>2</sup>* (<sup>1</sup>Department of Biology, Southern Oregon University, 1250 Siskiyou Boulevard, Ashland, OR 97520; <sup>2</sup>Department of Academic Speech, Bureau of Speech Employment, 12 Back Street, Medford, OR 97504; [spkraf@biology.sou.edu](mailto:spkraf@biology.sou.edu)).

All authors should be listed sequentially, starting with the person who contributed the most and ending with the person who contributed the least. If more than one address occurs among the presenters, indicate so by a superscripted number on the right of each presenter's last name, followed by a superscripted listing of each unique address. The e-mail address should be that of the main presenter. Submissions not formatted in this manner may be returned for reformatting or rejected.

Note that the first line of each of these text paragraphs is indented. Indent the first line of each paragraph of your abstract 0.25 inches by using the first line indent command of your word processor, not the tab. All text should be full justified.

Use 10 point Times New Roman font. If you substitute, your abstract will be reformatted to this font. If your text contains special characters, they probably won't accurately survive e-mailing and/or any required reformatting. Thus, in addition to an e-mail submission, abstracts that contain special characters should be printed and faxed (541-552-8457) or mailed (AAAS Pacific Division, Department of Biology, Southern Oregon University, 1250 Siskiyou Blvd., Ashland, OR 97520) to the AAASPD office. Be sure to point out special characters in your abstract and identify the font set that contains them. If outrageously exotic fonts are used, we probably won't have the correct one to use. Use common font sets (e.g. Symbol, Wingdings, etc.) for your special characters!



**92<sup>nd</sup> Annual Meeting  
UNIVERSITY of SAN DIEGO  
San Diego, CA  
12 – 16 June 2011**

## **Call for Symposium and Workshop Proposals**

Members of AAAS and its affiliated societies, students, teachers and other scientists are encouraged to participate in the annual meeting by developing symposia and/or workshops. Persons wishing to develop a program for the 2011 San Diego, California meeting should e-mail the title, description and other information (see instructions below) to the Pacific Division office at [rchristi@sou.edu](mailto:rchristi@sou.edu).

**Symposia** may be 1/2-day, full-day or longer. Individual symposium presentations are usually scheduled with more time than for contributed papers (30 minutes rather than 20 minutes), but the actual scheduling depends on the needs of the symposium and may be longer or shorter, even a combination of the two. Please contact Dr. Roger Christianson, Pacific Division Executive Director, to discuss your specific needs. When preparing your submission, please indicate which presenters are confirmed or not (see Line 10 below). If you do not yet have a list of presenters, you may submit a list of potential presentation topics. Please keep in mind that we need as much information as early as possible in order to adequately publicize the symposium.

**Workshops** generally are 1/2-day or full-day and may or may not accompany a symposium. If special facilities and/or equipment are required, be sure to identify what you need as completely as possible in your submission (see Line 10 below). If a cost is incurred, it will be passed along to participants as a workshop fee in addition to the ordinary meeting registration fee.

