



AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE  
PACIFIC DIVISION

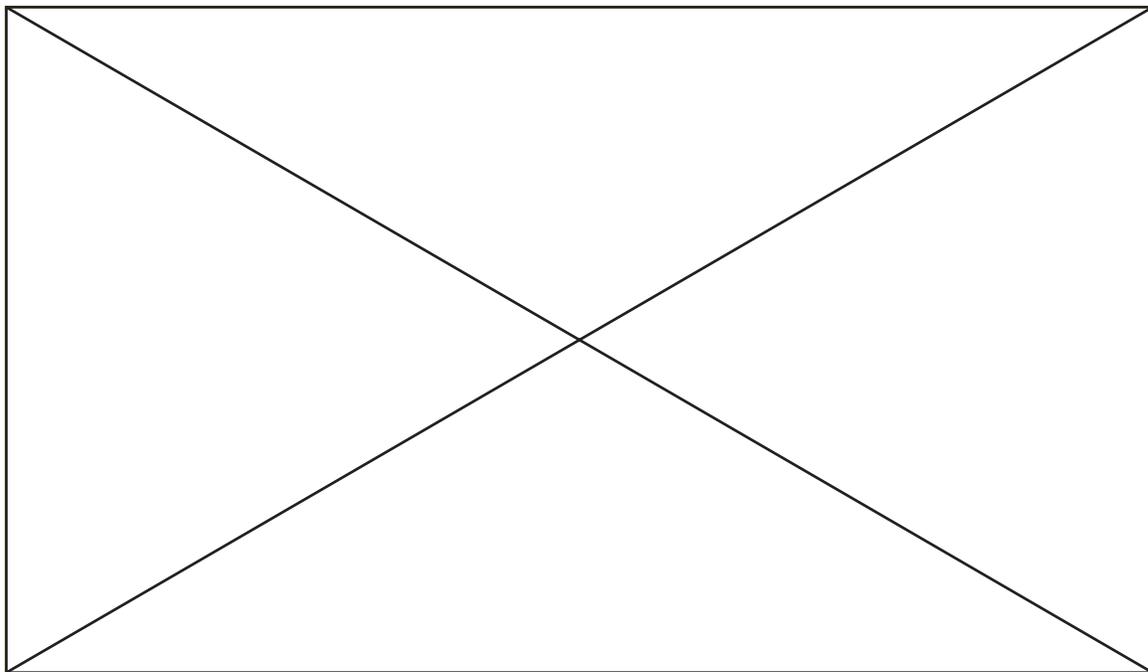
# NEWSLETTER

Number 44

January 3, 2005

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**86<sup>th</sup> ANNUAL MEETING OF THE PACIFIC DIVISION AT  
SOUTHERN OREGON UNIVERSITY  
Ashland, OR  
June 12–16, 2005**



Southern Oregon University

## **2005 ANNUAL MEETING OF THE AAAS PACIFIC DIVISION**

The AAAS Pacific Division and its affiliated societies and sections will hold its 86<sup>th</sup> annual meeting on the campus of Southern Oregon University. The Division's Program and Special Events Committee is making a special effort to design a program of exceptional scientific merit.

All scientists and graduate and undergraduate students are invited to present research papers of their research results either orally or as posters. All registrants for the meeting may attend the scientific sessions as well as participate in the many

other activities. Some activities, notably field trips and selected workshops, require advance registration and payment of additional fees. Dr. Roger Christianson, Department of Biology, Southern Oregon University is chair of this year's annual meeting.

This *Newsletter* contains a preliminary description of the

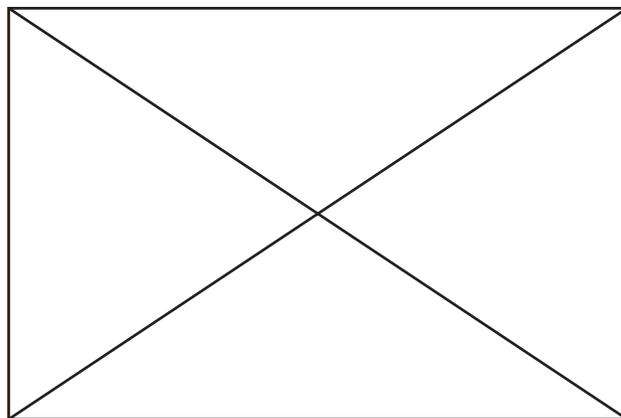
Please visit the Pacific Division website for the latest news about Division activities and updated meeting information. E-mail should be addressed to [aaaspd@sou.edu](mailto:aaaspd@sou.edu).

**<http://pacific.aaas.org>**

scientific program, a call for papers, directions for preparation of abstracts, and information about early registration, housing, transportation, special events, and field trips.

The following societies and sections will sponsor sessions at the meeting. The names and addresses of session chairs are listed on page 23.

- Western Society of Soil Science**
- Agriculture and Horticultural Sciences Section**
- Anthropology and Archaeology Section**
- Atmospheric and Oceanographic Sciences Section**
- Biological Sciences Section**
- Chemistry Section**
- Computer and Information Sciences Section**
- Earth Sciences Section**
- Ecology and Environmental Sciences Section**
- Education Section**
- Engineering and Industrial Sciences Section**
- Health Sciences Section**
- History and Philosophy of Science Section**
- Physics Section**
- Psychology Section**
- Social, Economic and Political Sciences Section**



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### SOUTHERN OREGON UNIVERSITY AND VICINITY

Southern Oregon University (SOU) is a contemporary public liberal arts and sciences university with selected professional programs at the bachelor's and master's levels. It is one of seven universities in the Oregon University System (OUS). Its purpose is to provide intellectual and personal growth through quality education. Southern emphasizes critical thinking, career preparation, and capacity to live and lead in a multicultural, global society. The University has a student-to-faculty ratio of 19:1, and 93 percent of faculty teaching classes have the highest degrees in their fields.

SOU serves the whole of southern Oregon and the northernmost counties of California. The University is a major partner in the economic, cultural, and environmental developments of this vast area, offering students valuable opportunities to participate. SOU's rising national reputation is based on its faculty's notable research and creative talents, as well as its practical liberal learning. Southern is one of twenty-one institutions across the nation selected for membership in the Council of Public Liberal Arts Colleges (COPLAC). 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.

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 a rare opportunity to engage in graduate-level investigations under the mentorship of distinguished researchers. Interdisciplinary projects such as the acid mine drainage (AMD) research being 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

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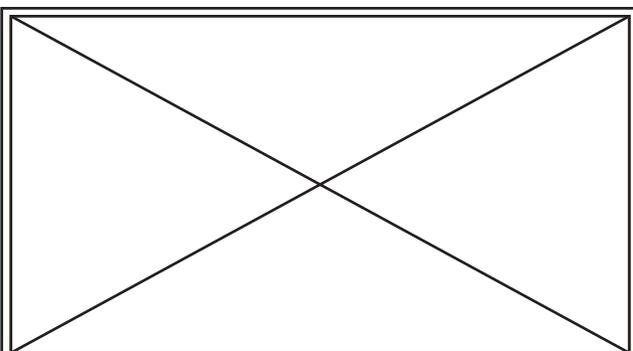
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Student presentation judges at judges' meeting to decide Divisional awards.

### **DIVISION ACTIVITIES AND STUDENT AWARDS AT THE LOGAN MEETING**

**I**n June, 2004, the Pacific Division held its 85<sup>th</sup> annual meeting at Utah State University. The meeting was very successful, with 344 registrants, 15 symposia, three poster sessions, four contributed paper sessions, and five field trips.

The meeting opened on Sunday morning with three field trips. One, "The History of Local Indians, Mountain Men and Early Mormon Settlements," toured the area up to Bear Lake and back down over the Wasatch Mountains into the Cache Valley. Another went north into Idaho to the Idaho Museum of Natural History. Yet another included a hike up the Preston Valley Trail. Enthusiastic reports came back from all participants. Sunday evening featured a well-attended and very interesting lecture presentation, "Using Ecological Insight to Promote Drug Discovery and Conservation in Tropical Forests," by Dr. Phyllis Coley of the University of Utah.

The technical program began Monday morning and ran through Wednesday afternoon. Many interesting symposia were presented over the course of the three days. One in particular, "Future Climate Change: Implications for Western Environments," organized by Dr. Fred Wagner of Utah State University, was identified in advance for publication by the Pacific Division. *Watch for the announcement of this symposium volume in future issues of this Newsletter.*

Other excellent symposia in the technical program included "Ecosystems, Sustainability and Health," organized by Dr. Tilak R. Dhiman (Utah State University), "Electromagnetic Techniques in Soil Science," organized by the Western Society of Soil Science, "Colorado Plateaux to Great Basin—A Natural Laboratory from Grade School to Grad School," organized by Dr. C. Frederick Lohrengel II (Southern Utah Uni-

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University will continue to fuel the local economy and knowledge base through dedicated, interdisciplinary research rooted in the region.

Southern'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 Southern's educational enrichment offerings.

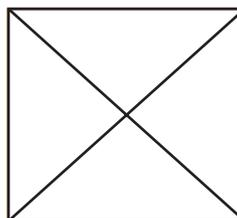
### **The Region**

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, ranging from golf, rafting, fishing, and sailing to 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 in Ashland and the Britt Music Festival in Jacksonville. Among the theater venues for visiting and local performances is Medford's Craterian Ginger Rogers Theater. Recreational facilities include 151 public and 110

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### **IMPORTANT ANNOUNCEMENT**

**Are you planning to attend the AAAS national meeting in Washington, D.C. in February? AAAS is looking for qualified people to help with the student poster judging. If you are not a student and would like to help, please e-mail Katherine Madison at [kmadison@aaas.org](mailto:kmadison@aaas.org). Substantial discounted rates for the meeting are available to judges.**

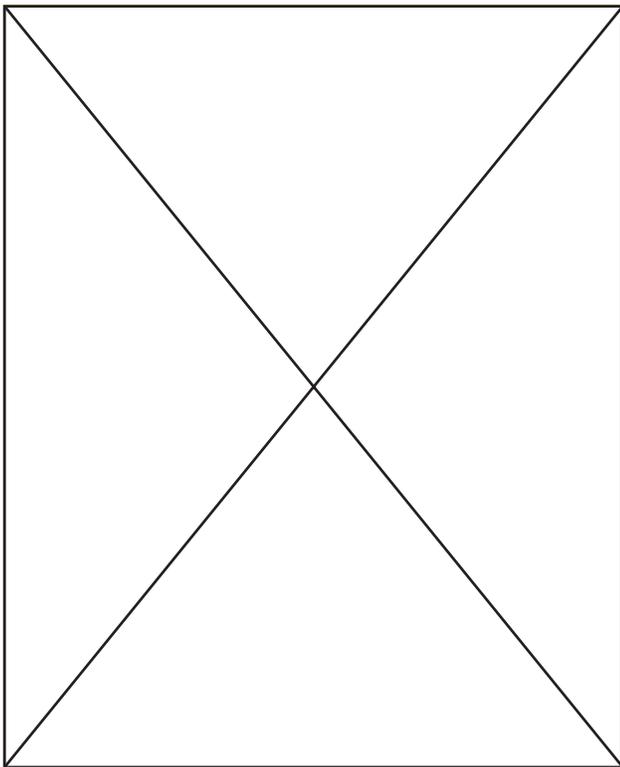
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commercial campgrounds, seventeen golf courses, three racetracks, two ski areas, two ice-skating rinks, and four horse stables. There are sixty-four registered guided tours in southern Oregon.

### **Ashland and SOU**

Southern 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 is a popular attraction. A bicycle path leads from SOU to downtown Ashland and beyond. The city offers an ideal setting for picnics and strolls in its 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



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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.

Southern and the community are focal points for rich cultural activities and organizations. Ashland is home to the Oregon Shakespeare Festival (OSF), 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 features artworks by faculty, students, and visiting artists. SOU is home to the Southern Oregon Singers, the Rogue Valley Symphony, and the Chamber Music Concert Series. Its Music Department also provides frequent concerts and recitals by exceptional faculty and students.

### **Ashland Campus**

Southern 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 pleasant environment for academic endeavors, student club activities, and opportunities to think and study together with peers and faculty. SOU is nearing completion of a major renovation and expansion of its Hannon Library. The project has nearly doubled the size of the library and yielded a new learning center with contemporary services and technologies, ample study spaces, seminar rooms, reading areas with fireplaces, and a coffee shop.

Ashland and SOU house many very special facilities and services, such as the nation's only Fish and Wildlife Forensics Laboratory and the nationally recognized Jefferson Public Radio (JPR). Southern 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. Finally, Southern has an established reputation for the size and scope of its extended programs for senior citizens.

### **SOU Statistics**

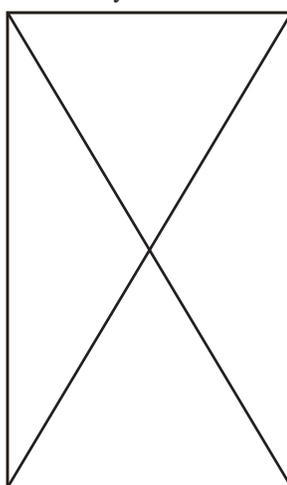
In the 2003/2004 academic year, SOU boasted a total enrollment of 5,478 students. Of these, 3,955 were undergraduates and 561 were graduate students. The average age of students was 25. Seventy-nine percent of students came from Oregon while 150 came from 30 different countries.

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versity, Cedar City, UT), “Carbon and Nitrogen in Soil Ecosystems,” organized by the Western Society of Soil Science, “Emerging Diseases of Significance in the West,” organized by Dr. Robert Sidwell (Utah State University), “Mobile Elements: Molecular Mechanisms and Evolutionary Applications,” organized by Drs. Lynn B. Jorde (University of Utah, Salt Lake City, UT) and Mark A. Batzer (Louisiana State University, Baton Rouge, LA), “Use of Intermountain Native Plants in Sustainable Urban Landscapes,” organized by Dr. Roger Kjellgren (Utah State University), “Nuclear Transfer: Implications and Status,” organized by Dr. Kenneth L. White (Utah State University), “Trace Element Biogeography and Soil Rehabilitation,” organized by the Western Society of Soil Science, “Improving Learning in Large Lecture Science Classes,” organized by Dr. Kathleen Fisher (San Diego State University, San Diego, CA), “Lords of the Rings: Dendrochronology Yesterday, Today, and Tomorrow,” Organized by Donald J. McGraw (University of San Diego, San Diego, CA), “NSF ADVANCE: Examining a Leaky Pipeline—Research on the Academic Careers of Women in Science,” organized by Ms. Ronda Roberts Callister (Utah State University), “Strategies to Accommodate Dual Career Couples in Academic Sciences and Engineering Departments,” organized by Dr. Kim Sullivan (Utah State University), and “Agricultural Genomics: Who, What and Why?” organized by Dr. Kamal A. Rashid (Utah State University).

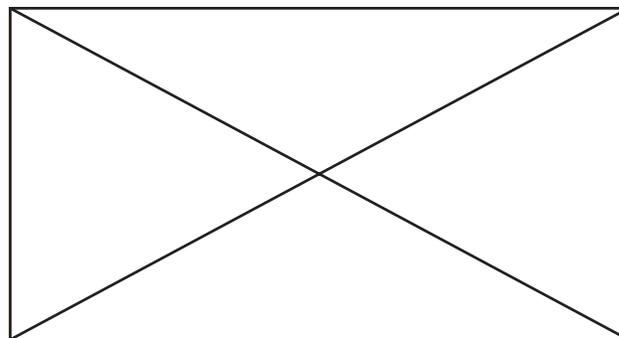
Fascinating noontime lectures on Monday, Tuesday, and Wednesday included “Cerebral Laterality and Cerebral Dominance: Fact or Fiction?” by Dr. Fred C.C. Peng (Veterans General Hospital, Taipei, Taiwan), “Beyond Global Warming: Global Cooling and the Next Ice Age,” by Dr. Aden B. Meinel and Marjorie P. Meinel (emeritus, University of Arizona, Tucson, AZ and Jet Propulsion Laboratory, Pasadena, CA), and “Command Strategies of the 9-11 Terrorist Attack on the World Trade Towers,” by Mr. Henry Oman (consulting engineer, Seattle).

