94th Annual Meeting of the Pacific Division of AAAS
and including the annual meetings of the
Arizona–Nevada Academy of Sciences
Northwest and Southwest Regions of Sigma Xi, The Scientific Research Society
UNIVERSITY OF NEVADA
Las Vegas, Nevada
16 – 19 June 2013

The AAAS, Pacific Division and its affiliated societies and sections will hold its 94th annual meeting this June at the University of Nevada, Las Vegas, in Las Vegas, Nevada. The Division is especially pleased to welcome participants of the Arizona–Nevada Academy of Sciences and also the Northwest and Southwest Regions of Sigma Xi, The Scientific Research Society, to our annual meeting and to acknowledge the University of Nevada, Las Vegas (UNLV) as a contributing sponsor of the meeting.

The Division’s Program and Special Events Committee and the local Program Committee on the UNLV campus have been hard at work assembling a program of exceptional scientific merit and interest. All scientists, professors, teachers, students, and others are invited to present the results of their research either orally or as posters at this meeting. All registrants for the meeting may attend all of the technical sessions as well as participate in the many other activities that are being planned. Some activities, notably field trips and selected workshops, require advance registration and payment of additional fees. Dr. Steve Rowland, Department of Geosciences at UNLV, is
**CONTENTS**

**AAAS, Pacific Division Newsletter**  
Number 61

<table>
<thead>
<tr>
<th>Topic</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013 Meeting Announcement</td>
<td>1</td>
</tr>
<tr>
<td>Las Vegas and the University of Nevada, Las Vegas</td>
<td>2</td>
</tr>
<tr>
<td>Report on 2013 AAAS Annual Meeting</td>
<td>2</td>
</tr>
<tr>
<td>Update of Pacific Division Going Green</td>
<td>3</td>
</tr>
<tr>
<td>Errata</td>
<td>3</td>
</tr>
<tr>
<td>Students Take Note!</td>
<td>4</td>
</tr>
<tr>
<td>Garniss Curtis Remembrance</td>
<td>5</td>
</tr>
<tr>
<td>Announcements</td>
<td>6</td>
</tr>
<tr>
<td>Poster Judges Sought for PD Las Vegas Meeting</td>
<td>6</td>
</tr>
<tr>
<td>Annual Meeting Information</td>
<td>6</td>
</tr>
<tr>
<td>Societies and Sections Sponsoring Sessions</td>
<td>11</td>
</tr>
<tr>
<td>Registration</td>
<td>11</td>
</tr>
<tr>
<td>On-campus Housing</td>
<td>11</td>
</tr>
<tr>
<td>Hotels</td>
<td>11</td>
</tr>
<tr>
<td>Food on Campus</td>
<td>12</td>
</tr>
<tr>
<td>Travel to the Meeting</td>
<td>12</td>
</tr>
<tr>
<td>On-Campus Parking</td>
<td>13</td>
</tr>
<tr>
<td>Registration Center</td>
<td>13</td>
</tr>
<tr>
<td>Meeting Rooms</td>
<td>13</td>
</tr>
<tr>
<td>Times and Locations of Presentations</td>
<td>13</td>
</tr>
<tr>
<td>Computers and PowerPoint</td>
<td>13</td>
</tr>
<tr>
<td>Call for Papers and Abstracts</td>
<td>14</td>
</tr>
<tr>
<td>Student Awards for Excellence</td>
<td>14</td>
</tr>
<tr>
<td>Special Events</td>
<td>14</td>
</tr>
<tr>
<td>Public Lectures/Programs</td>
<td>15</td>
</tr>
<tr>
<td>Field Trips</td>
<td>15</td>
</tr>
<tr>
<td>Workshops</td>
<td>15</td>
</tr>
<tr>
<td>Symposia</td>
<td>18</td>
</tr>
<tr>
<td>Contributed Papers</td>
<td>22</td>
</tr>
<tr>
<td>Poster Sessions</td>
<td>23</td>
</tr>
<tr>
<td>Sections and Program Organizers</td>
<td>23</td>
</tr>
<tr>
<td>Call for Papers and Abstracts</td>
<td>24</td>
</tr>
<tr>
<td>Call for Symposia and Workshop Proposals for the 2014 Riverside Meeting</td>
<td>25</td>
</tr>
<tr>
<td>Dorm Housing Registration Form</td>
<td>26</td>
</tr>
<tr>
<td>Advance Registration Form</td>
<td>27</td>
</tr>
<tr>
<td>Pacific Division Book Sale</td>
<td>30</td>
</tr>
<tr>
<td>Map of the University of Nevada, Las Vegas</td>
<td>31</td>
</tr>
</tbody>
</table>