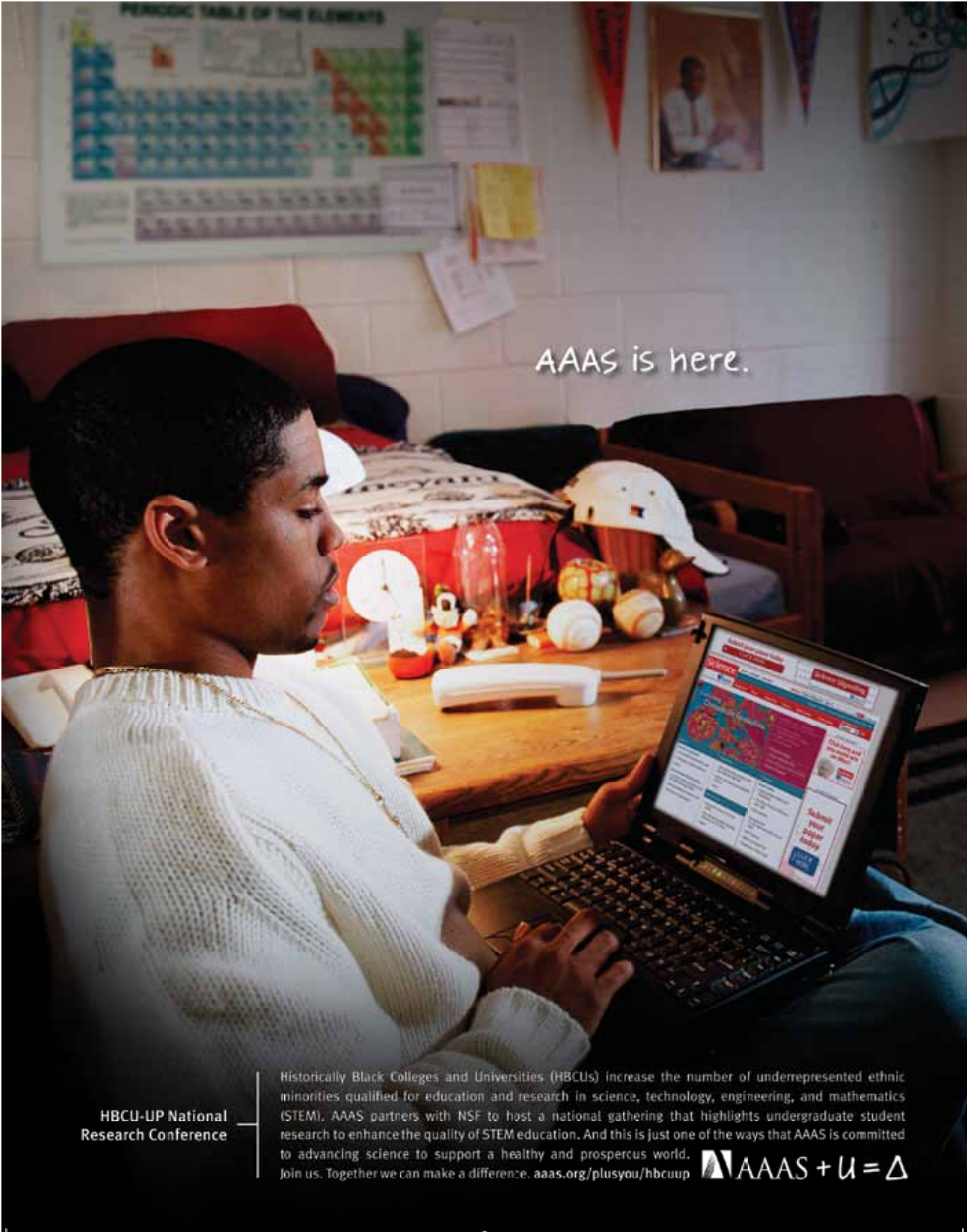
Questions? Contact Dr. Roger Christianson, AAAS, Pacific Division, Southern Oregon University, Ashland, OR 97520. Phone: 541-552-6747; e-mail: [rchristi@sou.edu](mailto:rchristi@sou.edu).

**Please format your submission as follows:**

- 1:** Organizer's name
- 2:** Organizer's full mailing address, including academic/professional affiliation, telephone number and e-mail address
- 3:** Co-organizer's name(s) (if any)
- 4:** Co-organizer's full mailing address, including academic/professional affiliation, telephone number and e-mail address
- 5:** Is this a Workshop or a Symposium?
- 6:** Number of 1/2-day sessions requested (a session is roughly three to three and a half hours, depending on the needs of the program)
- 7:** Pacific Division section(s) and/or affiliated society requested to sponsor this program (see page 22 of this *Newsletter* for list)
- 8:** Title of proposed program
- 9:** Brief description of proposed program (please limit to 250 words)
- 10:** *If a symposium*, list the names of proposed (confirmed?) speakers, including academic/professional affiliation, and e-mail address for each. Presentation titles are optional at this time and will be requested later, along with an abstract for each presentation.

*If a workshop*, indicate facilities and/or special equipment required and number of participants that can be accommodated.


**phone: 541-552-6747 • e-mail: [rchristi@sou.edu](mailto:rchristi@sou.edu) • internet: <http://pacific.aaas.org>**



AAAS is here.