Monday evening featured the Pacific Division Presidential Lecture, “The



Dr. William B.N. Berry, Pacific Division President, during his Presidential Lecture.

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Ten percent of the student body identify themselves as members of ethnic minorities. In 2003/2004, 1,202 degrees and certificates were awarded. Of these, 66% were for Bachelor’s degrees and 22% were for Master’s degrees.

## REGISTRATION

All persons planning to attend the meeting should preregister using the form on page 27. Advance registration fees are \$60 for professionals, \$45 for retirees, and \$30 for students and spouses of registrants. K-12 and community college teachers are encouraged to attend the meeting for a reduced professional registration fee of \$45. Advance one-day professional preregistration is \$45. After May 23 higher registration fees will be charged: professional, \$80; K-12, community college teachers and retirees, \$60; and students and participating spouses, \$40. One-day registration is available on-site for \$60. If you attend more than one day, you must pay the full registration fee.

*About field trips:* Preregistration for all field trips is required because of limited seating in the vehicles and the need to inform some destinations of numbers of people arriving. 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.

*About tickets to attend performances by the Oregon Shakespeare Festival (OSF):* A limited number of tickets will be available for meeting registrants to purchase to attend performances of the Oregon Shakespeare Festival. At least one member of a family group requesting play tickets must be a paid meeting registrant. If you are interested in attending one or more of these plays, you should register early to make sure you get tickets to the plays you wish to see.

Please send your Advance Registration Form and accompanying payment to **AAAS Pacific Division, Department of Biology, Southern Oregon University, 1250 Siskiyou Blvd., Ashland, OR 97520.**

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# Museums and Other Institutions of Natural History Past, Present, and Future



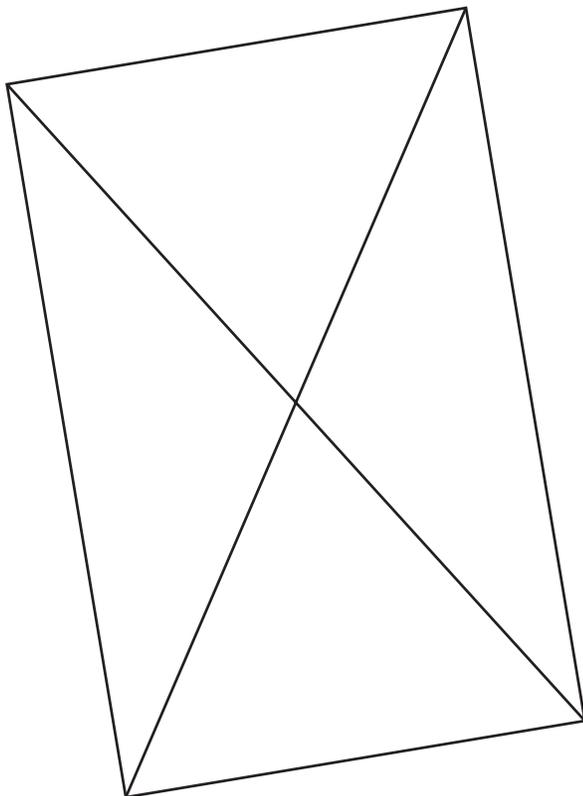
A Symposium Held on the Occasion of the 150<sup>th</sup> Anniversary of the California Academy of Sciences  
June 16–17, 2003

and sponsored by  
California Academy of Sciences and the Pacific Division of the American Association for the Advancement of Science

Arranged and edited by  
Alan E. Leviton and Michele L. Aldrich  
*California Academy of Sciences*

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**Price: \$35.00 including shipping and handling.**  
Refer to order form on page 30 of this *Newsletter*.

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Relevance of Relevance: Addressing the Decline in Science Literacy in America,” by William B.N. Berry, Pacific Division President (University of California, Berkeley, CA). Look for the text of this talk in the spring edition of this *Newsletter*. A reception, sponsored by Dr. Kermit L. Hall, Utah State University President, followed Dr. Berry’s lecture..

Fifty-four posters were presented in three half-day sessions. All of the technical sessions were well attended and much appreciated by attendees.

Tuesday evening shifted to the Bullen Center in downtown Logan for the annual Division Banquet and presentation of the student Awards of Excellence. The catered dinner was preceded by a wine reception. Following dinner, student awards were announced (see page 7) and Dr. Jan Sojka, Assistant Director of the Center for Atmospheric and Space Sciences at Utah State University talked about the involvement of Utah State University students in the space shuttle “Get Away Special” program. The evening culminated with the transition of the Pacific Division Presidency from Dr. Berry to Dr. Lynn M. Dudley, incoming Pacific Division President for 2004/2005.

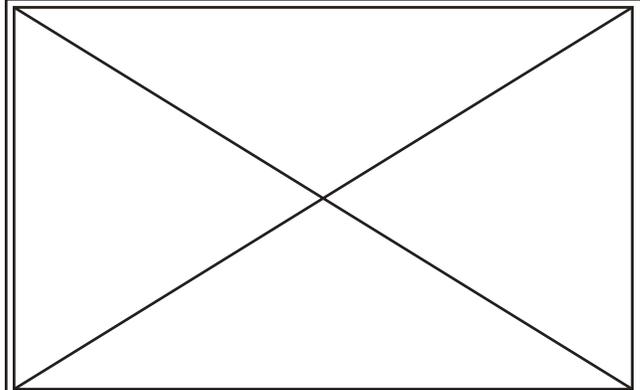
Drs. Lynn Dudley and Rhonda Miller served as co-chairs of the organizing committee for this meeting. They did a superb job!

The Pacific Division wishes to express its sincerest gratitude and appreciation to Dr. Kermit L. Hall for his invitation to the Pacific Division to hold our meeting on his campus and hosting the Monday evening reception. We also wish to thank the many other individuals on campus who made this meeting not only possible but also so extraordinarily run. Of special note is Cindy Moulton, who rearranged schedules and made possible the use of many of the rooms in which our program occurred. Finally, we wish to thank Dr. Larry Rupp, Head of the Department of Plants, Soils and Biometeorology for providing hors d’oeuvres for the banquet.

### STUDENT AWARDS

Each year the Division’s affiliated societies and sections conduct student competitions for best papers. Logan was no exception. Sixty-four presentations were made by students, and the Division’s Awards Committee had a difficult time deciding between very good presentations. The following awards were announced:

**AAASPD Laurence M. Klauber Award for Excellence:** Ying Luu (University of California, Los Angeles, CA), “3D Localization of the Mismatch Nega-



Participants enjoying one of the poster sessions.

tivity Response to Auditory Stimuli.”

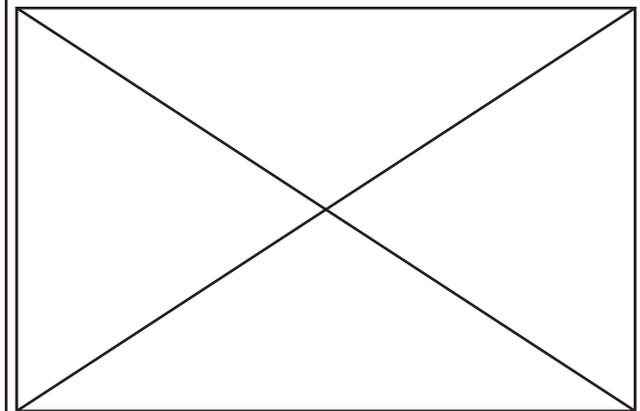
**AAASPD Geraldine K. Lindsay Award for Excellence in the Natural Sciences:** Drauzio E.N. Rangel (Utah State University, Logan, UT), “Stress Inducing Cross Protection to UV-B Radiation and Heat of *Metarhizium anisopliae* Conidia.”

**AAASPD Presidents’ Award for Excellence:** Amanda Gail Berry (Stevenson School, Pebble Beach, CA), “Are Stock Options Congruent with Maximizing Share Holder Value? A Mathematical Derivation.”

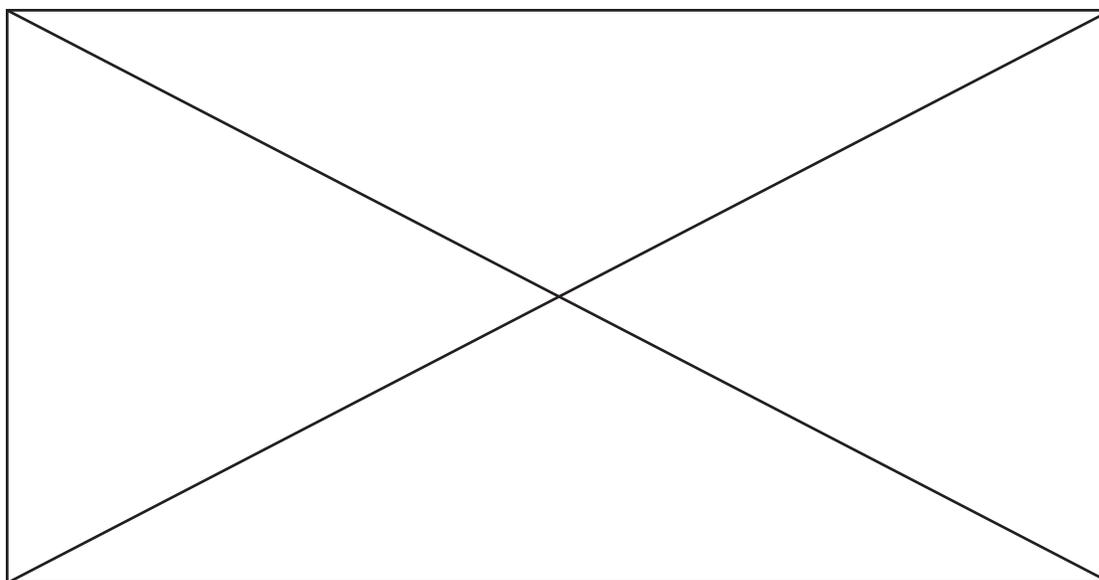
**AAASPD Best Poster Award for Excellence:** Amber V. Hess (Stevenson School, Pebble Beach, CA), “Digitally Enhanced Thin-Layer Chromatography.”

**AAAS Robert I. Larus Travel Award:** James Wittler (Colorado State University, Ft. Collins, CO), “EM-38 Calibration for Salinity Assessment in the Arkansas Valley.”

**WSSS Oral Papers:** James Wittler (Colorado State University, Ft. Collins, CO), “EM-38 Calibration for Salinity Assessment in the Arkansas Valley.” [first place]. Yaniria Sanchez-de Leon (University of Idaho, Moscow, ID), “Earthworm Populations in Different Experimental Coffee Management Systems.” [second place]. J. Mark Blonquist, Jr. (Utah State University,



Student presenters explaining their work to an interested registrant.



Winners of the student Awards of Excellence. From left to right, Front: Tom Bowen, Yaniria Sanchez-de Leon, Gyami Shrestha, and James Wittler. Middle: Amber Hess, Amanda Berry, Melissa Weber, Christelle Guédot, Eveline Séquin, and Drauzio E.N. Rangel. Back: Nickolee Zollinger, Leff Larsen, William Nelson, Udit Dave, and Mark Blonquist

Logan, UT), “A Low Cost Time Domain Transmission Sensor with TDR Performance Characteristics.” [third place].

**WSSS Poster Papers:** Tom Bowen (University of Idaho, Idaho Falls, ID), “Evaluation of Geospatial Technologies for Variable Rate Nitrogen Management in Potatoes.” [first place]. Gyami Shrestha (University of Wyoming, Laramie, WY), “Influence of Reclamation Management Practices on Soil Bulk Density and Infiltration Rates.” [second place].

**AAASPD Agriculture and Horticultural Science Section:** Nickolee Zollinger (Utah State University, Logan, UT), “Drought Tolerance of Ornamental Herbaceous Perennials.” [first place]. Jeff O. Larsen (Utah State University, Logan, UT), “Characteristics of Root Growth in a Management Intensive Grazing System.” [second place].

**AAASPD Biological Sciences Section:** Christelle Guédot (Utah State University, Logan, UT), “Effects of 3-Dimensional and Color Contrast Patterns on Nest Location Performance of Two Solitary Bees (Hymenoptera: Megachilidae).” [first place]. Jason Hunt (Idaho State University, Pocatello, ID), “Effects of Prolactin (PRL) on the Expression of PRL and PRL Receptor Long Form (PRL-L-R) mRNA in the Skin of Mink (*Mustela vison*).” [second place]. William K. Nelson (California State University Fresno, Fresno, CA), “Reproductive Inhibition by Methyl Farnesoate in the Tadpole Shrimp *Triops longicaudatus*, a Possible

Endocrine Alternative for Population Control.” [third place]. Jonathon Lords (Idaho State University, Pocatello, ID), “Prolactin (PRL) and PRL Receptor Long Form (PRL-L-R) mRNA Expression in the Testis and Epididymis of Sexually-Immature and -Mature Mink (*Mustela vison*).” [third place]

**AAASPD Chemistry Section:** Amber Hess (Stevenson School, Pebble Beach, CA), “Digitally Enhanced Thin-Layer Chromatography.”

**AAASPD Computer and Information Sciences and Engineering and Industrial Sciences Sections:** Rohit Saraswat (Utah State University, Logan, UT), “Automated Hardware Protocol Verification using Symbolic Trajectory Evaluation.” [first place] Udit M. Dave (Utah State University, Logan, UT), “PLSC Specifications of ARM AMBI-AXI Hardware Protocol.” [first place] Autumn Garza-Gosset (California State Polytechnic University, Pomona, CA), “Study of Spider Silk with a Particular Emphasis on Surface Behavior.” [honorable mention]

**AAASPD Ecology and Environmental Science Section:** Eveline S. Séquin (University of Nevada at Reno, Reno, NV), “Pygmy Rabbits (*Brachylagus idahoensis*): Methods of Detection, Habitat Preferences, and Distribution in Nevada.” [first place] Melissa Weber (Utah State University, Logan, UT), “Alkaloids and Old Lace: Pollen Toxins Exclude Generalist Pollinators from Death Camas (*Toxisoscordion [=Zigadenus] paniculatum*) (*Melanthiaceae*).” [second place]

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**AAASPD Education and Social, Economic and Political Sections:** Amanda Gail Berry (Stevenson School, Pebble Beach, CA), "Are Stock Options Congruent with Maximizing Share Holder Value? A Mathematical Derivation." [first place].

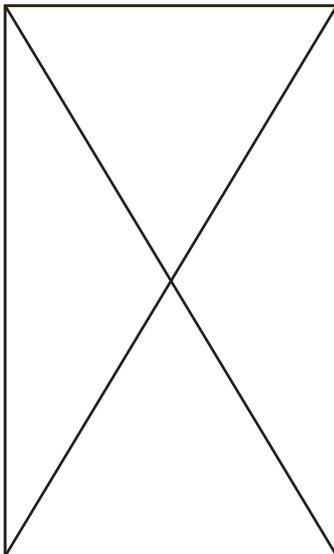
**AAASPD Psychology:** Ying Luu (University of California, Los Angeles, CA), "3D Localization of the Mismatch Negativity Response to Auditory Stimuli." [first place].

A photograph of most of the award winners is at the top of page eight.

### EXECUTIVE COMMITTEE AND COUNCIL MEETINGS

The Division's Executive Committee met on Saturday, June 13. At the meeting, chaired by Division President William B.N. Berry, Dr. Roger Christianson, Pacific Division Executive Director, reported on Division activities which occurred during the preceding seven months, reviewed Division finances, and presented the 2005 budget for approval. Final plans for the Logan meeting were discussed, as were plans for the 2005 meeting in Ashland. The possibility of the climate change symposium being published was discussed. It was noted that speakers in the symposium would be recorded and their talks transcribed to ease the preparation of the publication. *Keep watch for the announcement of this publication in a later Newsletter.*

The Council met over breakfast on Wednesday, June 17, to consider various recommendations from the Executive Committee and other business of the Division. The Council acted favorably on the Executive Committee's Nominating Committee recommendation of Dr. Kathleen M. Fisher (Department of Biology and Director, Center for Research in Mathematics and Science Education, San Diego State University, San Diego, CA) as President-Elect. The Council also acted favorably on the rec-



Dr. Kathleen M. Fisher  
President-elect of the Pacific Division.  
Photo courtesy of K.M. Fisher.