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**LAS VEGAS AND THE UNIVERSITY OF NEVADA, LAS VEGAS**

**Brief History of Las Vegas**

Hard as it may be to believe, the Las Vegas Valley and most of southern Nevada was once a marsh, awash with water and vegetation. As hundreds of thousands of years went by, the rivers went underground and the marshlands receded, eventually turning the valley into an arid landscape surrounded by the rain-trapping Sierra Nevada and Spring Mountains, that supported only the hardiest of animals and plants. However, water periodically resurfaced, flowing into the Colorado River and creating what has been described as a wetland oasis in the midst of the Mojave Desert.

As evidenced by petroglyphs, it is thought that Native Americans first explored the Las Vegas Valley several thousand years ago, followed by the Anasazi who lived along the Muddy and Virgin Rivers about 2,000 years ago. It is known that the Paiutes also traversed the Las Vegas valley.

The first people of European ancestry to explore the area arrived in 1829, with Antonio Armijo leading a party of 60 on the Old Spanish Trail to Los Angeles. Camped about 100 miles from the present Las Vegas, a scouting party was sent out to explore for water. A young Mexican scout, Rafael Rivera, departed from the main party and headed due west over the desert.

Sources:

- en.wikipedia.org/wiki/History_of_the_Las_Vegas_Valley
- www.intermind.net/im/history.html
- www.lvol.com/lvoleg/hist/lvhist.html
- www.lasvegasnevada.gov/FactsStatistics/history.htm

**see HISTORY, page 4**
Executive Director’s Report on the 179th Annual Meeting of AAAS
14 – 18 February 2013
Boston, Massachusetts

The 179th annual meeting of AAAS was held this past 14 – 18 February at the Hynes Convention Center in Boston, Massachusetts.

[The 179th annual meeting. You might ask how this can be for an association that was organized only 165 years ago (1848), which didn’t meet for five years during the Civil War, and which was almost an unknown victim of that war. The answer comes from a little known fact that in several scattered years in its august past, the Association met twice (three times in 1925, 1936 and 1941!), rather than once annually. So, yes, it was the 179th meeting this past February in Boston. Back to the meeting....]

You may remember that Boston was hit with a major storm just days previous to the start of the meeting, which left up to two feet of snow in parts

Snow mounds remaining a week after the big storm. Taken from the skybridge over Harcourt Street.

UPDATE

UPDATE on the Pacific Division going greener

In an effort to conserve precious funds and a bunch of trees at the same time, the Pacific Division is planning to cease production of hard copies of its biannual Newsletter, which will become available only as downloads from the Division’s home page. Since 2002, the newsletters have been dual published, being mailed out as hard copies and also being available as PDF downloads from our home page (pacific.aaas.org). The Newsletter you received this past January is likely the next to last hard copy Newsletter you will receive. It is currently planned to send the January 2014 Newsletter out as a hard copy, followed by the April 2014 and all subsequent Newsletters as Internet-only downloads, as was done with this issue. Watch for postcard and e-mail reminders informing you as to when the April 2014 Newsletter will become available. Eventually, the notification will be solely by e-mail. If you have chosen to not receive e-mailings from AAAS, please change that preference in your AAAS account in order to enable us to continue to communicate with you!

ERRATA

The following corrections refer to the AAAS Pacific Division Newsletter No. 60, 2 January 2013.

The caption on page 4 under the photo of the Buster-Jangle Dog atomic test mistakenly identified the yield at 21 megatons. It should read 21 kilotons.

On page 16, Mathematics, the title for third place award winner Kevin Bombardier’s presentation should read “Computability and Complexity in Elliptic Curves and Cryptography.”
The Pacific Division has a website just for students, called STUDENTS ONLY! Its address is http://associations.sou.edu/aaaspd/Students/Students.html. On it you will find links to information about

- the AAAS, Pacific Division Alan E. Leviton Student Research Awards
- travel grants to help support students traveling to present their research at annual meetings of the Pacific Division
- the Pacific Division student oral and poster presentation awards program
- winners of previous student presentation competitions
- additional news of interest to students

Research grants of up to $750 are available to students residing in the Pacific Division’s geographical boundaries. But you must apply for this by 1 May 2013! Information can be found at http://associations.sou.edu/aaaspd/Students/StudentResearchGrants.html or click the Research Award link on STUDENTS ONLY!