**HBCU-UP National  
Research Conference**

Historically Black Colleges and Universities (HBCUs) increase the number of underrepresented ethnic minorities qualified for education and research in science, technology, engineering, and mathematics (STEM). AAAS partners with NSF to host a national gathering that highlights undergraduate student research to enhance the quality of STEM education. And this is just one of the ways that AAAS is committed to advancing science to support a healthy and prosperous world. Join us. Together we can make a difference. [aaas.org/plusyou/hbcuup](http://aaas.org/plusyou/hbcuup)

 **AAAS + U = Δ**

# AAAS, Pacific Division 91<sup>st</sup> Annual Meeting

## SOUTHERN OREGON UNIVERSITY RESIDENCE HALL APPLICATION

Please type or print this form legibly! If faxing, use black ink.

Name \_\_\_\_\_  Male  Female

Address \_\_\_\_\_

City, State, Zip \_\_\_\_\_

Phone (day): \_\_\_\_\_ Phone (evening): \_\_\_\_\_ E-mail: \_\_\_\_\_

If requesting a double room (check one)

roommate's name is: \_\_\_\_\_  please assign a roommate

*Please refer to page 7 of this Newsletter for a description of the various room and board packages listed below.*

**Important Notes:**

*No refunds will be given for uneaten meals or unused nights of stay.*

*All double prices are per person.*

**ROOM AND BOARD PACKAGES:**

A (three nights; 6 meals)	Number	~	Total
<i>classic rooms only</i>			
<input type="checkbox"/> Single @ \$210			\$ _____
<input type="checkbox"/> Double @ \$155	x	_____	\$ _____
<b>B (four nights; 7 meals)</b>			
<i>classic rooms</i>			
<input type="checkbox"/> Single @ \$270			\$ _____
<input type="checkbox"/> Double @ \$192	x	_____	\$ _____
<i>suites</i>			
<input type="checkbox"/> Single @ \$440			\$ _____
<input type="checkbox"/> Double @ \$290	x	_____	\$ _____

**ADDITIONAL NIGHTS LODGING:**

**C** (rooms only; food on your own; available only as addition to a 3- or 4-night package and must be consecutive)

Friday night, 11 June			
<input type="checkbox"/> Single classic @ \$51			\$ _____
<input type="checkbox"/> Double classic @ \$32	x	_____	\$ _____
<input type="checkbox"/> Single suite @ \$93			\$ _____
<input type="checkbox"/> Double suite @ \$55	x	_____	\$ _____
Saturday night, 12 June			
<input type="checkbox"/> Single classic @ \$51			\$ _____
<input type="checkbox"/> Double classic @ \$32	x	_____	\$ _____
<input type="checkbox"/> Single suite @ \$93			\$ _____
<input type="checkbox"/> Double suite @ \$55	x	_____	\$ _____
Thursday night, 17 June			
<input type="checkbox"/> Single classic @ \$51			\$ _____
<input type="checkbox"/> Double classic @ \$32	x	_____	\$ _____
<input type="checkbox"/> Single suite @ \$93			\$ _____
<input type="checkbox"/> Double suite @ \$55	x	_____	\$ _____
Friday night, 18 June			
<input type="checkbox"/> Single classic @ \$51			\$ _____
<input type="checkbox"/> Double classic @ \$32	x	_____	\$ _____
<input type="checkbox"/> Single suite @ \$93			\$ _____
<input type="checkbox"/> Double suite @ \$55	x	_____	\$ _____

**ON-CAMPUS PARKING PERMIT**

One-week permit @ \$27 \$ \_\_\_\_\_

**Total Amount** \$ \_\_\_\_\_

**Deadline for Application**

The completed application for housing must be received in the Pacific Division office no later than 15 May 2010. Space is on an as available basis.

**Three Ways to Apply for Housing**

1. Complete this form and send it to the Pacific Division office, either with a check in the full amount payable to AAAS, Pacific Division, or with credit card information completed below.
2. Call the Pacific Division office, 541-552-6869, between approximately 12:00 p.m. and 4:00 p.m. Pacific Time. Your information will be taken, along with the appropriate credit card information.
3. Fax your housing request, including credit card information. The 24-hour fax number is 541-552-8457. It is a dedicated line into the Pacific Division office.