(continued on page 10, left column)

### ACCOMMODATIONS AND FOOD SERVICE

**Residence Halls:** Southern Oregon University is offering an attractive rate for housing in their residence halls. For \$22.50 per night double or \$36.50 per night single you can keep your budget under control while taking advantage of all that the meeting, Ashland, and the surrounding area have to offer. If you wish to partake of an all-you-can-eat breakfast in the dining commons each morning, the cost for room and breakfast is \$29.00 per night double or \$43.00 per night single.

Cox Hall, the university residence hall to which our group has been assigned, was recently remodeled. It consists of typical dorm rooms with shared bathrooms down the hall. Rooms can accommodate a maximum of two persons. For your comfort, rooms are air conditioned. Rooms are furnished with two twin beds, desk with lamp and chair, bureau and closet. On arrival, rooms are made up with linens, a blanket, towels, plastic cups, and small bars of soap. On the fourth day of a stay, fresh towels are provided. On the seventh day of a stay, fresh linens and towels are provided. Maid service is not provided. Ice machines, extra pillows, and extra blankets are not available. Guests who bring extra towels should pack colored ones, as the ones provided are white. Guests might also consider packing an extra blanket since the evenings can be quite cool in June. Guests are encouraged to bring cell phones, as individual room phones are not available. However, pay phones are within easy walking distance. **No smoking or alcohol use is allowed in the facilities, including the bedrooms.**

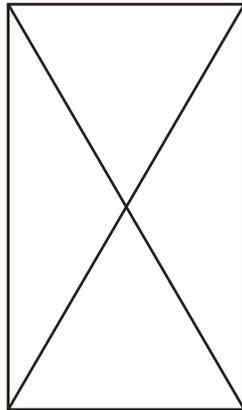
In addition to the standard dorm rooms, a very limited number of deluxe rooms ("suites") are available. These are similar to upscale motel rooms. Most have two double beds but one has a single queen. All have private bathrooms, air conditioning, telephones, a bar sink, microwaves, and refrigerators. Half of the rooms, including the queen suite, have views of Grizzly Peak, which will be assigned first. The other half have "garden views." These rooms are a bit more expensive than the standard dorm rooms. Doubles are \$41.50 per night, or \$48.00 with the all-you-can-eat breakfast. Singles are \$72.00 per night, or \$78.50 with breakfast.

**Length of stay in residence halls:** The Pacific Division has reserved a block of rooms for the nights of Friday, June 10 through Thursday, June 17. You may choose which of these nights you wish to stay in University housing. **There is a two night minimum stay. Housing registration closes May 6, 2005.**

**Residence Hall Registration:** Register **by May 6** by 1) completing the form on page 26 of this *Newsletter* and sending it directly to AAAS Pacific Division with your advance registration form, or 2) faxing the form on page 26 to 541-552-8457 (a dedicated fax line to the Pacific Division office) or 3) telephoning the Pacific Division office at 541-552-6869 with your registration and credit card information.

(continued from page 9, left column)

ommendations of the Council Nominating committee to elect Dr. Anne Sturz (Department of Marine Science and Environmental Studies, University of San Diego, San Diego, CA 92110-2492) to a five year term on the Executive Committee and Drs. Richard Koenig (Crop and Soil Sciences, Washington State University, Pullman, WA 99164-6420) and Carol Tang (Senior Science Educator, California Academy of Sciences, 875 Howard St., San Francisco, CA 94103) to three year terms as at-large members of the Council. There was considerable discussion about a request to lend support to the embryonic stem cell research ballot measure in California for the November election. The Council agreed to continue its tradition of not becoming involved in political issues but decided it was important to establish a Pacific Division policy on the issue of embryonic stem cell research. Dr. Christianson was charged with drafting a resolution on this issue to circulate to the members of the Council for an e-mail vote during the summer. The task was completed with the help of Marlene Zendell, our liaison to AAAS, the resolution was overwhelmingly accepted in the e-mail vote. The resolution may be read on page 11 of this *Newsletter*.



Katie, mascot of the Logan meeting and proudly owned by Pacific Division past-President John Carroll and wife Inge.

*Residence Hall Check-in:* Instructions for picking up room assignments will be mailed to you prior to the meeting.

*On-Campus Dining:* On-campus dining is available only to those staying in dorms (see previous page). However, there are several restaurants adjacent to campus which are just a short walk from the meeting site. Registrants will be provided with a list of nearby restaurants for their dining pleasure. Additionally, downtown Ashland boasts a number of restaurants from casual to elegant.

*Local off-campus accommodations:* There are many hotels and motels in the Ashland area. A complete list may be found on the internet by clicking on the appropriate links at <http://www.sou.edu/AAASPD/Ashland2005/Housing.html>. A list of local motels and hotels that are offering meeting attendees special rates and holding blocks of rooms follows. Be sure to identify yourself as attending the AAAS Pacific Division meeting when making your reservation. All rates listed are for one or two people in a room and are exclusive of taxes and other fees unless otherwise noted.

• **Ashland Springs Hotel**

212 East Main Street, Ashland, OR 97520  
541-488-1700

Rates: all except Sunday and Monday: \$112.00/night  
Sunday and Monday: \$102.00/night

Located in the heart of downtown Ashland, about 1 mile from the University campus. Additional guests are \$20.00 each. Rates include continental breakfast on the Mezzanine and steam bath or sauna at the Ashland Springs Spa. Reservations must be made by Tuesday, May 10, 2005. After this date the group rate is available based upon availability. Web: [www.ashlandsspringshotel.com](http://www.ashlandsspringshotel.com).

• **Stratford Inn**

555 Siskiyou Boulevard, Ashland, OR 97520  
541-488-2151

Rates: \$120.00/night

Located just east of downtown Ashland, about 0.8 miles from the University campus. Standard rooms include two queen beds, refrigerators, tub/shower bathrooms and cable television with HBO. Other amenities include an indoor swimming pool and spa and free guest laundry. Included is a "wonderful light breakfast" served in the grand room.

• **Plaza Inn and Suites at Ashland Creek**

98 Central Avenue, Ashland, OR 97520  
888-488-0358 or 541-488-8900

Rates: deluxe queen \$145.00/night  
executive king \$165.00/night

Located just northwest of downtown Ashland, about 1.25 miles from the University campus. Amenities include mini-refrigerators and microwaves in all rooms, pillow menu. 100% non-smoking, deluxe European complimentary breakfast, 24-hour fitness center with outdoor spa tub, evening snacks, late evening fresh baked cookies, milk and gourmet PBJ sandwiches. Web: [www.plazainnashland.com](http://www.plazainnashland.com).

• **La Quinta Inn & Suites**

434 Valley View Road, Ashland, OR 97520  
800-531-5900 or 541-482-6932

Rates: \$99.00/night

Located just off I-5 at exit 19, approximately four miles from the University campus. Double queen rooms have kitchenettes. Free continental breakfast, 24-hour indoor swimming pool, spa and fitness center. Web: [www.lq.com](http://www.lq.com).

• **Manor Motel**

476 North Main Street, Ashland, OR 97520  
541-482-553

Rates: \$65.00 - \$95.00/night

Located 1.6 miles from the University on the west side of Ashland. The Manor Motel is a small "1940's style" auto court with 11 rooms. Rates depend on the room and amenities. Rooms accommodate 2, 3 or 4 persons, and many have kitchens. Senior discounts are available.

• **Holiday Inn Express**

565 Clover Lane, Ashland, OR 97520  
541-201-0202

Rates: \$89.00/night

Located on the east end of town near I-5 Exit 14, the hotel is approximately two miles from the university campus. Rate is for a single king or two queens, double occupancy (children stay free in adult's room). Additional persons are \$10 + tax each. Maximum is three for a king room and five for a double queen room. All rooms reserved are non-smoking. Smoking may be available—ask at time of making reservation. Be sure to ask for a room out of the AAAS Pacific Division block, confirmation number P21754.

• **Windmill Inn and Suites of Ashland**

2525 Ashland Street, Ashland, OR 97520  
800-547-4747 or 541-482-3010

Rates: \$95.00/night

Located just to the north of I-5 at Exit 14, about 2.5 miles from the University campus. Additional persons \$10 + tax. Free breakfast buffet for guests, and complimentary shuttle to and from the airport, SOU campus, and downtown Ashland.

• **Oak Street Cottages**

171 Oak Street, Ashland, OR 97520  
541-890-6462

Rates: \$226.80 - 302.40/ night (including taxes)

Located just a block from downtown Ashland, Oak Street Cottages operates four rental houses, priced as follows: Sherwin Cottage (sleeps 11) \$302.40 per night, including taxes; Oak Lawn and Oak Hideaway (each sleep 6) \$226.80 per night, including taxes; Oak Tower (sleeps 8) \$275.40 per night. Web: <http://www.oakstreetcottages.com>.

*Please make your reservations* for off-campus housing directly with the hotel/motel of your choice. Note that AAAS, Pacific Division, lists the above hotels and motels for information only, not as an endorsement for any specific commercial enterprise.

## TRANSPORTATION AND CAMPUS PARKING

*By Automobile:* Southern Oregon University is located about 15 miles north of the California border on Interstate 5. *From the south,* take Exit 14 from I-5. Turn left at the stop and follow Hwy 66 (Ashland Street) toward town. Proceed to the right at the third signal onto Siskiyou Blvd.

• If you are going to your on-campus housing, turn left at the first signal onto Indiana St. In about 1/3 block turn left into the parking lot (looks like an alley but opens into a park-

### UNITED AIRLINES SPECIAL MEETING OFFER

Save up to 15% on airfare for travel on United to Medford, OR, between June 7 and June 22, 2005.

You or your travel agent call UAL's Meeting Plus Reservation Center at **800-521-4041**, 8:00 a.m. to 10:00 p.m. E.T., 7 days a week.

Refer to **Meeting ID Number 539GU**.

Call at least 30 days in advance for best discounts.

## AAAS Pacific Division Resolution on Stem Cell Research\*

**Whereas** the American Association for the Advancement of Science (AAAS) has taken the lead in exploring ethical issues related to stem cell research in its 1999 report, "Stem Cell Research and Applications: Monitoring the Frontiers of Biomedical Research,"<sup>1</sup> and

**Whereas** the AAAS on 17 August 2001 issued a statement regarding President Bush's stem cell policy,<sup>2</sup> which included concerns about the number, quality, and pedigrees of stem cell lines available for use in federally funded research, and

**Whereas** the AAAS Board of Directors on 14 February 2002 adopted a "Statement on Human Cloning,"<sup>3</sup> which endorsed a ban on reproductive cloning but included support for human stem cell research under close scrutiny by the federal government over both the public and private sectors, and

**Whereas** the AAAS on 23 June 2004 signed, with 141 other agencies and organizations, a letter<sup>4,5</sup> to President Bush urging an expansion of his stem cell research policy and especially increasing the number of stem cell lines available to researchers,

**Therefore, be it resolved** that the Pacific Division of the American Association for the Advancement of Science fully concurs with the heretofore noted actions of the AAAS relating to human stem cell research, and

**Be it further resolved** that the Pacific Division of the AAAS also urges President Bush to reexamine his three-year old policy toward human stem cell research, especially as it relates to the number of stem cell lines available to researchers.

<sup>1</sup><http://www.aaas.org/spp/dspp/sfrl/projects/stem/main.htm>

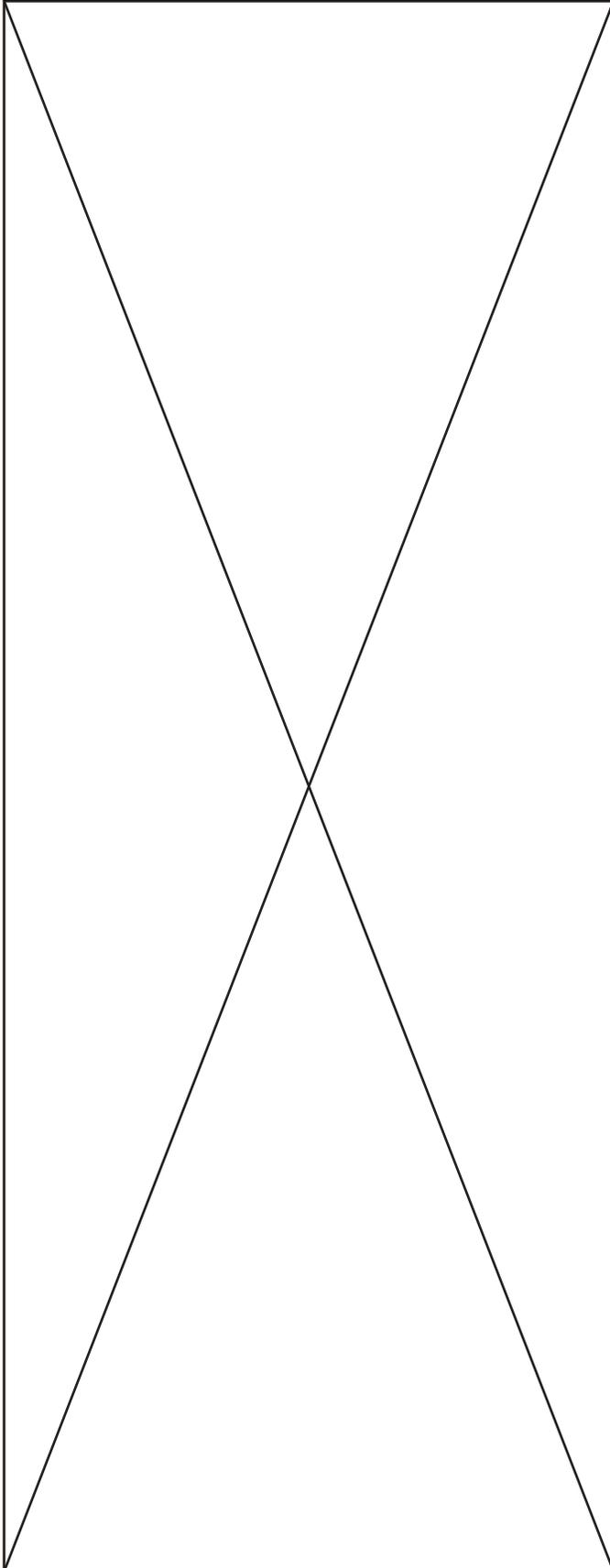
<sup>2</sup>[http://www.aaas.org/spp/cstc/docs/01-08-17\\_stemstmt.htm](http://www.aaas.org/spp/cstc/docs/01-08-17_stemstmt.htm)

<sup>3</sup><http://www.aaas.org/news/releases/2002/Cloning.shtml>

<sup>4</sup><http://www.aaas.org/news/releases/2004/0623stemcell.shtml>

<sup>5</sup><http://www.camradvocacy.org/fastaction/change6-17-20041.pdf>

\*Approved by vote of the Pacific Division Council, September 9, 2004.



ing lot). Cox Hall faces the parking lot.

- If you are coming onto the campus for the meeting, turn left at the second signal (Mountain Ave.). Proceed up the hill to the STOP and turn left. Follow the signs to parking.

*From the north*, take Exit 19 from I-5. Turn right and proceed to the signal (Hwy 99). Turn left onto Highway 99 and continue driving about one mile past downtown Ashland to Mountain Avenue (a signal).

- If you are heading to your 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 coming onto campus for the meeting, turn right onto Mountain Avenue. Proceed up the hill to the STOP sign and turn left. Follow the signs to parking.