Travel grants to help support student travel to the annual meeting are available….but you must apply no later than 1 May 2013! Information can be found at http://associations.sou.edu/aaaspd/Students/TravelGrants2010.html. Or click on the Travel Grant link on STUDENTS ONLY! Up to twenty grants are available this year and they will be awarded based on need.

Awards of Excellence are given to students who make outstanding presentations at the Pacific Division’s annual meetings. Awards include money, certificates of merit, and one-year student memberships to AAAS. But you must present your research in order to be in the competition pool to receive one! Information can be found at http://associations.sou.edu/aaaspd/Students/StudentAwards.html or click the Student Awards link on STUDENTS ONLY!

Student Aides are needed to help at the AAAS Annual Meeting 13 – 17 February 2014 in Chicago, Illinois. For a small investment in time, students receive complimentary meeting and poster registrations. For a bit more time, students receive a one-year membership to Science On-Line. More information and a link to the application form may be accessed from the Pacific Division home page, http://pacific.aaas.org.
In Rememberance of
Garniss H. Curtis
27 May 1919 ~ 19 December 2012

It is with great sadness that we report that Garniss Curtis, professor emeritus at the University of California, Berkeley, founder of the Berkeley Geochronology Center, and former President of the Pacific Division of AAAS died on December 19, 2012 in his home in Orinda, Calif. He was 93.

Curtis, a native Californian and specialist in geology, received both his undergraduate degree in mining engineering (1942) and his doctorate in geology (1951) at the University of California, Berkeley, following which he continued at Berkeley as a professor until his retirement in 1989. In his 38 years teaching at UC Berkeley, Curtis pioneered the use of the potassium-argon dating method. Working with Berkeley professors Jack Evernden, a seismologist and John Reynolds, a physicist, Curtis showed that it was possible with modern equipment to date things much younger and more accurately than was previously possible. In 1961 he was able to, by dating the volcanic ash immediately above and below, assign an age of 1.85 million years to Mary Leakey’s 1959 find of Zinjanthropus boisei (later renamed Paranthropus boisei), pushing its age back almost 1 million years.

Following his retirement in 1989, Curtis collaborated with paleoanthropologist Donald Johanson at the Institute of Human Origins in Berkeley. Here, Curtis established The Berkeley Geochronology Center to continue his work with potassium-argon dating and a refinement called argon-argon dating. He and his colleagues provided dates for Johanson’s discoveries of human ancestors in Africa, most notably the famed Lucy (Australopithecus afarensis, 3.2 million years old), and Tim White’s almost as famous Ardi (Ardipithecus ramidus, 4.4 million years old), as well as dates for additional discoveries by Mary and Richard Leakey and others. A late 1990s collaboration with Berkeley geologist Carl Swisher jolted the paleoanthropologist community by demonstrating that Homo erectus persisted in Asia until about 50,000 years ago, meaning that Homo erectus and Homo sapiens co-existed for a period of time and that human lineage isn’t a straight line but has dead end branches off of it. The Berkeley Geochronology Center became independent of the institute in 1994, and is today one of the top laboratories for dating in the world.

In 1999, Curtis was elected President-elect of the Pacific Division of AAAS, serving as president from June 2000 – June 2001. He continued to strongly support the Division and attend its annual meetings through the 2007 meeting in Boise, Idaho. Unfortunately, he was unable to attend the 2008 meeting in Hawaii, or any subsequent meetings. He also was recipient of the coveted AAAS Newcomb Cleveland Prize, which is awarded to the author or authors of an outstanding paper published in the Research Articles or Reports sections of Science.

Garniss was indeed a gentleman and had a depth of geological knowledge matched by few, as well as a wealth of stories about his various colleagues with whom he worked over so many years of his life. His passing is a great loss to us all, and he will be sorely missed.

A web site in Garniss' honor has been established at http://garnisscurtis.net/. Please visit it to find additional information about Graniss' life or to add your own memoirs, photos, or recollections of events relating to Garniss. A memorial for him is planned for 2 – 5 p.m. on 29 September 2013 at the Faculty Club on the Berkeley campus. Updates on the memorial will be on the website or contact Lisa Smeenk at lsmeenk@bgc.org.