**Cancellation/refund Policy**

All cancellation/refund requests for housing/meals on this form must be made in writing to the Pacific Division office via USPS or e-mail. Requests must be received no later than 20 May 2010. Refunds are subject to a \$15 processing charge and an additional 3.5% of the total if payment was by credit card.

**Payment by Credit Card**

Type of Card  Visa  Master Card  Discover  Am Ex

Card Number \_\_\_\_\_

Expiration Date \_\_\_\_\_ Today's Date \_\_\_\_\_

Name on Card (print) \_\_\_\_\_

Card Billing Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Cardholder Signature \_\_\_\_\_



**AAAS, Pacific Division 91<sup>st</sup> ANNUAL MEETING  
Ashland, OR  
13 – 17 June 2010**

**ADVANCE REGISTRATION FORM  
FOR EARLY REGISTRATION, FIELD TRIPS, and OTHER SPECIAL EVENTS**

*Send this form directly to*

**AAAS, Pacific Division • Department of Biology • Southern Oregon University • Ashland, OR 97520  
or call with information: 541-552-6869 or FAX to our dedicated line: 541-552-8457**

*Please PRINT CLEARLY or TYPE this form. If faxing, use black ink.*

Name: \_\_\_\_\_ Date: \_\_\_\_\_

Mailing Address: \_\_\_\_\_

City, State, Zip: \_\_\_\_\_

E-mail: \_\_\_\_\_ Day Phone: \_\_\_\_\_

Institution/Company (for your name tag – if blank, city & state will be used): \_\_\_\_\_

AAAS Member:  Yes  No Affiliated Society Membership: \_\_\_\_\_

How did you first hear about this meeting? \_\_\_\_\_

Did you receive the January *Newsletter* for this meeting?  Yes  No

If yes, how?  Print copy via USPS  Print copy from someone  PDF download from internet

If you received a copy of the *Newsletter*, did you find it useful?  Yes  No

Did you know that electronic copies of each *Newsletter* are available as PDF downloads from the Pacific Division web site?  Yes  No

If you had a choice, would you prefer to receive an electronic copy of the *Newsletter* rather than a print copy?  Yes  No

Are you interested in helping to judge student presentations at the annual meeting?  Yes  No

Please see page 5 of the 4 January 2010 *Newsletter* for information about judging. If you check the “yes” box, you will be contacted for additional information.

Are you planning a program for this meeting or presenting orally or as a poster?  Yes  No

If so, in which program or section? \_\_\_\_\_

*(above must be filled out in order to receive program planner/presenter rate)*

**MEETING REGISTRATION FEES:**

	Received by 20 April	Received by 31 May	On-site	
<b>Full Meeting</b>				
Professional	<input type="checkbox"/> \$85.00	<input type="checkbox"/> \$100.00	<input type="checkbox"/> \$115.00	
<b>Program Planner/</b>				
Presenter	<input type="checkbox"/> \$65.00	<input type="checkbox"/> \$75.00	<input type="checkbox"/> \$85.00	
Teacher K-14	<input type="checkbox"/> \$45.00	<input type="checkbox"/> \$52.50	<input type="checkbox"/> \$60.00	Stipend? <input type="checkbox"/> Yes <input type="checkbox"/> No
Post-Doc	<input type="checkbox"/> \$45.00	<input type="checkbox"/> \$52.50	<input type="checkbox"/> \$60.00	
Student	<input type="checkbox"/> \$30.00	<input type="checkbox"/> \$35.00	<input type="checkbox"/> \$40.00	
Unemployed	<input type="checkbox"/> \$45.00	<input type="checkbox"/> \$52.50	<input type="checkbox"/> \$60.00	
Spouse	<input type="checkbox"/> \$30.00	<input type="checkbox"/> \$35.00	<input type="checkbox"/> \$40.00	➔ Name, City, State (for name tag): _____
Emeritus/Retired	<input type="checkbox"/> \$45.00	<input type="checkbox"/> \$52.50	<input type="checkbox"/> \$60.00	_____
<b>One-day of Meeting</b>				
Professional	<input type="checkbox"/> \$65.00	<input type="checkbox"/> \$75.00	<input type="checkbox"/> \$85.00	➔ Select day: <input type="checkbox"/> Fri. <input type="checkbox"/> Sat. <input type="checkbox"/> Mon. <input type="checkbox"/> Tues. <input type="checkbox"/> Wed.
<b>Workshop:</b>				
Geometry As A Design Tool	<input type="checkbox"/> \$5.00			