*By Air:* Ashland is not served by a commercial carrier. However, Medford (about 15 miles from Ashland) is served by major airlines. Car rentals are available at the airport. Both Cascade Airport Shuttle (541-488-1998) and Yellow Cab Shuttle Service (541-482-3065) service Ashland from the airport. Advance reservations are required for both shuttle services. Rates and advance reservation forms for Yellow Cab Shuttle Service may be found by going to their website, [www.yellowcabofsouthernoregon.com](http://www.yellowcabofsouthernoregon.com). Pricing is competitive for the two shuttle companies. The airport is about 25 minutes from the University.

## REGISTRATION CENTER

The Registration Center will be set up in the lobby of the Science Building (see campus map, p. 31). It will be open at 2 p.m. on Sunday and 8:00 a.m. on Monday through Wednesday, remaining open daily until 5 p.m. except Wednesday, when it will close at 2 p.m.

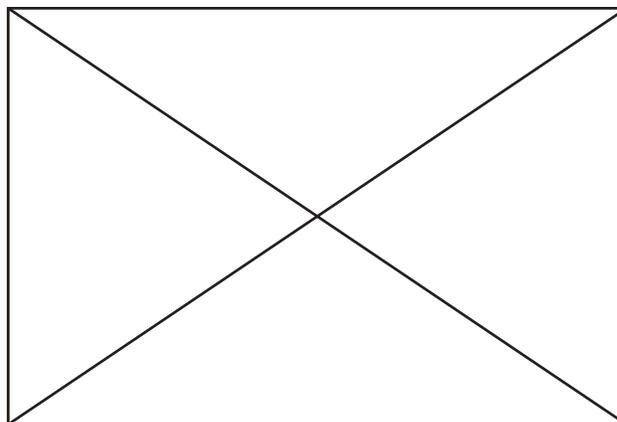
## MEETING ROOMS

This year's technical sessions will meet in the Science Building. Meeting rooms will be equipped with a 35 mm slide projector, an overhead projector, a Windows-based computer running PowerPoint (watch the web page for version or check the spring *Newsletter*), and a standard computer projector. Speakers requiring other specialized equipment must make their requests when they submit their abstracts. Specialized equipment, such as VHS/TV, will be provided if available. If rental costs are incurred for specialized equipment, payment will be the responsibility of the requestor. A Speaker's Preview Room, with most projection equipment, will be open during the meeting. The meeting rooms and times of presentations will be published in the "Program with Abstracts" issue of the *Proceedings*

(vol. 24, part 1), which will be given to those who have registered for the meetings. Speakers may obtain final confirmation of the time and place of their presentation by visiting the Pacific Division website ([pacific.aaas.org](http://pacific.aaas.org)) starting ten days prior to the meeting.

### POSTER SESSIONS

Posters will be assigned a display space of 40" tall X 60" wide (1 m X 1.5 m). If you need more space or the opposite orientation, please contact the Division office by e-mail: [aaaspd@sou.edu](mailto:aaaspd@sou.edu) or telephone: 541-552-6869 to discuss your needs *no later than May 13, 2005*. By action of the Pacific Division Council in order to assure fairness, all student posters must fit within the assigned display space of 40" X 60" (either orientation) to be eligible for student awards of excellence. A request for extra space will disqualify a student from the award competition. Posters will be grouped by discipline and subject matter. Each presenter will be given at least four hours for poster display, although more time will likely be available. Presenters should set up their posters no less than 15 minutes before the beginning of their presentation session and are expected to be available to discuss their work during the time their poster is on display. Posters should remain in place until the close of the session, and be removed within 15 minutes of that time. Student posters will be judged for Awards of Excellence. Students must be present during the judging of posters.



Science Building on SOU campus. Registration and most meeting sessions occur here. Photo courtesy SOU Photographic Services.

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 website, <http://pacific.aaas.org>. Click on the 86<sup>th</sup> Annual Meeting home page and then **Poster Preparation** (listed in the left-hand column).

### SPECIAL EVENTS

It would be difficult to visit Ashland without being given the opportunity to attend one or more plays produced by the

## Library Book Packs

\$120 postpaid

A \$327 value!

U.S. and Canada only...others please contact us for shipping costs.

Have library access to all of the AAAS, Pacific Division books that are currently in print. Give this order form to your librarian and request that they place the order today! Or use it to augment your own personal library! For only \$120 postpaid, you or your library will receive one copy of each of the following:

- *new* Museums and Other Institutions of Natural History (paper, 2004) *new*
- Genecology and Ecogeographic Races (cloth, 1995)
- Dietary Factors and Birth Defects (paper, 1993)
- San Francisco Bay: The Ecosystem (cloth, 1996)
- San Francisco Bay: Use and Protection (paper, 1982)
- Crater Lake: An Ecosystem Study (cloth, 1990)
- Late Cenozoic History of the Pacific Northwest (cloth, 1985)
- Cracking Rocks and Defending Democracy: The Life and Times of Kirtley Fletcher Mather, 1888–1978 (cloth, 1994)
- Agroecosystems and the Environment: Source, Control, and Remediation of Potentially Toxic Trace Element Oxyanions (cloth, 1998)
- Frontiers of Geological Exploration of Western North America (paper, 1982)
- Patterns of Evolution in Galapagos Organisms (cloth, 1983)

WHILE QUANTITIES LAST!!

Tables of Contents posted at [pacific.aaas.org](http://pacific.aaas.org)

Attention \_\_\_\_\_ Institution \_\_\_\_\_

Address \_\_\_\_\_ City, State & Zip \_\_\_\_\_

Please make check out to **AAAS, Pacific Division** or call with credit card • Purchase orders accepted from institutional libraries  
Questions? Phone 541-552-6869 or e-mail [aaaspd@sou.edu](mailto:aaaspd@sou.edu)

MAIL TO:

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

nationally renowned Oregon Shakespeare Festival (OSF). We have chosen four plays, one contemporary, one not so contemporary and two Shakespeare, to offer to meeting registrants. Two are in the outdoor Elizabethan Theatre and two are indoors in the Angus Bowmer Theatre. Almost all tickets are seated in the C-sections, the least expensive areas of the theatres. It is hard to find a bad seat in the OSF theatres. We worked with the OSF group ticket sales agents to get the best possible seats at the most reasonable prices. We have only a limited number of tickets for each performance. Please use the Advance Registration Form to order your tickets. Additional information about the plays may be found at [www.osfashland.org](http://www.osfashland.org). At least one member of a family unit requesting tickets must be registered for the meeting.

*Saturday Evening Play at Oregon Shakespeare Festival.* This evening's play is **ROOM SERVICE**, "a screwball homage to theatre, made famously funny by the Marx Brothers. In 1938, this classic American farce had 'em rolling in the aisles. Aspiring theatrical impresario Gordon Miller has what might be The Great American Play. He doesn't have the dough to produce it, and he's teetering on the brink of eviction from the White Way Hotel. Can he hoodwink the hotel management long enough to scrape together the money? And just how many starving theatre artists can you jam into one room? This tribute to the high-wire enterprise of putting on a new play revels in eccentric characters and wicked one-liners worthy of Groucho himself." –OSF

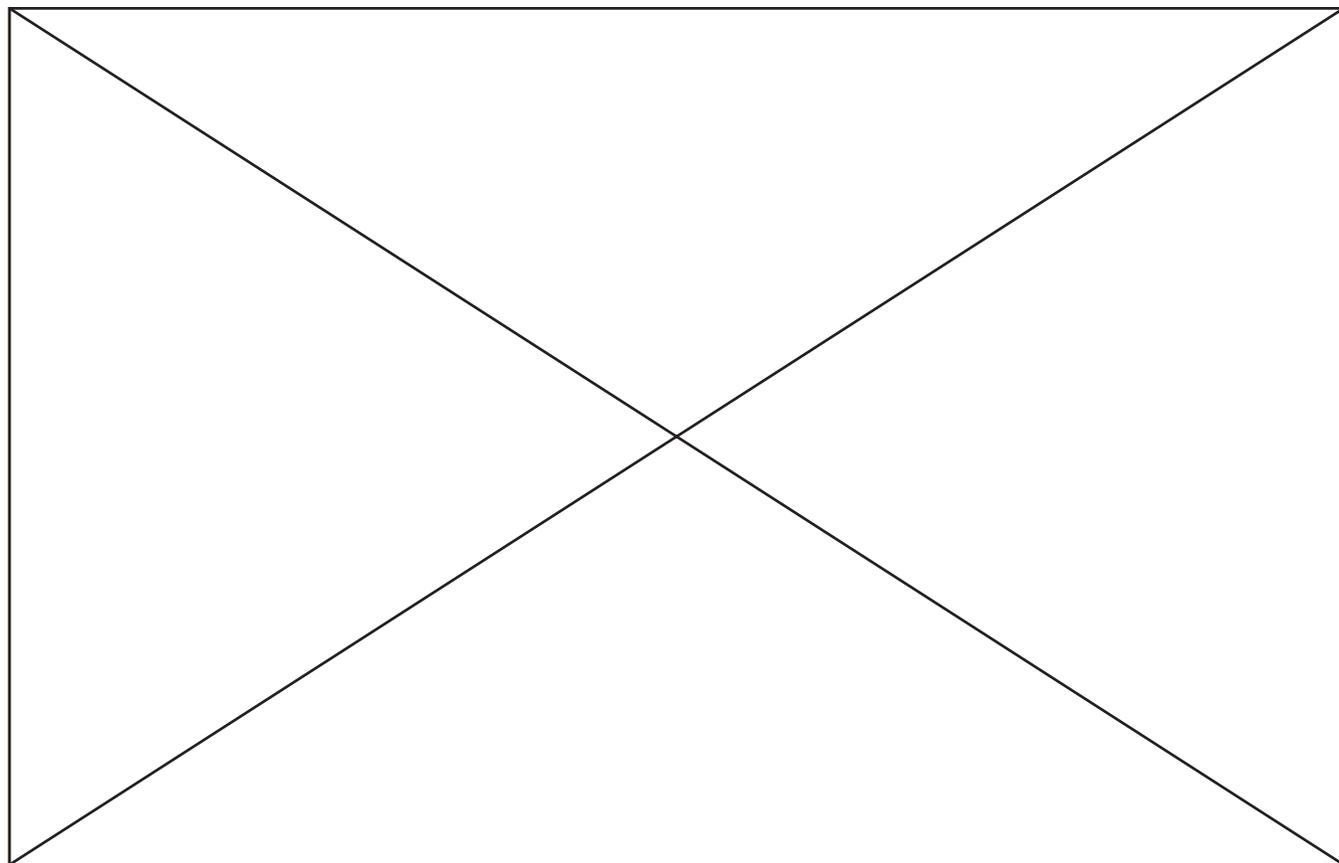
*Sunday Evening Welcome Wagon and Cracker Barrel Mixer*, hosted by the Pacific Division and its affiliated societies and sections. All registrants and their families are

invited to enjoy the conviviality of this social on June 12 from 8:00 to 10:00 p.m. A selection of soft drinks, chips, pretzels, and good conversation will be available.

*Sunday Evening Play at Oregon Shakespeare Festival.* This evening's play is Shakespeare's **LOVE'S LABOR'S LOST**. "Love is the teacher and love is the lesson. In Shakespeare's giddy word-feast, Ferdinand, King of Navarre, and three of his friends decide to give up women and the world to devote themselves to learning, but their foolish vows can't bar love—from their gates or from their hearts. Certainly not when four high-spirited, high-bred ladies arrive on the scene. Their unexpected entrance throws the noble scholars—and the pedants and peasants of the neighboring countryside—into romantic upheaval. Can the men pursue the ladies without breaking their oaths? Will these sophisticated young women consent to be courted by such fickle young men? Will love's labors be lost or won?" –OSF

*Monday Evening President's Reception.* Southern Oregon University President *Elisabeth Zinser* will welcome conferees at an informal reception from 7:30 to 9:30 p.m. All participants and their families are invited to enjoy this relaxed occasion. Nonregistered family members are welcome, but must be accompanied by a registrant. Please wear your registration badge.

*Tuesday Evening Reception, Banquet, and Announcement of the Winners of the Student Awards for Excellence.* The Divisional Dinner will be held Tuesday evening beginning at 6:00 p.m. at the Stevenson Union on the Southern Oregon University campus. The cost is \$25 per person and you must sign up in advance (please see Advance Registration Form,



p. 27). Students who are in competition for an Award of Excellence are invited to attend as guests of the Division. If you are a student planning to attend the dinner, please be sure to check the appropriate boxes on the Advance Registration form. Dinner will be preceded by a no-host reception. Wine, beer, and a variety of soft drinks will be available, starting about 6:00 p.m. The following entrees are offered for dinner: Rosemary Roasted Chicken Breast (chicken breast marinated with rosemary, lemon juice, garlic, and Dijon mustard), Native American Style Grilled Salmon (rubbed with fresh sage, lemon, and garlic) and Portabella Napolian (portabella mushrooms, roasted vegetables and tofu with roasted red pepper sauce—our vegetarian offering). Please be sure to indicate your choice on the Advance Registration Form (page 27). Following dinner, AAAS Pacific Division President Lynn M. Dudley will give the Presidential Lecture, and Division representatives will announce the names of student winners of sectional and affiliated society 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 2006 annual meeting of AAAS in St. Louis, MO, February 16 - 20, in order to present his/her winning presentation as a poster.

The Klauber, Lindsay, Dutro, Presidents', Best Poster, Peterson, and AAAS–Larus awards are given to those students whose presentations are judged the most significant in the advancement or understanding of science. Eligible students must: (1) register for the meeting, (2) present the paper or poster, and (3) 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 (oral and poster) are posted on the Division's website.

All are invited and encouraged to attend these annual events.

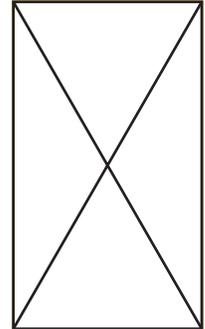
*Business Meeting of the Council of the Pacific Division.* The Council of the AAAS, Pacific Division will hold its annual breakfast and business meeting at 7:00 a.m. on Wednesday, June 15. The Council will elect officers, discuss programs for the 2006 and 2007 annual meetings, and transact such other business as is required by the Division's By-Laws.

*Wednesday Evening Play at Oregon Shakespeare Festival.* This evening's play is THE TRAGICAL HISTORY OF DOCTOR FAUSTUS, by Christopher Marlowe. "The devil will have his due. Doctor Faustus is going to Hell. In this epic theatrical masterpiece—the first great poetic tragedy in English drama—Marlowe presents a burning question: What does it profit a man if he gains the whole

## ***While you're in the area, explore the region with the Siskiyou Field Institute***

—by Sue Parrish, Executive Director

The Siskiyou Field Institute (SFI) is a non-profit organization that offers natural history field programs about the Klamath-Siskiyou bioregion. Its programs serve a wide audience, from nature fun for youth to technical science courses for professionals. Participants can raft down the Klamath River while learning the region's ethnobotany and native ecological knowledge from PhD candidate and Native American Frank Kanawa Lake; relax at the Oregon Caves Chateau, hiking its old-growth forests and enjoying the Valley's diverse wildflowers with expert naturalists; or join SFI's Cave Junction or Ashland programs to partake in a menu of courses about the region's birds, reptiles, geology, salmon, plants, butterflies—there's something for everyone!

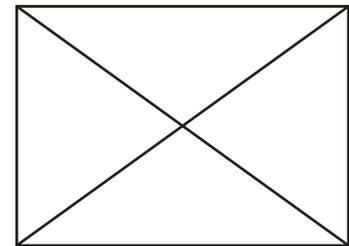


Siskiyou Field Institute

SFI works cooperatively with SOU, offering college credit for some of its field courses and providing a venue for SOU professors and other naturalists to share their work with the general public. SFI is also partnering with SOU to offer three seasons of programs in a dedicated education/research facility in 2006. This year's programs will find participants all around the bioregion from March through October, enjoying the region's unusual biodiversity and pristine mountain and river systems. Although the program spans seven months, it features two main sessions:

- **June 2 – 5 are Cave Junction based programs.**
- **June 16 – 20 are Ashland-based programs, immediately following the AAAS conference!!**

Join SFI and learn about the ecology of the unique and beautiful Klamath-Siskiyou bioregion from researchers, professors and practitioners eager to share their knowledge and love for this area. Discover plants that grow nowhere else in the world, snorkel with fish that thrive in wild rivers, and backpack and raft among one of the most geologically complex mountain systems in the world.