Sources of information: -- garnisscurtis.net, obituaries by
Robert Sanders, Media Relations, UC Berkeley, 26 February 2013
Jennie Yoon, Staff Reporter, The Daily Californian, 7 March 2013
David Perlman, San Francisco Chronicle Science Editor, 2 March, 2013
and personal recollections of Roger Christianson, Executive Director, Pacific Division of AAAS.
against, the city of Las Vegas was incorporated. Just prior to that, in 1910, a strict anti-gambling law that even forbade the western custom of flipping a coin for the price of a drink became effective in Nevada. This ban on gambling has been described as lasting about three weeks in Las Vegas, as private clubs sprouted up and locals who knew the appropriate passwords were again gambling. This illegal but accepted gambling continued until 1931, when the Nevada legislature once again legalized gambling. The population of Las Vegas hit 5,165 in 1930.

The other big event to hit Nevada and the Las Vegas area in 1931 was the beginning of the construction of Hoover Dam, which was completed in 1935. Construction of the dam caused the population to swell to over 25,000, with most of the newcomers being single males looking for jobs on the dam. This influx of single males resulted in the development of casinos and showgirl theaters. After completion of the dam, the dam itself and Lake Mead, which formed behind the dam, became tourist attractions on their own, leading to the development of additional higher class hotels in Las Vegas.

Electricity from Hoover Dam powered Las Vegas and Fremont Street which, because of the many bright lights, became known as “Glitter Gulch.” The extravagance of these lights can still be experienced today in the four block long stretch of Fremont Street known as the “Fremont Street Experience.”

The first hotel of the famous Las Vegas Strip, the El Rancho Vegas, opened on 3 April 1941. As gangster influences became greater, several Las Vegas landmark hotels, such as the Sahara, the Sands, the New Frontier, the Showboat, the Riviera, the Fremont, Binion’s Horseshoe, and the Tropicana, all offering top name entertainment, were built in the early 1950s.

During this spurt of hotel construction, the first atomic bomb was detonated at the Nevada Test Site on 27 January 1951. This was the first of over a hundred atmospheric explosions at the Nevada Test Site, which continued until the Partial Test Ban Treaty of 1963 was enacted and nuclear testing moved underground. Because the risks of these explosions
were greatly underestimated at the time, they were advertised as another tourist attraction. Several hotels had sky rooms that offered panoramic views of the mushroom clouds.

In 1966, Howard Hughes moved into the Desert Inn, purchasing the property so he wouldn’t be forced by the hotel staff to leave when his initial two week stay ended. With Howard Hughes came a different Las Vegas, with its image changing from its Wild West roots into a more refined and cosmopolitan city. Following Hughes’ lead, corporations purchased or built large hotels, while renovating or tearing down the older landmark hotels.

Today, the city boasts seventeen of the twenty largest hotels in the U.S. Top name performers continue to headline at the various hotels. The city has continued to grow until at its 100th anniversary, the population of Las Vegas was estimated to be 544,806 residents, with an estimated 589,317 residents on 1 July 2011. The transformation from a gangland-led gambling mecca to a respectable international destination was complete.

Brief History of the University of Nevada, Las Vegas

In its 55 year history, the University of Nevada, Las Vegas (UNLV), has undergone an amazing transformation, from a dusty outpost on the south edge of town to a thriving urban research institution. Along the way, thanks to its innovative frontier spirit, UNLV has kept pace with one of the country’s fastest-growing and most enterprise cities.

The university’s origins were humble, indeed. In 1951, when the post-war boom had swollen Las Vegas’ metropolitan population to more than 50,000, the University of Nevada, Reno (UNR), established an extension program. Twenty-eight students began meeting for classes in the dressing rooms of Las Vegas High School’s auditorium. In 1954, the Nevada Board of Regents founded the Southern Regional Division of the University of Nevada, popularly known as Nevada Southern. Students adopted the Rebel name and mascot to reflect their desire to break free from UNR. After Las Vegas residents exerted pressure, the regents decided to acquire land for a campus, finally selecting an 80 acre parcel along the two-lane dirt road known as Maryland Parkway.

On September 10, 1957, the first classes were held on campus in a new 13,000 square foot building, later named for Maude Frazier, a state assemblywoman and founding force behind Nevada Southern. A year later, the school received accreditation from the Northwest Association of Secondary and Higher Schools. To serve the growing enrollment, buildings went up in a flurry of construction, including a physical education and health center, a science and technology building, a classroom building named for regent Archie C. Grant, and the James R. Dickinson Library, named for the first director of the extension program.

Despite its expansion, Nevada Southern remained under UNR’s control. In fact, university officials required students to spend a semester in Reno before graduating. After fighting to become a degree-granting institution, Nevada Southern held its first commencement in 1964, graduating 29 students as the “Centennial Class” in honor of Nevada’s 100th anniversary as a state. The next year, the school became Nevada Southern University, with its own curriculum. Donald Moyer served as its first chancellor and then became its first president in 1968, when the university finally won its autonomy under the state’s higher education system, giving it equal status to UNR.