**SALMON BAKE:** Sponsored by the Native American Student Union; Sunday, 13 June, 4:30 p.m. *Number of tickets @ \$20.00 ea.* \_\_\_\_\_

**DIVISION BANQUET:** The Division banquet will be held on the evening of Tuesday, 15 June and will include announcement of the student award winners. Students who are registered for the meeting and who presented an oral or poster paper are invited to be guests of the Division and do not have to pay to attend but must check the appropriate box below. Refer to page 20 of the 4 January 2010 *Newsletter* for descriptions of the entrées.

*Student presenter ticket @ no charge (choose one):*  vegetarian  baked salmon  roast top round of beef

*Tickets @ \$30.00 ea.* Indicate quantity by each choice: \_\_\_ vegetarian \_\_\_ baked salmon \_\_\_ roast top round of beef

**Please complete reverse side before sending or faxing form.**

**FIELD TRIPS:** All trips are priced per person. See page 14 of this *Newsletter* for details. Be sure to indicate which type of sandwich you would like in your box lunch, if provided. ➔  **vegetarian**  **regular**

Field trip registration fee for non-registrants (once per person) \_\_\_ regs. @ \$10.00 \$ \_\_\_\_\_

**Sunday, 13 June**

Field Trip #1: Wineries of the Rogue and Applegate Valleys \_\_\_ tickets @ \$50.00 \$ \_\_\_\_\_

**Wednesday, 16 June**

Field Trip #4: Oregon Caves National Monument \_\_\_ tickets @ \$60.00 \$ \_\_\_\_\_

**Thursday, 17 June**

Field Trip #2: Geology of Mt. Shasta \_\_\_ tickets @ \$50.00 \$ \_\_\_\_\_

**Thursday, 17 June**

Field Trip #3: Serpentine Geology and Botanical Diversity \_\_\_ tickets @ \$50.00 \$ \_\_\_\_\_

**THEATRE TICKETS:** See page 13 of this *Newsletter* for details.

**Saturday, 12 June, 8:30 p.m. curtain**

Cat on a Hot Tin Roof \_\_\_ tickets @ \$21.00 \$ \_\_\_\_\_

\_\_\_ tickets @ \$60.00 \$ \_\_\_\_\_

**Sunday, 13 June, 2:00 p.m. curtain**

Hamlet \_\_\_ tickets @ \$21.00 \$ \_\_\_\_\_

\_\_\_ tickets @ \$60.00 \$ \_\_\_\_\_

**Wednesday, 16 June, 8:30 p.m. curtain**

Henry IV, Part 1 \_\_\_ tickets @ \$21.00 \$ \_\_\_\_\_

\_\_\_ tickets @ \$60.00 \$ \_\_\_\_\_

**PLEASE NOTE:** Requests for refunds must be in writing and be received in the Pacific Division office no later than 20 May 2010. A \$15 handling fee will be applied. An additional 3.5% deduction will be applied to the total amount for credit card refunds.

**Registration Total** \$ \_\_\_\_\_

**Workshop Total** \$ \_\_\_\_\_

**Salmon Bake Total** \$ \_\_\_\_\_

**Banquet Total** \$ \_\_\_\_\_

**Field Trips Total** \$ \_\_\_\_\_

**Theatre Total** \$ \_\_\_\_\_

**TOTAL DUE** \$ \_\_\_\_\_

(Make checks payable to AAAS, Pacific Division or use your credit card—see below.)

Please check which workshops you are interested in attending.

- Geometry as a Design Tool* (\$5.00 workshop fee)     *Science of Research Synthesis*     *Advanced Placement*  
 *Science and Religion*     *Promoting Meaningful Learning*     *SENCER*

To help estimate the number of people planning to participate in one of both of the events listed below, please indicate the number of people in your party that plan to attend each.