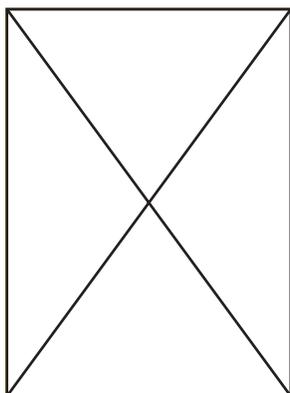


Siskiyou Field Institute

To join the SFI mailing list and/or receive its catalog, please e-mail [institute@thesfi.org](mailto:institute@thesfi.org), phone (541) 592-4459 or visit our website at [www.thesfi.org](http://www.thesfi.org).



## AAAS Project 2061 Announces Science Educator Workshops for 2005



AAAS Project 2061 has announced new dates for its popular “Using *Atlas of Science Literacy*” workshops. Science and mathematics educators are invited to participate in these professional development workshops designed to improve classroom practices and help students achieve important learning goals

in science, mathematics, and technology. The workshops for 2005 include:

January (tentative) in Seattle, WA  
March 7-9 (Mon-Wed) in Washington, DC  
June 9-11 (Thurs-Sat) in St. Louis, MO  
October 17-19 (Mon-Wed) in Washington, DC

For details, visit [www.project2061.org/workshops](http://www.project2061.org/workshops).

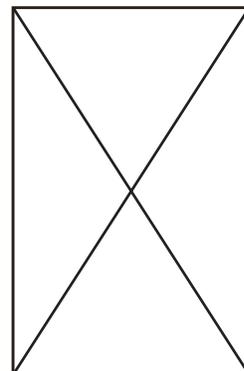
In 2001, Project 2061 and the National Science Teachers Association published *Atlas of Science Literacy*, a collection of conceptual strand maps for nearly 50 key topics in science, mathematics, and technology. Strand maps display the connections among key ideas and skills and the sequence in which K-12 students might develop their understanding of various topics. The three-day *Atlas* workshop demonstrates how to use *Atlas* maps and related Project 2061 resources to improve curriculum, instruction, and assessment. Workshop participants include K-12 teachers, administrators, curriculum specialists, researchers, university faculty, and other professionals.

world but loses his immortal soul? Driven by curiosity and ambition, Faustus signs a pact with dark forces and embarks on a breathtaking journey through time and space with the devil Mephostophilis as his guide. The horror of damnation is obscured by the wonders heaped upon him: unlimited access to forbidden knowledge, heady encounters with the legendary and powerful, the satisfaction of every desire. Lucifer’s generosity is boundless—until the clock strikes midnight.” –OSF

*Thursday Evening Play at Oregon Shakespeare Festival.* This evening’s play is RICHARD III, by William Shakespeare. “Meet the most charismatic villain ever to command a stage. He’s Shakespeare’s Richard III—the man audiences have loved to hate for 400 years. Deformed in body and spirit, this engaging monster is

obsessed with power. Driven by bloody ambition, cursed by nightmares and a chorus of queens, Richard grinds his adversaries beneath his lurching feet until he bestrides beleaguered England like a malevolent colossus. Does he fall? Of course, but not before he has taken us all on a wild and wickedly entertaining ride.” –OSF

**Trivia Question.** You may recognize this device. It was featured on the postcard mailed earlier to remind people of this meeting. It is found on the SOU campus. But what is it? The names of everyone who correctly identify the object will be placed into a hat with one lucky winner’s name being drawn. The winner will receive a free and postpaid publication of the Pacific Division of her or his choice (see list on page 30). Entries must be date-marked (postmark or e-mail date) by February 28, 2005. E-mail your entry to [aaaspd@sou.edu](mailto:aaaspd@sou.edu) or mail it to AAAS Pacific Division, TRIVIA QUESTION, Department of Biology, Southern Oregon University, Ashland, OR 97520. The name of the winner will be posted on the Pacific Division website.



## PUBLIC LECTURES

The following public lectures are being planned. Additional ones may be scheduled as time permits.

“Historic Management within the Cascade-Siskiyou National Monument,” Dr. Paul Hosten, Bureau of Land Management, Medford, OR.

“Dementia Is Not A Disease: What Is It?,” Dr. Fred C.C. Peng, (Neurological Institute, Department of Neurosurgery, Veterans General Hospital–Taipei, Taipei, Taiwan.

AAAS Pacific Division Presidential Lecture, Dr. Lynn M. Dudley, Utah State University, Logan, UT.

## FIELD TRIPS

All field trips are open to meeting registrants and their families. Due to limited space, advance registration is required for all trips. Reservation and payment of field trip fee(s) are included on the Advance Registration Form.

A full refund will be granted if a trip is cancelled by the Division. If a registrant cancels via e-mail or written notification postmarked by May 23, 2005, the registrant will receive a refund of the fee(s) paid less a \$10 processing fee. If paid by credit card, an additional 3% will be deducted from the amount being refunded.

The following field trips are being planned:

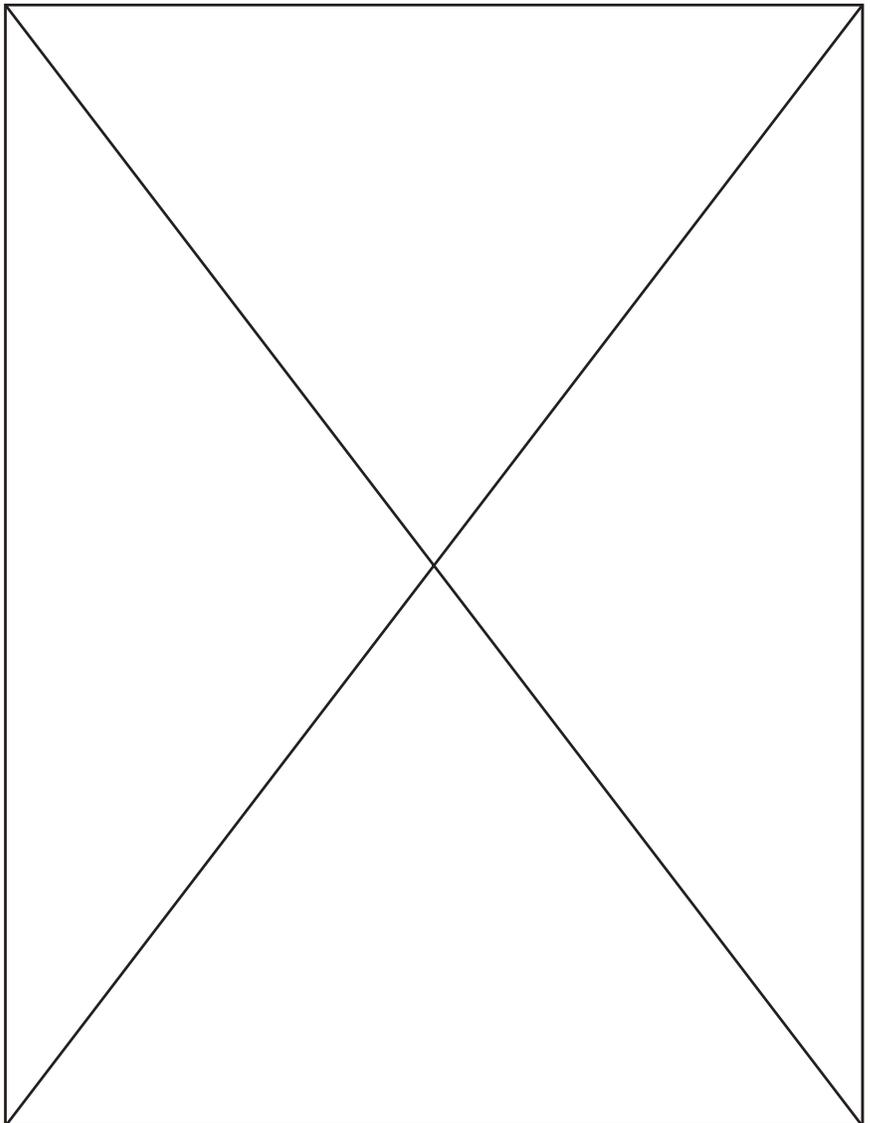
(1) *Saturday, June 11 at 9:00 a.m. – Sunday, June 12 at 5:00 p.m. Redwoods, The Oregon Coast, and Life on the*

*Serpentine*. Led by Drs. Ronald Nitsos and Frank Lang (both emeritus, Department of Biology, Southern Oregon University, Ashland, OR). Explore the uniqueness of the Siskiyou and Coast Mountains. Travel the Redwood Highway, making stops at Eight Dollar Mountain, Rough & Ready Botanical Wayside, Jedediah Smith State Park and Stout Grove. Spend the night in Crescent City, CA, and explore tide pools, Battery Park Lighthouse, the Mouth of the Windchuck River, and Harris Beach State Park (Brookings, OR). Examine plants adapted to serpentine soils in fens and bogs (caution: you may get wet feet!), carnivorous plants (*Darlingtonia*, *Pinguicula*, and *Drosera*), and life in tide pools. The trip includes easy to moderate walking plus some rocky beaches. Bring good walking/hiking shoes. Coastal fog/rain is always a possibility. Includes transportation and a box lunch the first day. Participants are responsible for purchasing their own dinner Saturday and breakfast and lunch on Sunday. Cost: \$125 double occupancy, \$185 single occupancy. Minimum 8, maximum 18 participants.

**(2) Sunday, June 12: 10:00 a.m. - 5:00 p.m.** *The Terroir and Wines of the Rogue Valley*. Led by Dr. Gregory Jones (Department of Geography, Southern Oregon University, Ashland, OR). The continuum of issues from grape variety to wine is often embodied in the notion of “terroir”, the French concept where both physical and cultural factors interact to define the wine styles and quality that comes from any site or region. The Rogue Valley wine region of southern Oregon is a rapidly growing and recognized wine production region, which is bordered by the Coastal Range to the west, the Cascades to the east, and the Klamath Mountains to the south and drained by its namesake river. The region’s geologic history and spatial configuration has created a unique suite of landscapes, soils, and climates from which rise beautiful vineyards and high quality wines. The Rogue Valley is Oregon’s most diverse winegrape growing region and is suited to a wide range of grape varieties, including Syrah, Viognier, Pinot Noir, and Pinot Gris, to name a few. Join us for a field trip through some of southern Oregon’s beautiful vineyard landscapes to discuss and experience the terroir, wine, and uniqueness that is the Rogue Valley! Includes transportation, short guide, and box lunch. Cost: \$35.

**(3) Sunday, June 12: 10:00 a.m. - 4:00 p.m.** *Blue Ledge Mine*. The Blue Ledge

mine is an abandoned underground copper mine located at the 4500 ft elevation in a remarkably beautiful area of the Siskiyou Mountains. It is intermediate in size and has not been subject to remediation efforts. Drs. Kathleen Page, Bill Elliot and Steve Petrovic study the geomicrobiology of acid mine drainage at this site. We will leave from SOU at 10 a.m. and travel through the beautiful Applegate Valley to arrive at the site by 12 p.m. We will hike a forested trail to the lower main adit and enjoy our box lunches in the shade of conifers. Our field trip will include a survey of acid drainage, tailings, mine works, and surrounding ecology. The history, geology, chemistry and microbiology of the mine will be discussed. A unique display of wildflowers along the trail to the upper adits may help to distract us from the steep climb. From the top of the mine, we will have a bird’s eye view of the entire mining operation and surrounding forest. We will return to the base of the mine and travel back to SOU, arriving



about 4 p.m. Be sure to bring good hiking shoes. Includes transportation and box lunch. Cost: \$35.

**(4) Monday, June 13: 1:30 p.m. - 4:00 p.m. Dam Removal and Riparian Enhancement.** Dam removal or breaching (partial removal) is an increasingly common remedy for fish passage, habitat degradation, water quality, and other problems caused by dams in the United States. The Jackson Street Dam, built in 1960 on Bear Creek in Medford, Oregon, resulted in a barrier to migration of Pacific salmon (*Oncorhynchus* spp.) and steelhead (*O. mykiss*), loss of stream habitat, eutrophication, and an algae-choked impoundment in downtown Medford. The 11-foot high concrete and wooden structure was owned and operated by the Rogue River Valley Irrigation District as one of its primary diversions. The dam was breached in 1998, culminating a 13-year, \$1.2 million effort led by the Rogue Valley Council of Governments and the Medford Urban Renewal Agency in collaboration with the irrigation district, other government agencies, and local citizens. This field trip, led by Eric Dittmer (Department of Geology, Southern Oregon University, Ashland, OR), will stop first in Ashland to view the Oak Street diversion structure and irrigation impacts on Bear Creek. The trip will continue to the Jackson Street Dam in Medford to view the new diversion structure, water quality enhancing facilities, and review the process involved in achieving the goals. Includes transportation. Fee: \$7.50.

**(5) Wednesday, June 15: 9:00 a.m. - 5:00 p.m. Serpentine Soils of the Illinois Valley, Southern Oregon.** Sponsored by the Western Society of Soil Science and the Departments of Biology, Chemistry and Geology, Southern Oregon University. More details will be included in the Spring Newsletter and will also be posted on the Pacific Division website, [pacific.aaas.org](http://pacific.aaas.org), as they become available. Includes transportation and box lunch. Fee: \$25.

**(6) Thursday, June 16: 9:00 a.m. - 4:00 p.m. Cascade-Siskiyou National Monument.** Includes transportation and box lunch. Cost: \$35.

**(7) Thursday, June 16, 8:00 a.m.–Saturday, June 18, 5:00 p.m. Subduction and the Southern Cascade Volcanoes.** Led by J. Thomas Dutro, Jr., (U.S. Geological Survey, ret.) and Alan E. Leviton (California Academy of Sciences), the post-meeting three-day trip will examine the Southern Cascades as a case study of subduction processes in geology. Time and weather permitting, we will examine Crater Lake, the Three Sisters area, Newberry volcano, Lava Beds National Monument and Mt. Shasta. The trip will develop the story of the origin of the Cascade chain, tracing the volcanism from the ultramafics and basalts of the west to the andesites and rhyolites of the eastern part of the range. The age relationships of the rocks and the volcanoes will be outlined and the volcanic future of the region will be explored. Cost per person includes lodging for two nights, three box lunches, two breakfasts, guidebooks, and transportation. Other meals and items of personal nature are the responsibility of participants. Cost:

\$250 per person double occupancy, \$365 per person single occupancy. Minimum 18, maximum 30 participants.

## WORKSHOPS SCIENCE EDUCATION ENRICHMENT

### Tuesday, June 14

**Demonstration of Science Educational Enrichment Programs at the University of California, Berkeley, for Students in Grades 9 through 12.** Presented by Dr. William B.N. Berry (Department of Earth & Planetary Sciences, University of California, Berkeley, CA). The workshop will focus on a project used by UC Berkeley undergraduates in providing enrichment of science education for high school students in grades 9 through 12. The science behind the project will be discussed. Undergraduates will talk about how science education is enhanced and high school students become engaged in learning through design, development and production of a product.