In 1969, with the board of regents’ approval, the university adopted its current name. By the following year, as Las Vegas’ metropolitan population reached 275,000, UNLV enrolled more than 5,500 students. During the 1977-78 academic year, UNLV surpassed UNR in total enrollment.

Over the next three decades, UNLV continued this heady rate of development — erecting more than 100 buildings, developing dozens of graduate programs, creating partnerships with the community, fielding nationally ranked sports teams, founding an alumni association, promoting scholarship, establishing a fundraising foundation, and recruiting diverse and talented students from across the country.

UNLV Today

Today, UNLV is an institution of approximately 27,000 students and nearly 2,900 faculty and staff located minutes from the Las Vegas Strip. Classified by the Carnegie Foundation for the Advancement of Teaching as a research university with high research activity, UNLV offers more than 200 undergraduate, graduate and doctoral degree programs including innovative academic degrees in such fields as gaming management, entrepreneurship, entertainment engineering and much more. The entertainment capital of the world, Las Vegas offers students a “living laboratory” for research, internships, and a wide variety of job opportunities. UNLV is dedicated to developing and supporting the human capital, regional infrastructure, and economic diversification that Nevada needs for a sustainable future.

Additional information about UNLV can be found on the following web pages:
ir.unlv.edu/IAP/Reports/Content/Common+Data+Set+2011-12.aspx
news.unlv.edu/highlights
news.unlv.edu/units/sciences
news.unlv.edu/about/glance/highlights#university

Sources:
www.unlv.edu/history/beginnings
ir.unlv.edu/IAP/Reports/Content/Common+Data+Set+2011-12.aspx

Visit us at http://pacific.aaas.org
of Boston, caused Logan Airport to be closed, and resulted in Massachusetts Governor Deval Patrick ordering all automobiles off the streets and highways for a time. It worked! We arrived late Wednesday afternoon and were relieved to see traffic moving well and were amazed to see mounds of snow as high as six-feet piled in the on-street parking spots downtown, which, I’m sure, was a frustration to residents. But the AAAS Annual Meeting was revving up.

As usual, meeting-related activities began on Wednesday, the day before the official start of the annual meeting. Unfortunately, my teaching load at Southern Oregon University precludes my attendance at any of these functions. On Thursday morning I and my colleagues from the other three AAAS Divisions (Arctic, Southwest and Rocky Mountain, and Caribbean) reported on the activities of our Divisions to the AAAS Board of Directors. My report included a review of the geographical boundaries of the Division (in the U.S.: California, Hawaii, Idaho, western Montana, Nevada, Oregon, Utah, Washington; in Canada: British Columbia and Alberta; in the Pacific Basin: China, Japan, New Zealand, Australia, Oceana, and all other Pacific Basin countries that weren’t part of another Division at the time of inclusion of the Pacific Basin countries into the territory of the Pacific Division) and how we communicate with members (Newsletters, postcards, e-mail, meetings). I also informed Board members how holding our allotment of funds from AAAS at the same level for the past twelve years has affected our ability to communicate with members, leading to the elimination of print copies of Newsletters, first to Canada and now to everyone, and the likely elimination of postcard reminders in the near future. We briefly discussed my plan to step down as Executive Director of the Division, followed by my report on the commitment of the Chancellor and others at UCLA to continue funding that was begun with an HHMI grant to bring disadvantaged youth into the science pipeline, pointing out that presentations at Pacific Division meetings serve as the capstone experience for these students. Following was a report on our 2012 Annual Meeting this past June in Boise, Idaho and co-located with the 67th Annual Meeting of the Northwest Region of the American Chemical Society. This was a highly successful meeting, with the Pacific Division hosting about 325 registrants and a total of about 750 registrants for both groups. After reporting about Jamie Lee, winner of our 2012 Alan E. Leviton Student Research Award, I invited all Board members to our 2013 Annual Meeting this coming June at the University of Nevada, Las Vegas, Nevada.

The AAAS Annual Meeting officially began with the Presidential Address by William H. Press, AAAS President and Warren J. and Viola M. Raymer Professor in Computer Science and Integrative Biology, University of Texas at Austin. His talk, What’s So Special About Science (And How Much Should We Spend On It?), was a very interesting analysis of the value of investing in science to those societies and countries that do invest in science. Following was a lavish opening reception that included many delicious appetizers—a fine way to begin an excellent meeting!