\_\_\_ *Cracker Barrel Mixer* (Sunday evening, no charge to registrants and family)

\_\_\_ *Presidential Reception* (Monday evening, no charge to registrants and family)

**CREDIT CARDS**

To pay for your advance registration by credit card, you may

- mail this completed form to the address below, *or*
- phone the information to 541-552-6869 between about 12:00 p.m. and 4:00 p.m. Pacific Time, *or*
- fax this completed form to 541-552-8457 (dedicated fax line into the Pacific Division office).

Type of Card:     Visa     Master Card     Discover     AmEx

Credit Card Number \_\_\_\_\_ Expiration Date \_\_\_\_\_

Name on Card \_\_\_\_\_

Complete Billing Address for Card \_\_\_\_\_

Signature of Cardholder \_\_\_\_\_ Date \_\_\_\_\_

**COMPLETE AND RETURN THIS FORM WITH YOUR PAYMENT TO:**

AAAS, Pacific Division • Department of Biology • Southern Oregon University • Ashland, OR 97520

Should you have questions, e-mail us at [aaaspd@sou.edu](mailto:aaaspd@sou.edu) or call 541-552-6869 M – F 12:00 p.m. to 4:00 p.m., Pacific Time.



# Call for Symposium Proposals

**AAAS Annual Meeting + You = Global Visibility**

17-21 February ▶ 2011 Washington, D.C.

## Science Without Borders

Science and teaching that cross conventional borders, or break out from silos, will be highlighted at the 2011 Annual Meeting. Sessions are encouraged that have strong scientific content, particularly at the interface of different disciplines, or exemplify a multidisciplinary approach to problem solving.

Symposium proposals are due 27 April 2010. For details, go to [www.aaas.org/meetings](http://www.aaas.org/meetings) and sign up for updates throughout the year.

## Call for Poster Submissions

### Student Poster Competition

*Open to college undergraduate and graduate students only*

The competition recognizes the individual efforts of students who are actively working toward a college-level degree. Posters are judged at the meeting. Winners in each category receive a cash award and framed certificate, and are listed in *Science*. Postdoctoral scholars who hold a doctoral degree are not eligible to enter.

### General Poster Session

*Open to postdocs and professionals*

This session provides an opportunity for participants to present their research to the broad community of scientists attending the AAAS Annual Meeting.

The submission site for poster submissions for the 2011 Annual Meeting in Washington, DC, 17-21 February, will open on 12 May 2010 at [www.aaas.org/meetings](http://www.aaas.org/meetings).