## MOLECULAR BIOLOGY KITS

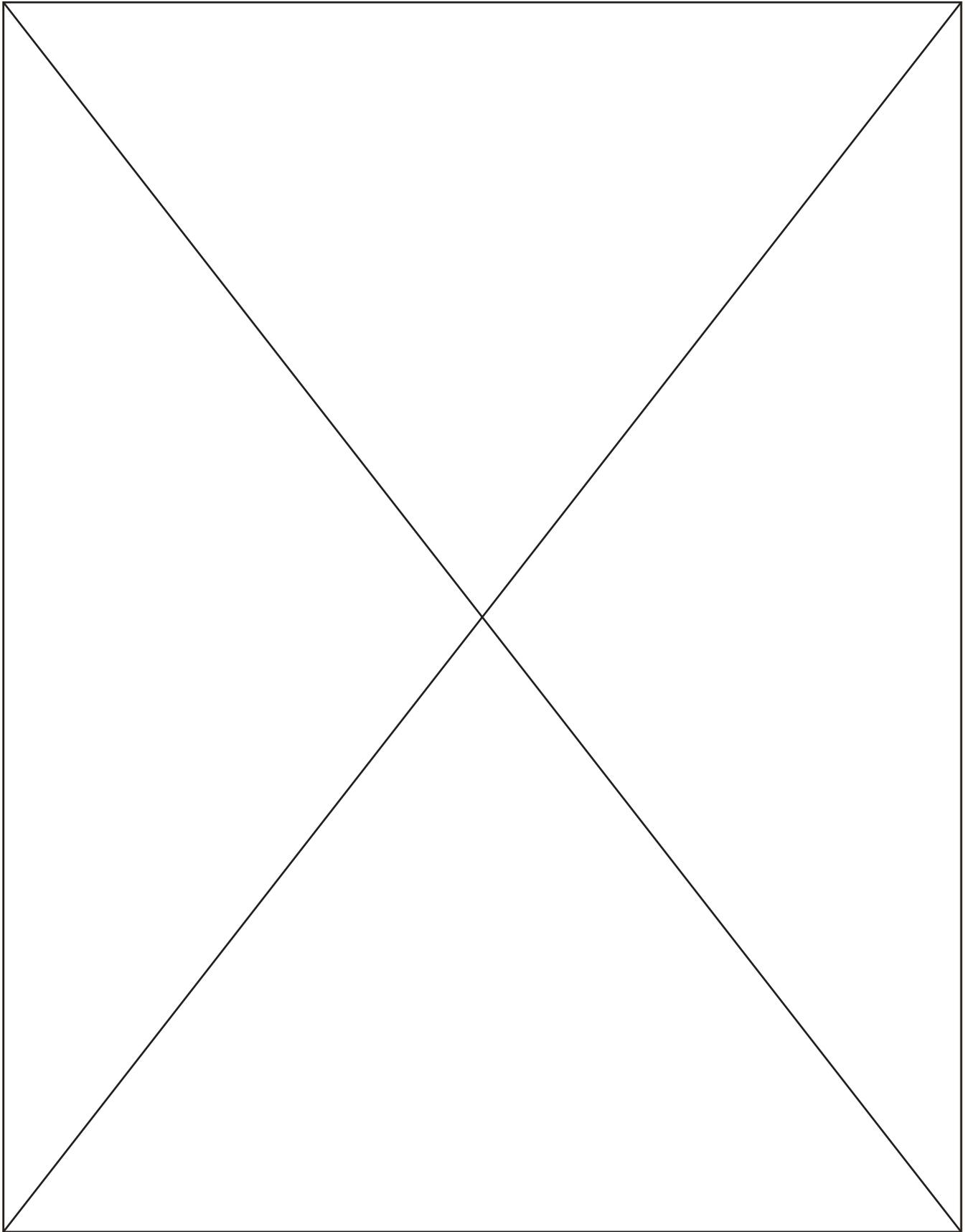
Bio-Rad Corporation of Hercules, CA, will be presenting several hands-on workshops to give middle school, high school and university instructors the opportunity to try out some of the molecular biology kits they offer to educators. There is no charge for these workshops. However, participants must be registered for the meeting. Space is on an "as available" basis and pre-registration is not required. Bio-Rad representatives will provide certificates of attendance for those desiring to utilize these workshops for professional development credits.

### Wednesday, June 15

**8:30 a.m. Genes in a Bottle.** Extract and bottle your own DNA. Introduce your students to molecular biology with their own DNA! In this activity, you will extract and bottle the DNA from your own cheek cells to make a necklace. This real-world laboratory procedure is used to extract DNA from many different organisms for a variety of applications and integrates multiple life science standards in a single lesson. Seeing DNA makes it real. Be the first at your school to wear your DNA!

**10:30 a.m. ELISA Immuno Explorer.** Biology's magic bullet. Explore immunology with this topical, new hands-on classroom lab. ELISA (enzyme-linked immunosorbent assay) is a powerful antibody-based test used to detect diseases such as HIV/AIDS and SARS, and to trace pathogenic agents in water, food, and the air whether these emerge naturally or through acts of aggression. You will simulate the spreading of a disease, perform ELISA, and learn how this assay is used to identify and track agents of disease, or to detect molecular markers of cancer, pregnancy, and drug use. This kit integrates multiple standards in a single lesson, including antigen-antibody interactions and the role antibodies play in medicine, epidemiology, and biotechnology.

**1:30 p.m. PV92 PCR.** What pair of genes are you wearing? PCR is central to forensic science and many medical, archaeological, and ecological procedures. You will extract DNA from your own hair samples, then amplify and fingerprint a pair of alleles, an Alu repeat within PV92, a real forensic marker. This activity integrates multiple life science standards in a single lesson and covers a range



of core content areas, from DNA replication to evolution to Hardy-Weinberg equilibrium theory.

#### **Thursday, June 16.**

**9:00 a.m. GMO Investigator/Analysis.** Have your favorite foods been genetically modified (GM)? Currently, genetically modified organisms (GMOs) in foods do not have to be labeled in the US. Regardless of where you stand in the GM debate, wouldn't it be fun to know if the corn or soy-based foods you eat are GMO foods? This kit uses DNA extraction techniques, PCR, and gel electrophoresis to test common grocery store food products for the presence of GMO foods. This activity integrates and reinforces multiple life science standards in a single lesson.

**1:00 p.m. Protein Fingerprinting.** Can molecular evidence support evolution? DNA gets a lot of attention but proteins do all the work. Proteins give organisms their form and function and are the raw material for evolution because natural selection acts on phenotypes. Over time accumulated changes in DNA (genotypes) lead to variation and ultimately, speciation. You will extract muscle proteins from both closely and distantly related species of fish and use protein electrophoresis to generate protein fingerprints to look for variations. This activity integrates multiple life science education standards in a single lesson from physiology to the theory of evolution to exploring the molecular framework of biology. DNA>RNA>Protein>Trait.

### **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, the Pacific Division is pleased to announce that starting in 2005 winners will also receive a one year student membership in AAAS. Societies often supplement these awards with their own cash prizes.

In 2005, 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 2006 national meeting of AAAS in St. Louis, MO, February 16 - 20, 2006, for the purpose of presenting their winning presentation as a poster.

The Klauber, Lindsay, Dutro, Presidents', Peterson, Best Poster, and Larus awards are given to those students whose presentations are judged the most significant in the advancement or understanding of science. To be eligible, 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 website. Students who are eligible for Awards of Excellence are invited to be the Division's guests at the Division Banquet Tuesday evening, June 14. 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 and which entre you wish to have.

### **INSTRUCTIONS FOR SUBMITTING PAPERS**

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 a paper at one of the sessions should send a title and abstract (see page 24) via e-mail to the program coordinator of the society or section at which you would like to present the paper (see page 23 for names and addresses). If you are unable to do this, please contact the Pacific Division office, 541-552-6869, to discuss how to submit your abstract. When sending the abstract to the program organizer, be sure to copy it to the Division's meetings office at [aaaspd@sou.edu](mailto:aaaspd@sou.edu). Special characters often do not survive e-mail. If your abstract contains special characters, please fax a print copy to the Division office, 541-552-8457, as well as e-mailing it.

### **TECHNICAL SESSIONS SYMPOSIA**

The following symposia are 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. Should you wish to present a paper in one of the contributed paper sessions, refer to pages 23 and 24 of this *Newsletter*. Check the Division's website, [pacific.aaas.org](http://pacific.aaas.org), for the latest information on symposia and other program events.

It's not too late to propose a symposium or workshop for the 2005 meeting. If you have a program you believe to be suitable for the meeting, please contact the Executive Director, Dr. Roger Christianson (541-552-6747, [rchristi@sou.edu](mailto:rchristi@sou.edu)) as soon as possible to discuss your ideas.

Please remember, at this time the listings below are tentative and subject to change. If you plan to attend the meeting largely for one symposium or technical session, check the Division's website for updates to the program or phone the Division's meeting 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 website and will appear in the Spring Newsletter.

**(1) Serpentine Ecology.** Organized by Drs. Christine Oswald and Darlene Southworth (Department of Biology, Southern Oregon University, Ashland, OR; e-mail: *oswald@sou.edu*). A broad overview of soils, fungi, plants and animals on serpentines, particularly in Oregon and California. Topics may include serpentinization and formation of serpentine soils, mycorrhizal fungi on oaks on serpentine, content and distribution of nickel in plants on serpentine areas, pollinators of a serpentine-endemic Phlox, effects of nickel on deer mice from serpentine areas, and phytomining. Our objective is the bring together diverse areas of expertise to better understand the functioning of these unique ecosystems.

**(2) Material Science and Nanoparticles.** Organized by Drs. Sidney C. Abrahams, Panos Photinos and Peter Wu (Department of Physics, Southern Oregon University, Ashland, OR; e-mail: *phaaas@sou.edu*). The Symposium is designed as an opportunity for educators, researchers and their students in the Northwest to present their current work to an interested and knowledgeable audience. Topics will cover the synthesis, characterization and applications of novel smart materials, including:

- Biomaterials
- Ferroelectrics
- Liquid Crystals and Complex fluids
- Nanomaterials
- Polymers
- Thin films and coatings

Potential presenters are invited to contact the symposium planners with their proposals.

**(3) Chemical Education.** Organized by Dr. Owen McDougal (Department of Chemistry, Southern Oregon University, Ashland, OR 97520; e-mail: *mcdougao@sou.edu*).

**(4) Geology, Chemistry and Microbiology of Acid Mine Drainage and its Remediation.** Organized by Drs. Kathleen Page (Department of Biology, Southern Oregon University, Ashland, OR; e-mail: *page@sou.edu*), William Elliott (Department of Geology, Southern Oregon University, Ashland, OR; e-mail: *elliottw@sou.edu*), and Steven Petrovic (Department of Chemistry, Southern Oregon University, Ashland, OR; e-mail: *petrovis@sou.edu*). Acid Mine Drainage (AMD) poses a water quality problem for wildlife and human populations throughout the world. Acid mine waters often have pH values ranging from 0 to 4 and concentrations of toxic metals capable of killing aquatic organisms. AMD is an unfortunate consequence of mining that exposes reduced sulfide minerals associated with some ore bodies. Bacteria that respire on reduced sulfides catalyze acid production and mineral dissolution. This symposium will facilitate a multidisciplinary approach to understanding AMD-related problems. Speakers with expertise in chemistry, geology, hydrology, microbiology, and mine remediation will report results of their studies from sites of AMD. The symposium will consist of 4 to 6

invited speakers. In addition, posters may be contributed. An optional field trip to Blue Ledge mine (see page 17) will provide an excellent forum for discussion of field-based challenges faced by scientists involved in AMD research. The following topics may be included:

- Mineralogical and geological aspects of AMD.
- Identification and isolation of microorganisms associated with AMD generation and AMD waters.
- Microbial controls of sulfide mineral dissolution.
- Evaluation of major and trace elements in acid mine waters.
- The release and transport of metals in groundwater at mining sites.
- Various approaches to remediation at AMD sites.
- Involving communities and informing them about AMD.

Speakers will include representatives from several different groups working at AMD sites.

**(5) Calibrating the Evolution of the Universe.** Organized by Dr. *Garniss Curtis* (Berkeley Geochronology Center, Berkeley, CA; e-mail: *gcurtis@uclink.berkeley.edu*).

**(6) Northwest Forest Plan.** Organized by Dr. Dominick DellaSalla (Director, World Wildlife Fund Klamath Siskiyou Program, Ashland, OR 97520; e-mail: *dellasal@wwfks.org*). The Northwest Forest Plan of 1994 marked an unprecedented step toward large-scale ecosystem management on federal lands. The Plan allocated millions of acres of federal lands to various land-use designations, including the protection and restoration of late-successional forests across the range of the threatened northern spotted owl and marbled murrelet. Ten years later the plan is mired in conflict as some protections are being weakened to reach anticipated but seldom achieved timber targets. This session examines successes and failures of the Plan as a regional, if not global, model of large-scale ecosystem management. With ten years of implementation experience, there are many lessons to be learned from this bold attempt at ecosystem management that may have application beyond the region.

**(7) Resource Preservation and Research at Crater Lake National Park, Oregon: Lake and Terrestrial Ecosystem Studies.** Organized by Mark Buktenica (Aquatic Ecologist, Crater Lake National Park and Southern Oregon University, Ashland, OR; e-mail: *mark\_buktenica@nps.gov*). Crater Lake National Park provides an excellent natural laboratory for studying aquatic and terrestrial environments in the Southern Oregon Cascade Mountains. Nearly 266 square miles of terrestrial ecosystems occur within Crater Lake National Park including subalpine meadows, caves, snowfields, pumice barrens, bogs, old-growth, and timberline forests. An elevational expanse of 5,000 feet straddling two ecoregions (eastern and western cascades) adds to the diversity of this park. This symposium highlights some of the most recent research conducted at the park.

The deepest lake in the US, Crater Lake, is internationally renowned for its aesthetic beauty, extremely clear water

and, increasingly, for a growing body of scientific understanding of lake ecosystem structure and function. This symposium will feature several studies reported in an upcoming special issue of the international journal *Hydrobiologia* featuring studies on Crater Lake. Symposium presentations may include papers on mass wasting and filling of the caldera; water budget; water quality; hydrocarbon contamination; optical properties; lake circulation; particle flux; modeling of lake circulation, nutrients, light, phytoplankton assemblages; phytoplankton nutrient limitations; bacteria; zooplankton; and fish.

**(8) Ice Age People of the Pacific Northwest.** Organized by Dr. Nina Jablonski (Department of Anthropology, California Academy of Sciences, 875 Howard St., San Francisco, CA 94103; e-mail: [njablonski@calacademy.org](mailto:njablonski@calacademy.org)).

**(9) Science and Cognitive Values.** Organized by Prakash Chenjeri (Department of Philosophy, Southern Oregon University, Ashland, OR 97520; e-mail: [chenjeri@sou.edu](mailto:chenjeri@sou.edu)).

**(10) The WISE Project: Enhancing Water Management Techniques Benefiting both Agriculture and Instream Needs.** Organized by Eric Dittmer (Environmental Studies Program and Department of Geology, Southern Oregon University, Ashland, OR 97520; e-mail: [dittmer@sou.edu](mailto:dittmer@sou.edu)). The history, development and goals of the Water for Irrigation Streams and the Economy (WISE) Project will be presented. The WISE Project was proposed to address both water quantity and quality problems facing agriculture and instream needs in Jackson County in SW Oregon. There is simply not enough water to meet all consumptive and instream needs. In order to address the problem, a combination of increased storage, innovations in water conservation and the use of reclaimed water is being investigated. A varied group of stakeholders is working collaboratively with government agencies to develop what could be a \$ 100 million project to create a truly state-of-the-art water management system in the Rogue Valley.

Presenters will speak to the key issues of the project development, the use of reclaimed water, the benefits to agriculture and instream needs as well as the environmental impacts involved in constructing such an ambitious project.

The symposium will close with the speakers forming a panel to answer questions and to receive input and suggestions from the audience about their experiences on other water resource enhancement efforts around the country.