The days following were filled with many fine symposia, plenary lectures, and opportunities to meet with colleagues. Especially impressive for this meeting was the three-day program for budding scientists of the Junior Academy of Sciences. We were pleased to again have the opportunity to visit for a few minutes with Gloria Takahashi and some of her students from the Pacific Division (Southern California) who participated in this program. Benjamin D. Hobson (University of Colorado, Boulder), winner of the 2012 AAAS–Robert I. Larus Student Travel Award at our meeting in Boise the previous June, was also present at the meeting, where he presented his winning poster Stimulation of Adenosine A1 Receptors in the Nucleus Accumbens Reduces Dopamine D1 Receptor-induced Reinstatement by Antagonizing D1-mediated Enhancements in Glutamate Transmission in the general poster session of the meeting.

Always a highlight at the annual meeting was the...
Bringing Primary Literature into the Classroom

Studies agree that the most robust science education reforms must focus on active learning strategies that engage students in the process of science. At Science, we have created a unique approach to transforming the undergraduate STEM learning environment, one that introduces undergraduates, at very early stages in their careers, to important elements of science education: reading primary research articles, communicating science, and engaging in a peer review system. These practices are directly relevant to the work done at Science, a place where the world’s best scientists go to communicate their results and engage in debate. Through reading and deconstructing scientific papers, students will gain an understanding of how scientists design their experiments and present their results, essentially allowing students to experience the logic of getting from a set of data to a new conclusion. In addition, publications are also how scientists discuss what steps to take next, making primary literature an example of the peer review process and two-way scientific communication while showing students that there are still many unanswered questions.

Science accomplishes this by translating contemporary scientific papers, taken from our pages, into tools for learning. We collaborate with a team of expert scientists and educational researchers to develop these resources, with the goal of exposing students to primary data sets and enabling them to gain a deep understanding of how scientists design experiments, gather and analyze data, and present their conclusions. We help students assume the persona of the scientist by guiding them through the scientific process of posing questions, designing experiments to pursue those questions, analyzing the data that returns from the experiments, and working toward new conclusions in response to the analysis. We also engage students in understanding, first-hand, the process of scientific communication, through which scientists explain their progression from question to experiments to data to conclusions, while also generating the next set of intriguing questions for themselves and their peers.

As a weekly publisher of cutting-edge scientific papers, Science is in a prime position to lead the efforts of integrating primary literature into the classroom. In doing so we will take advantage of the unique wealth of published research and scientific expertise that Science currently possesses. We call this initiative “Science in the Classroom.”

“Science in the Classroom” (http://scienceintheclassroom.org) is a collection of annotated research papers and accompanying teaching materials designed to help students at advanced high school, community college, and undergraduate level understand the structure and workings of professional scientific research. Currently three Science papers have been annotated (topics: ecology, chemistry, developmental biology) and are ready for use in the classroom. Each annotated Science paper contains a “Learning Lens,” which is used to selectively highlight and explain original text of the research article. An interactive glossary is included. Additionally, an educational scaffold and expanded explanation of the figures, often with a close-up of the relevant section of the figure itself, has been built into each research paper. Also accompanying the papers are discussion questions, additional activities, connections to the English Language Arts Standards and the 8 Practices of the Next Generation Science Standards, and raw data provided the authors.

We have completed an initial beta-testing phase during the Fall 2012 school semester. While the complete data is being analyzed by our evaluator, initial feedback suggests that the resource is being used in both high school and undergraduate classrooms in a variety of different ways. The beta-testing phase also led us to engage with new collaborators, such as the IBio Seminar series (http://www.ibioseminars.org/), whom we have already begun working with on two of our annotated papers.

Please contact Dr. Melissa McCartney (mmccartn@aaas.org) or Dr. Pamela J. Hines (phines@aaas.org) for more information.
two days of Family Days. The exhibit hall was flooded with participants of all ages, who certainly seemed to be thoroughly enjoying themselves with a large variety of exhibits geared to the young minds.