**Pacific Division Publications  
Book Sale Continues!**

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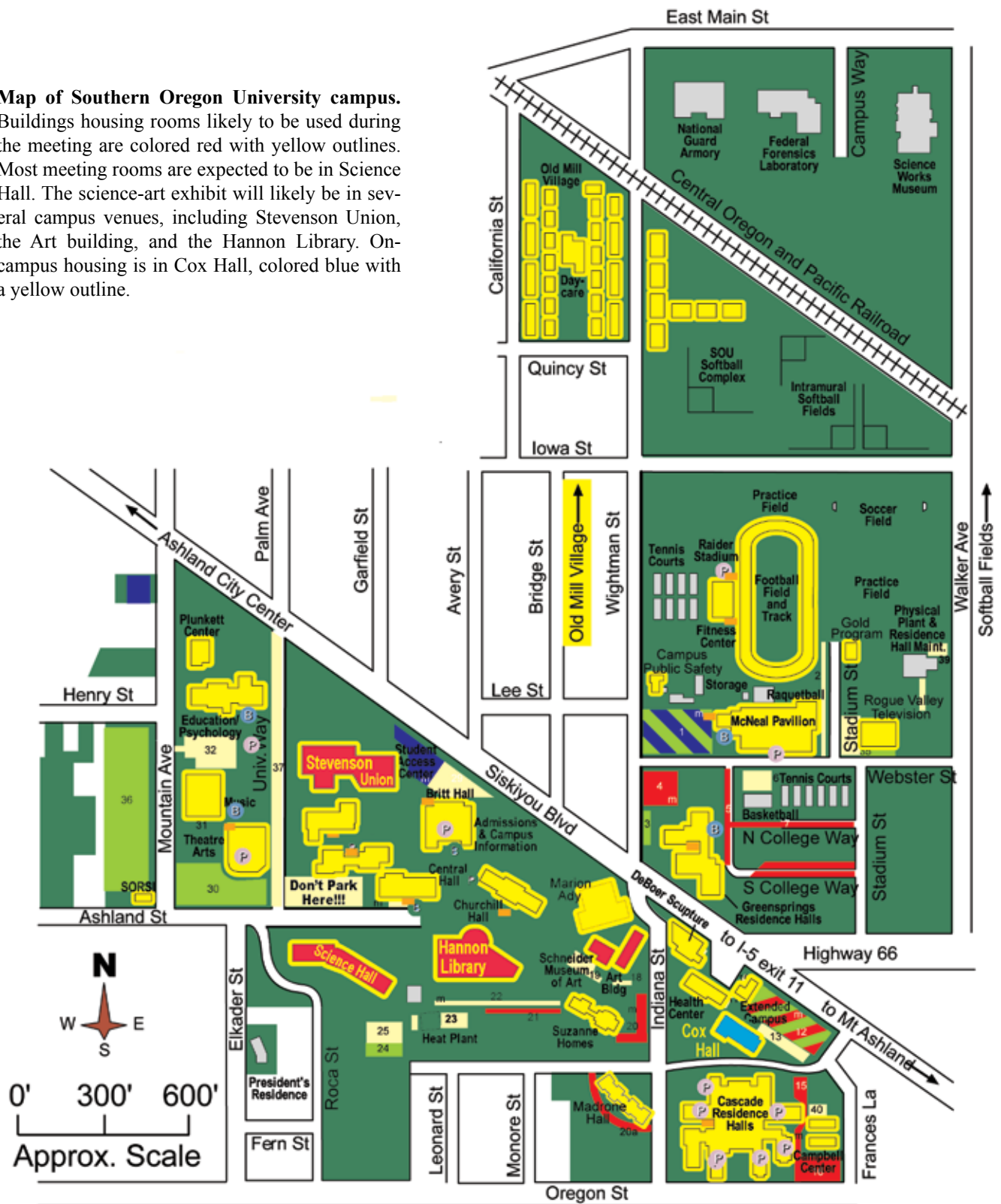
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**Map of Southern Oregon University campus.**

Buildings housing rooms likely to be used during the meeting are colored red with yellow outlines. Most meeting rooms are expected to be in Science Hall. The science-art exhibit will likely be in several campus venues, including Stevenson Union, the Art building, and the Hannon Library. On-campus housing is in Cox Hall, colored blue with a yellow outline.





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**AAAS, PACIFIC DIVISION 91<sup>st</sup> Annual Meeting**  
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**13 – 17 June 2010**  
**UPDATE of SYMPOSIA,**  
**FIELD TRIPS and OTHER EVENTS**

**SYMPOSIA**

(see page 18)

- Forensic Science: A Balance of Art and Science
- Wildlife Forensics
- Progress in Vaccines and Therapeutics
- Anthropological Approaches to Environmental Change
- 6<sup>th</sup> Annual Symposium on Materials Science and Nanotechnology
- Science-Humanities Cross Fertilizations
- Ecotoxicology and Environmental Protection
- Science and Art Consilience
- Citizen Science: Integrating Biophysical and Social Realities in the Management of the Ashland Watershed

**FIELD TRIPS**

(see page 14)

- Winemaking in the Rogue and Applegate Valleys
- Endemics of Oregon Caves National Monument
- Geology of Mount Shasta
- Serpentine Geology and Botanical Diversity of Eight Dollar Mountain and the Illinois River Valley

**WORKSHOPS**

(see page 17)

- Evidence-Based Research, the Science of Research Synthesis: Implications and Applications in the Delivery of Health Care
- Geometry as a Design Tool
- Science Education for New Civic Engagements and Responsibilities (SENCER) Workshop
- Promoting Meaningful Learning
- Science and Religion: A Philosophical Look at Issues and Approaches

**SCIENCE-ART EXHIBIT**

(see page 13)

**OREGON SHAKESPEARE FESTIVAL PLAYS**

(see page 13)

- Cat on a Hot Tin Roof
- Hamlet
- Henry IV, Part One

NOTE: These programs are being planned as of 15 March 2010. However, changes in offerings frequently occur. For up-to-date information, please visit the Pacific Division web site, [pacific.aaas.org](http://pacific.aaas.org)