**(11) New Humanities and Science Convergences.** Organized by Drs. Robert Louis Chianese (California State University, Northridge, CA; e-mail: [robert.chianese@csun.edu](mailto:robert.chianese@csun.edu)) and Carl A. Maida (University of California, Los Angeles CA; e-mail: [cmaida@ucla.edu](mailto:cmaida@ucla.edu)). This multidisciplinary symposium explores new or recent connections between the humanities and science in order to survey positive cross-fertilizations they produce. C. P. Snow's "two cultures" designation of decades ago seems belied by a growing, respectful melding of concerns that move beyond simplistic fact/value contraries. Unforeseen collaborations of unique kinds between science on

the one hand and art, literature, music, and architecture on the other mark the current interdisciplinary scene. Mainstream medical science finds applications of various arts in healing; artists evolve rich content, forms, and technique from contemporary science theory and practice. New aesthetically posed plasticized anatomy models as well as new imaging modalities for the body, nature, and cosmos draw scientists toward the problematics of art. Eco-artists find inspiration and motivation from ecological science. New postmodern theorists find in scientific theory potential sources of new meta-narratives or fundamental principles that check the radical relativism of contemporary postmodern thought. The symposium seeks to survey collaborations that eclipse former antagonisms between science and the humanities and provoke questions about the very nature of each area as they draw from and influence each other. Papers for panel presentations should highlight the potential for creative work and new directions emerging from new humanities and science convergence.

**(12) The Cascade-Siskiyou National Monument: What It Means To Be A Biological Crossroads.** Organized by Brian R. Barr (Program Officer, World Wildlife Fund Klamath-Siskiyou Field Office, Ashland, OR 97520; e-mail: [brian.barr@wwfus.org](mailto:brian.barr@wwfus.org)). In 1999, President Clinton designated 52,000 acres of Bureau of Land Management administered lands in southwestern Oregon as the Cascade-Siskiyou National Monument in recognition of the diverse plant and animal life residing in this area. Straddling the crest of the Cascade Mountains, the Cascade-Siskiyou National Monument is located where three very distinctive ecoregions come together: the high desert of the Columbia/Snake shrub steppe to the east, the young, volcanic Central/Southern Cascades, and the ancient, uplifted Klamath-Siskiyou to the west. The diverse elements from each of these ecoregions are well represented within the Cascade-Siskiyou National Monument's vascular plant, butterfly, mollusk, and bird communities. This symposium will provide a glimpse into the dizzying array of species residing in the monument and highlight the importance of protecting this landscape.

A field trip the following day (Thursday, June 16—see page 18) is designed to complement this symposium. The field trip costs an additional fee and must be signed up for in advance. Please register for it on the Advance Registration Form.

*Additional ideas for symposia* are always welcome but time is of the essence. As soon as possible, potential organizers should submit to the chair of the section in which the symposium will be presented (see list on page 23) a title, brief description of the symposium, and a list of potential speakers and/or titles of presentations. Once approved, the symposium information will be added to the Division's website. The information will also appear in the spring *Newsletter*. At this time we are also considering ideas for the 2006 annual meeting in San Diego, California. See the "Call for Workshops and Symposia" on p. 25.

## CONTRIBUTED PAPERS

Those wishing to submit papers for presentation at a contributed paper session should refer to the "Call for Papers" on page 24 in this *Newsletter*, or download instructions from the Division's website ([pacific.aaas.org](http://pacific.aaas.org)). Send the requested information to the program coordinator of the society or section at which you would like to present the paper (see page 23 for addresses) and copy the mailing to the Division's Meetings Office at [aaaspd@sou.edu](mailto:aaaspd@sou.edu). Abstracts should be submitted electronically via e-mail. If you are unable to do this, please contact the Pacific Division office at 541-552-6747 for instructions. Special characters in e-mailings often do not come through properly. If your abstract contains special characters, please fax a print copy of the abstract to the Pacific Division office, 541-552-8457, in addition to e-mailing it to the section chair and Division office.

Do not forget, *the deadline for submitting abstracts is April 26, 2005*. If an abstract comes in after this date, it may not make it into 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. Use the spell checker in your word processor. And remember, keep the length of your abstract to no more than 250 words. Use 10-point Times (or variation) font (no exotic fonts, please!) for your abstract. Lastly, if yours is a student presentation, oral or poster, please state clearly that it is such so that it will be included in the judging competition.

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

**Western Society of Soil Science.** Section Chair and Program Coordinator: Dr. Matthew J. La Force, Dept. of Geosciences, San Francisco State University, 1600 Holloway Avenue, TH 509, San Francisco, CA 94132-4163. Phone: 415-338-6869; e-mail: [laforce@sfsu.edu](mailto:laforce@sfsu.edu).

**Agriculture and Horticultural Science.** Section Chair and Program Coordinator: Dr. Rhonda L. Miller, Dept. of Agricultural Systems Technology and Education, Utah State University, Logan, UT 84322-2300. Phone: 435-797-3772; e-mail: [rlmiller@cc.usu.edu](mailto:rlmiller@cc.usu.edu).

**Anthropology and Archaeology.** Section Chair and 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. John J. Carroll, Atmospheric Sciences Section, Dept. of Land, Air and Water Resources, University of California, Davis, CA 95616. Phone: 530-752-3245; e-mail: [jjcarroll@ucdavis.edu](mailto:jjcarroll@ucdavis.edu).

**Biological Sciences.** Section Chair and Program Coordinator: Dr. A. Michelle Wood, Dept. of Biology, University of Oregon, Eugene, OR 97403. Phone: 541-346-0454; e-mail: [miche@darkwing.uoregon.edu](mailto:miche@darkwing.uoregon.edu).

**Chemistry.** Section Chair and Program Organizer: Dr. Owen M. McDougal, Department of Chemistry, Southern Oregon University, Ashland, OR 97520. Phone: 541-552-6407; e-mail: [mcdougao@sou.edu](mailto:mcdougao@sou.edu).

**Computer and Information Sciences.** Section Chair and Program Organizer: Dr. Alan E. Leviton, Department of Herpetology, California Academy of Sciences, 875 Howard St., San Francisco, CA 94103. Phone: 415-321-8276; e-mail: [aleviton@calacademy.org](mailto:aleviton@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: 202-343-3222; e-mail: [dutro.tom@nmnh.si.edu](mailto:dutro.tom@nmnh.si.edu).

**Ecology and Environmental Sciences.** Section Chair and Program 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 & 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).

**Engineering and Industrial Sciences.** Section Chair and Program Organizer: Mr. Henry Oman (Boeing Company, ret.), 19221 Normandy Park Drive SW, Seattle, WA 98166. Phone: 206-878-4458; e-mail: [homan@ieee.org](mailto:homan@ieee.org).

**Health Sciences.** Section Chair & Program Organizer: Dr. Carl Maida, UCLA Schools of Dentistry and Medicine, University of California, PO Box 951668, 63-023 CHS, Los Angeles, CA 90095-1668. E-mail: [cmaida@ucla.edu](mailto:cmaida@ucla.edu).

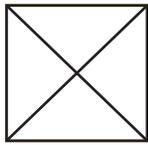
**History and Philosophy of Science.** Section Chair and Program Organizer: Dr. Donald McGraw, 824 Southshore Drive, Chula Vista, CA 91913. Phone: 619-216-4650; e-mail: [granttree@yahoo.com](mailto:granttree@yahoo.com).

**Physics.** 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 & 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. Mark Aldrich, Dept. of Economics, Smith College, Northampton, MA 01063. Phone: 413-585-3603; e-mail: [maldrich@smith.edu](mailto:maldrich@smith.edu).





# *American Association for the Advancement of Science Pacific Division*

## *86<sup>th</sup> Annual Meeting Southern Oregon University June 12 – 16, 2005 Call for Papers*

Members of AAAS and its affiliated societies, students, teachers and other scientists are encouraged to participate in the annual meeting and present papers and/or posters. Persons wishing to present a paper or poster at one of the sessions should e-mail the title, abstract and other required information (see instructions below) to the chair of the appropriate society or section (see page 23) and also the Pacific Division office, *aaaspd@sou.edu*. If your abstract contains special characters, please also fax a copy of it to the Pacific Division office, 541-552-8457. The deadline for submission is **April 26, 2005**. Students must identify themselves so that judges will be able to evaluate their presentations for Awards of Excellence. Oral presentations should be no longer than 20 minutes, including about five minutes for questions.

### **Please format your submission as follows:**

**Line 1:** Your name

**Line 2:** Your telephone number and e-mail address

**Line 3:** Name of presenter (if different from above)

**Line 4:** Presenter's telephone number and e-mail address

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

**Line 6:** Is the presentation oral or a poster?

**Line 7:** Special equipment needs (other than 35mm, overhead, and computer projectors)

**Line 8:** Is the presenter a student?

**Line 9:** Paper title in title case and italics (i.e. *Paper Title in Title Case*)

Author(s) name(s) in **ALL CAPS AND BOLD**

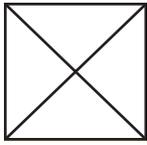
Full address(es), including institution, mailing address, city, and zip code.

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

### **Example of properly formatted abstract submission (lines 9-11)**

*Advanced Knowledge Acquisition in Elementary Biology*. **KATHLEEN M. FISHER and STACY GOMES** (Center for Research in Mathematics and Science Education, San Diego State University, San Diego, CA 92120).

Advanced knowledge acquisition differs in important ways from introductory learning. Advanced knowledge acquisition refers to learning a content area beyond the introductory stage but before extensive experience and practice (Spiro, Coulson, Feltovich, and Anderson, 1988). At this stage, knowledge must be reasonably correct and active rather than inert. The goals of learning shift from knowledge reproduction to knowledge use. Advanced students need to become more comfortable with learning in different ways, more adaptive in using and applying knowledge, and more inclined to spontaneously restructure their knowledge. These advanced students are preparing themselves to leave school and enter practice in the workplace. They need to attain a deeper understanding of content material; reason with it; and apply it flexibly in diverse contents (Spiro, et al, 1988, p 375). They need to shift from being passive receivers of information to active organizers and users of their knowledge. In teaching biology to prospective elementary school teachers in their senior undergraduate year, we use a variety of strategies to achieve these ends, including: 1. stimulating curiosity and eliciting prior knowledge; 2. prompting students to build runnable mental models through prediction and interpretation; 3. promoting conceptual change by prompting 3a) cognitive disequilibrium and 3b) knowledge elaboration and by presenting 3c) ill-structured cases and 3d) knowledge construction activities; 4. promoting students' active learning; 5. providing scaffolding and support for student knowledge construction; 6. diagnosing and remediating underdeveloped cognitive and metacognitive skills; 7. prompting students to identify central ideas; 8. prompting students to integrate ideas; 9. avoiding oversimplification and overregulation; 10. prompting students to construct multiple representations; 11. building confidence and teamwork; and 12. evaluation for meaningful understanding. Two aspects which will be emphasized here are the use of SemNet<sup>®</sup> software to help students develop the skills and habits of meaningful knowledge organization and the use of two tiered multiple choice questions to assess conceptual understanding.



***American Association for the Advancement of Science  
Pacific Division***

***87<sup>th</sup> Annual Meeting  
University of San Diego  
San Diego, CA  
June 11 – 15, 2006***

**Call for Workshop and Symposium Proposals**

Members of AAAS and its affiliated societies, students, teachers and other scientists are encouraged to participate in the annual meeting by developing workshops and/or symposia. Persons wishing to develop a workshop and/or symposium for the 2006 San Diego meeting should e-mail the title, description and other required information (see instructions below) to the chair of the appropriate society or section (see page 23 of this *Newsletter*) and also the Pacific Division office, [aaaspd@sou.edu](mailto:aaaspd@sou.edu). The deadline for submission is **October 17, 2005**, although late submissions will be considered.

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

Workshops generally are 1/2- 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 8 below). If a cost is incurred, it will be passed along to participants as a workshop fee.

Symposia may be 1/2- or full-day or longer. Individual 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 mixture. Please contact Dr. Christianson to discuss your specific needs. When preparing your submission, please indicate which presenters are confirmed (see Line 8 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 possible early on in order to adequately publicize the symposium.

**Format your submission as follows:**

**Line 1:** Organizer's name.

**Line 2:** Organizer's full mailing address, including academic/professional affiliation, telephone number and e-mail address.

**Line 3:** Co-organizer (if any).

**Line 4:** Co-organizer's full mailing address, including academic/professional affiliation, telephone number and e-mail address.

**Line 5:** Is this a Workshop or a Symposium?

**Line 6:** Number of 1/2-day (roughly three hours, depending on the needs of the program) sessions needed.

**Line 7:** Title of proposed program.

**Line 8:** If a symposium, list the name of each (proposed) speaker, including academic/professional affiliation, telephone number and e-mail address for each. Topic titles are optional at this time and will be requested later, along with an abstract for each presentation (see Call for Papers, page 24).

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

**Line 9:** Brief description of proposed program (please limit to 250 words).

**AAAS Pacific Division Meeting—June 12 - 16, 2005**  
**Southern Oregon University Residence Halls Application**

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

Name \_\_\_\_\_  Male  Female  
 Arrival Date \_\_\_\_\_ Departure Date \_\_\_\_\_ Total # Nights (min. 2) \_\_\_\_\_  
 Roommate's Name \_\_\_\_\_  Male  Female  Spouse  
 Mailing Address (Home) \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_  
 Phone (Day) \_\_\_\_\_ (Night) \_\_\_\_\_

A separate lodging application must be sent for EACH person.		
LODGING OPTIONS	FEE/NIGHT	TOTAL
Std Dbl	\$22.50	\$ _____
Std Dbl w/breakfast	\$29.00	_____
Std Sngl	\$36.50	_____
Std Sngl w/breakfast	\$43.00	_____
Dlx Dbl	\$41.50	_____
Dlx Dbl w/breakfast	\$48.00	_____
Dlx Sngl	\$72.00	_____
Dlx Sngl w/breakfast	\$78.50	_____
Total Amount Enclosed:		\$ _____

**Method of Payment** (Full payment is required)  
 **Check** (payable to AAAS Pacific Division)  
 **Credit Card** (circle one)  
           **Visa    AmEx    MasterCard    Discover**

**Name** \_\_\_\_\_  
**Number** \_\_\_\_\_  
**Exp. Date** \_\_\_\_\_  
**Signature** \_\_\_\_\_  
**Cardholder Phone Number** \_\_\_\_\_

**Deadline for Application**

This completed application must be received in the Pacific Division office **no later than May 6, 2005.**

**Length of Stay**

The Pacific Division has reserved a block of rooms for the nights of Friday, June 10 through Thursday, June 17. You may choose which of these nights you wish to stay in University housing. There is a two night minimum stay.

**Three Ways To Apply**

1. Complete this application form and return it to the address below with full payment by enclosing a check payable to AAAS Pacific Division or credit card billing information.
2. Call the Pacific Division office at 541-552-6869. You will be registered with Visa, American Express, MasterCard or Discover.
3. Fax your registration form with your credit card number. The 24-hour fax number is 541-552-8457. This is a dedicated Pacific Division fax line.

**Cancellation/Refund Policy**

All cancellations must be made in writing to the address listed below. Cancellation requests must be received at least 14 (fourteen) days prior to the first night of lodging to receive a refund.

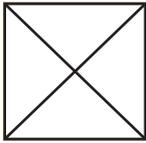
I have read and understand the cancellation policy. Registrations will not be processed unless this box has been checked and form signed.