Sunday morning was the AAAS Council meeting, which included remarks from AAAS President William Press, a report on AAAS 2012 financial results and the 2013 operating budget, a report on 2012 membership trends and the results of the 2012 election of AAAS officers, followed by a report on 2012 Board actions by Dr. Press and an update on the on-going long-range planning exercise by Dr. Alan Leshner, CEO of AAAS. After a break, Dr. Leshner presented his annual report on the affairs of the Association to the Council, followed by Monica Bradford (Executive Editor, Science) reporting on Science, and an update on the federal R&D budget and sequestration by Joanne Carney (Director, Government Relations). Yolanda George (Deputy Director, Education and Human Resources) then updated the Council on AAAS/NSF Vision and Change Activities, followed by Dr. Press reporting on the Committee on Sections discussions on production of a section officers handbook, section officer term lengths, the possibility of staggered starting years for sections with more than one Council delegate, and a decision that Fellow nominees for 2013 must have joined AAAS no later than 31 December 2009 (in response to the Council decision last year that eligibility for nomination as a Fellow would, starting in 2013, require a minimum of four current consecutive years of membership in AAAS).

The last part of the meeting was dedicated to action items for the Council to consider.

1. The Council voted unanimously to modify the AAAS Bylaws Article XIII, Regional Divisions and Local Branches, Sections 1.b and c to remove references for inactive participating organizations no longer associated with AAAS (Illinois Science Lecture Association and The Commission on Professionals in Science and Technology) and also to modify the Bylaws Article XII, Regional Divisions and Local Branches, Section 1.e to remove from this section the Lancaster (Pennsylvania) Branch, which is no longer active.

2. The Council voted unanimously to send to the AAAS membership for approval new wording in the AAAS Constitution and Bylaws to allow the use of electronic means for balloting.

3. The Council also voted unanimously to send to the AAAS membership for approval revised wording in the AAAS Constitution and Bylaws to make the two documents gender-neutral in their language.

By now, everyone had downed so much coffee that we all thought it best to call it quits for yet another year. So the meeting was adjourned at 11:45 a.m. and we all dispersed to our separate destinations.
chair of the Division’s local organizing committee for this year’s annual meeting. Members of the Pacific Division’s Executive Committee and Council are also involved in developing the program to ensure that it is of highest quality.

This Newsletter contains a preliminary description of the scientific program, a call for abstracts, directions for preparation of abstracts, and information about registration, housing, transportation, special events, and field trips.

Following is a list of the Societies and Pacific Division sections that will sponsor sessions at the meeting. The names and addresses of session chairs are found starting on page 23 of this Newsletter.

Societies and
Pacific Division Sections
Sponsoring Sessions at the
Las Vegas Meeting

Arizona–Nevada Academy of Sciences
Sigma Xi, The Scientific Research Society
Agriculture and Horticultural Sciences
Anthropology and Archaeology
Atmospheric and Oceanographic Sciences
Cell and Molecular Biology
Chemistry and Biochemistry
Computer and Information Sciences
Earth Sciences
Ecology, Organismal Biology and Environmental Sciences
Education (Science and Technology)
Engineering, Technology and Applied Sciences
General and Interdisciplinary
Health Sciences
History and Philosophy of Science
Mathematics
Oral Biology and Dental Medicine
Physics and Materials Science
Psychology
Social, Economic and Political Sciences

Registration

All persons planning to attend the meeting should use the Advance Registration Form on page 27 in this Newsletter to pre-register in order to receive the best registration rate. On-site registration will be available, but with higher fees. Advance registration fees (through 26 April) for the full meeting are $95.00 for professionals; $47.50 for retirees/emeritus and current post-docs; and $35.00 for current students, spouses/family members of registrants, and unemployed individuals. K–12 and community college teachers are encouraged to attend the meeting for a reduced professional registration fee of $47.50. Advance one-day professional registration is available for $65.00. Presenters and program organizers registering in the professional category may purchase a full-meeting professional registration at the reduced, one-day rate of $65.00. To be eligible for this discount, the individual must have submitted an abstract for presentation at the meeting that has either been approved or is pending approval, or be listed as an organizer/co-organizer of a program or leader of a field trip. Be sure to include this information in the appropriate space on your registration form. After 26 April, higher registration fees will be charged: full-meeting professional, $110.00; program planners/presenters, $75.00; K–12 and community college teachers, post-docs, and retirees/emeritus, $55.00; and students, participating spouses and/or family members, and unemployed persons, $42.50. One-day professional registration during this period is $75.00. Advance registration closes on 6 June. All requests for advance registration must be received in the Pacific Division office by this date to avoid the higher on-site fees. Beyond 6 June, on-site registration fees will be charged for both pre-meeting and on-site registrations. On-site registration fees for the full meeting are: professional, $125.00; program planners/presenters, $85.00; K–12, community college teachers, post-docs, and retirees/emeritus, $62.50; students, participating spouses and/or family members, and unemployed individuals, $50.00. One-day on-site professional registration will be $85.00. Note that if you attend more than one day, you must pay the full registration fee.