\_\_\_\_\_  
 Signature \_\_\_\_\_ Date \_\_\_\_\_

FOR OFFICE USE ONLY	
Batch Date _____	Initials _____
Participant No. _____	Date pmt. Rec'd. _____
Order No. _____	Check <input type="checkbox"/> business # _____
Confirmation Sent _____	<input type="checkbox"/> personal # _____
Invoice No. _____	<input type="checkbox"/> Visa <input type="checkbox"/> MC <input type="checkbox"/> Dis
Cancel Date _____	<input type="checkbox"/> AMEX
<input type="checkbox"/> CR Refunded _____	Total Amt. Rec'd. _____

**Mailing Address**

AAAS Pacific Division • Department of Biology • Southern Oregon University • 1250 Siskiyou Blvd • Ashland, OR



**AAAS PACIFIC DIVISION 86<sup>th</sup> ANNUAL MEETING**

**Southern Oregon University**

**Ashland, OR**

**June 12 - 16, 2005**

**ADVANCE REGISTRATION FORM**

**FOR EARLY REGISTRATION, FIELD TRIPS, AND OTHER SPECIAL EVENTS**

*Note: Send this form directly to*

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

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

**Name:** \_\_\_\_\_

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

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

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

**Institution/Company, (for your name tag--if none, city & state will be used):** \_\_\_\_\_

**AAAS member:**  Yes  No **Affiliated Society Membership:** \_\_\_\_\_

**Do you plan to present a paper or poster?**  Yes  No

**If so, in which affiliated society or PD section or program?** \_\_\_\_\_

**REGISTRATION FEES:** *Check all that apply.*

**Full Meeting:**

	Received by May 23	Received after May 23	
<b>Professional</b>	<input type="checkbox"/> \$60	<input type="checkbox"/> \$80	
<b>Teacher K-14</b>	<input type="checkbox"/> \$45	<input type="checkbox"/> \$60	
<b>Student</b>	<input type="checkbox"/> \$30	<input type="checkbox"/> \$40	
<b>Spouse</b>	<input type="checkbox"/> \$30	<input type="checkbox"/> \$40	➔ Name, City, State (for name tag): _____
<b>Retired, Emeritus</b>	<input type="checkbox"/> \$45	<input type="checkbox"/> \$60	_____

**One-day**

**Professional**  \$45  \$60 ➔ Select day:  Mon.  Tues.  Wed.

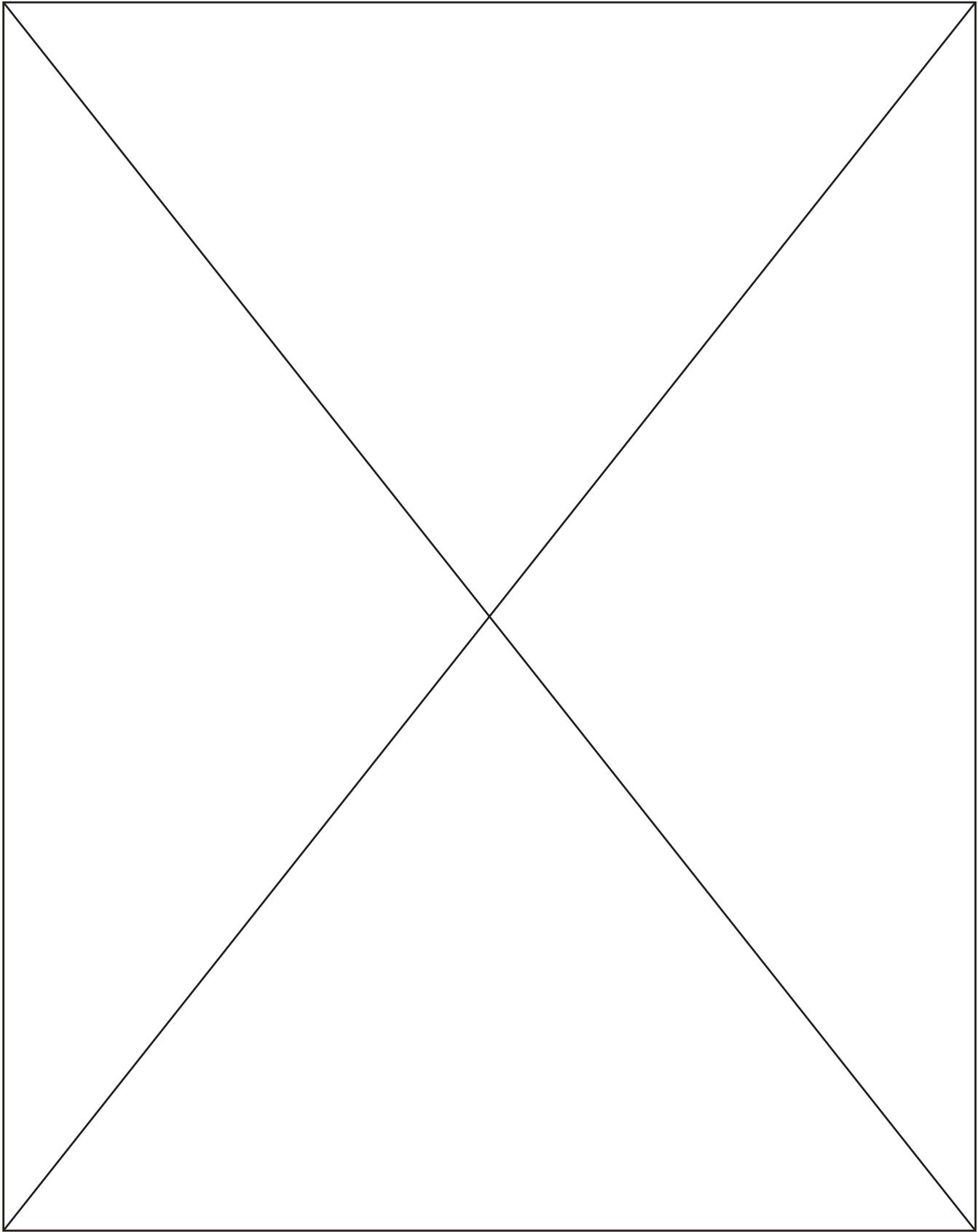
**DIVISION BANQUET** (June 14, Tuesday): The Division banquet will be held at the Stevenson Union, located on the SOU campus. The program will include the presentation of Student Awards of Excellence and the Presidential Address. Tickets must be purchased in advance. Students who are registered for the meetings and who have presented an oral or poster paper are invited to be guests of the Division and do not have to pay to attend (see below). Please refer to page 15 for descriptions of entrees.

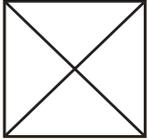
\_\_\_\_ tickets @ \$22 each \$ \_\_\_\_\_ # vegetarian # roasted chicken # salmon

student presenter ticket @ no charge # vegetarian # roasted chicken # salmon

**SEE REVERSE FOR FIELD TRIPS AND SUMMARY**







**Pacific Division Publications**  
**Huge Book Sale—All Books\* \$10.00 ea**  
**\*Excludes MUSEUMS. Includes shipping to U.S.A. and Canada.**  
**With this form only. Sale ends March 15, 2005.**

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

**\*\*NEW\*\* Museums and Other Institutions of Natural History: Past, Present, and Future** (2004; paper, 325 pp.); \$35.00 (ISBN 0-940228-60-2) **\*\*NEW\*\***

**Agroecosystems and the Environment: Source, Control, and Remediation of Potentially Toxic, Trace Element Oxyanions** (1998; cloth, 213 pp.); ~~\$20.00~~ \$10.00 (ISBN 0-934394-12-1)

**San Francisco Bay: The Ecosystem** (1996; cloth, 542 pp., color plates); ~~\$45.00~~ \$10.00 (ISBN 0-934394-11-3)

**Genecology and Ecogeographic Races** (1995; cloth, 275 pp.); ~~\$28.95~~ \$10.00 (ISBN 0-934394-10-5)

**Cracking Rocks and Defending Democracy: The Life and Times of Kirtley Fletcher Mather, 1888-1978** (1994; cloth, 342 pp., 39 photos); ~~\$31.95~~ \$10.00 (ISBN 0-934394-09-1)

**Dietary Factors and Birth Defects** (1993; paper, 410 pp.); ~~\$28.50~~ \$10.00 (ISBN 0-934394-08-03)

**Crater Lake: An Ecosystem Study** (1990; cloth 224 pp.); ~~\$26.95~~ \$10.00 (ISBN 0-934394-07-5)

**Late Cenozoic History of the Pacific Northwest** (1985; cloth, 417 pp.); ~~\$28.95~~ \$10.00 (ISBN 0-934394-06-7)

**Patterns of Evolution in Galapagos Organisms** (1983; cloth, 568 pp.); ~~\$32.50~~ \$10.00 (ISBN 0-934394-05-9)

**San Francisco Bay: Use and Protection** (1982; paper, 310 pp.); ~~\$17.95~~ \$10.00 (ISBN 0-934394-04-0)

**Frontiers of Geological Exploration of Western North America** (1982; paper, 248 pp); ~~\$16.95~~ \$10.00 (ISBN 0-934394-03-2)

**Proceedings Series**

**Meeting Program with Abstracts** (Proceedings Vol. 1, Part 1, 1982 through Vol. 23, Part 1, 2004); \$7.50 each

**Evolutionists Confront Creationists** (Proceedings Vol. 1, Part 3, 1984; paper, 213 pp.); \$10.00

**Scientific Research and New Religions** (Proceedings Vol 2, Part 2, 1985, paper, 180 pp.); \$10.00

**California's Master Plan for Higher Education in the Twenty-first Century** (Proceedings, Vol 13, Part 2, 1996; paper, 118 pp.); \$10.00

**Address orders to:** AAAS Pacific Division • Southern Oregon University • Department of Biology • Ashland, OR 97520  
 Phone: 541-552-6869; FAX: 541-552-8457; E-mail: [aaaspd@sou.edu](mailto:aaaspd@sou.edu)

**\*ALL SALES FINAL—NO RETURNS\***

**Payment must accompany all orders.** Make checks payable to AAAS, Pacific Division.

Quantity	Title	Price Each	Total
SHIPPING (no charge to USA & Canada; others contact us for amount)			
TOTAL DUE WITH ORDER			

Name \_\_\_\_\_

Address \_\_\_\_\_

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

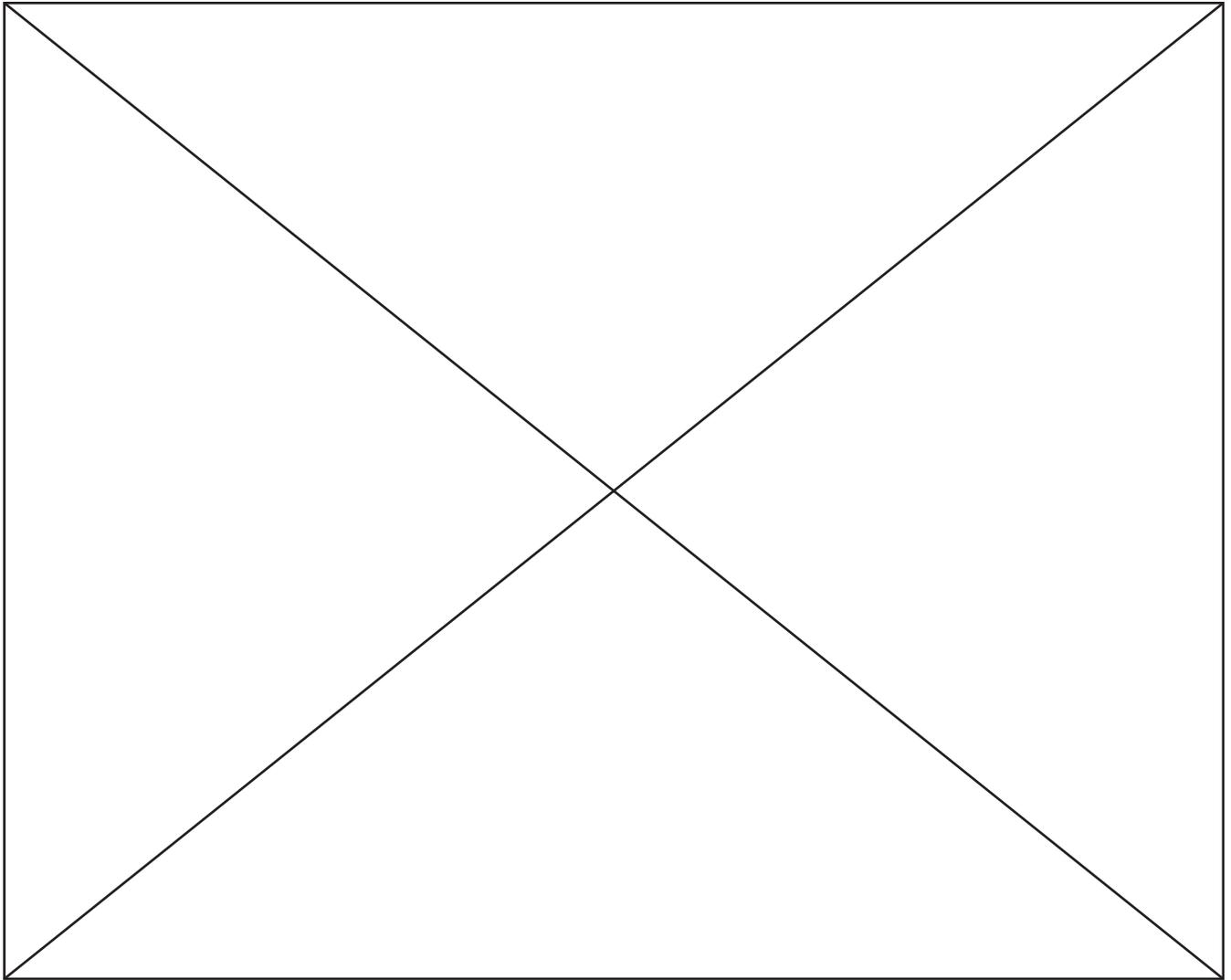
Daytime Phone \_\_\_\_\_ e-mail \_\_\_\_\_

**CREDIT CARD**

Visa     
  Master Card     
  Discover     
  American Express

Credit Card # \_\_\_\_\_ Expiration Date \_\_\_\_\_

Signature \_\_\_\_\_



### **Map of Southern Oregon University**

The Science Building, in which the bulk of the meeting will occur, has been colored black. So also have been the Hannon Library, location of the poster session and SOU Presidential reception, and Cox Hall, the on-campus dorm in which registrants may reserve rooms for their stay. The Hannon Library is just to the east of the Science Building. Cox Hall is further east, about a leisurely six minute walk. Both the Science Building and Cox Hall have permit-only parking lots in front of them. Those staying in Cox Hall can purchase a week-long parking permit for \$10.00. Those who wish to park in the lot in front of the Science Building can purchase a week-long permit at the meeting registration desk. There is quite a bit of on-street parking around the Science Building, which is free.

**AAAS PACIFIC DIVISION 86<sup>th</sup> Annual Meeting  
SOUTHERN OREGON UNIVERSITY  
Ashland, OR  
June 12 - 16, 2005**

**PRELIMINARY ANNOUNCEMENT OF SYMPOSIA,  
FIELD TRIPS AND OTHER EVENTS**

**SYMPOSIA**

- Serpentine Ecology
- Material Science and Nanoparticles
- Chemical Education
- Geology, Chemistry and Microbiology of Acid Mine Drainage and its Remediation
- Calibrating the Evolution of the Universe
- Northwest Forest Plan
- Resource Preservation and Research at Crater Lake National Park
- Ice Age People of the Pacific Northwest
- Science and Cognitive Values
- Enhancing Water Management Techniques Benefiting both Agriculture and Instream Needs
- New Humanities and Science Convergences
- The Cascade-Siskiyou National Monument: What It Means To Be A Biological Crossroads

NOTE: These programs are in the planning stages as of December, 2004. For more up-to-date information, please visit the Pacific Division website, [pacific.aaas.org](http://pacific.aaas.org).

**FIELD TRIPS**

- Redwoods and the Oregon Coast  
(2 day pre-meeting trip)
- The Terroir and Wines of the Rogue Valley
- Blue Ledge Mine
- Dam Removal and Riparian Enhancement
- Serpentine Soils of the Illinois Valley
- Cascade-Siskiyou National Monument
- Subduction and the Southern Cascade Volcanoes (2 1/2 day post-meeting trip)

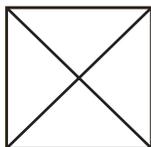
**WORKSHOPS**

- Demonstration of Science Educational Enrichment Programs at the University of California, Berkeley, for Students in Grades 9 through 12. See page 18.
- Selection of molecular biology workshops being offered at no charge by Bio-Rad Corporation. Please refer to page 18.

**OREGON SHAKESPEARE FESTIVAL TICKETS**

- Room Service • Love's Labors Lost • Richard III
- The Tragical History of Doctor Faustus

**2006 PACIFIC DIVISION MEETING SITE  
University of San Diego, San Diego, CA**



American Association for the Advancement  
of Science, Pacific Division  
Department of Biology  
Southern Oregon University  
1250 Siskiyou Boulevard  
Ashland, OR 97520

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