The first twenty K–12 and community college instructors that register in advance (by 6 June) for this meeting will receive, upon request, a $75.00 stipend to help defray their expenses to attend the meeting. The stipend is not available to teachers who register on-site. Note that to receive the stipend you must check the appropriate box on the Advance Registration Form.

Students have the opportunity to apply for travel awards to help defray their costs for the meeting. See page 4 of this Newsletter for additional information.

Field trips: Pre-registration for all field trips is required due to limited seating in the vehicles and the need to inform some destinations of the number 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. Participants who are not registered for the meeting will be charged a one-time $10 field trip registration fee in addition to the fee for the field trip.

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

PLEASE NOTE: Requests for refunds must be in writing and received in the Pacific Division office no later than 15 May 2013. A $15 handling fee will be applied. An additional 3.5% deduction will be applied to the total amount for credit card refunds. No refunds will be granted after 6 June.

On Campus Meeting Housing

A limited number of rooms on campus are available for this meeting. UNLV offers two different types of housing units, standard dorm rooms and Guest Suites. It is anticipated that all guests staying on campus have a greater opportunity to interact with meeting participants.

Visit us at http://pacific.aaas.org
ANNUAL MEETING, from page 11

campus will be housed in Tonopah Hall, which is quite near to the Student Union, where the majority of the meeting will take place.

The standard dorm rooms are typical dorm rooms (see “Standard dorm room” diagram). They are air-conditioned and come standard with two twin beds with a mattress pad, pillow and blanket for each, and two twin sheets, a pillowcase, a bath towel, and a washcloth per person. There is one bath mat per shared bathroom. Standard dorm rooms rent for $90 per person double or $180 single per night for three nights (Sunday, Monday and Tuesday) with extra nights available on either side for an additional $30 per person per night double or $60 single per night. Parking is an additional $7 for up to a week. Should you desire to have internet access in your room, a one-time $10 fee will be charged at check-in. To sign up for one of these units, please refer to the housing registration form on page 26 of this Newsletter.

The Guest Suites are actually two dorm rooms combined into one suite (see “Guest Suites” diagram). Each Guest Suite includes a queen-sized bed, resort style linen and drapery, a private bathroom, separate seating room, flat screen TV with high-definition cable, alarm clock, microwave, refrigerator/freezer, and iron/ironing board. Also standard are free wired internet and local phone calls.

Guest Suites currently rent for $40 per night for up to 2 persons per suite. In order to reserve a Guest Suite, go to this web site and follow the directions: http://www.unlv.edu/eventservices/guestsuites. If you are driving, be sure to request a parking pass at check-in. Parking is an additional $7 for up to a week.

HOTELS

Las Vegas is renowned for its resort hotels. We have contracted with one hotel, the Hampton Inn near McCarran Airport, which has given us a special group rate (see following). If you would rather try one of the many other hotels in Las Vegas, we suggest you use a search engine such as http://www.lasvegas.com/hotels/on-the-strip/ to find the hotel of your dreams. Please be aware that many of the hotels charge a daily “resort fee” in addition to their daily rate. You can see if the hotel you choose has a resort fee and, if so, how much it is by going to this page: http://www.vegas.com/incl/resortfees.html.

**Hampton Inn & Suites Las Vegas Airport**

Address: 6575 South Eastern Avenue, Las Vegas, NV 89119
Telephone: 702-647-8000
Website: www.lasvegasairportsuites.hamptoninn.com
E-mail contact: James Campa at james.campa@hilton.com

**Rates:**
- $69 (1 to 4 persons in a double queen room) + 8.1% tax
- $180 single for three nights available on either side for an additional $30
- $90 per person double or $150 single room

**Group Code:** PDA

**Dates Available:** 16 June – 18 June (plus three days before and after, subject to availability)

**Cut-off date for reservations:** 17 May 2013

**Complimentary amenities:**
- hot breakfast
- self-parking
- high speed internet in rooms
- shuttle service from and to airport
- shuttle service to and from UNLV Student Union, as available
- workout room and swimming pool

**Food on Campus**

The UNLV Student Union has a fairly extensive food court, which includes such establishments as Starbucks, Subway, Jamba Juice, Panda Express, and several others. Nearby, across from the Tonopah Hall (location of the Conference Housing front desk) is the Hazel M. Wilson Dining Commons where, for one price, you can eat to your fill. Breakfast is $7.75, lunch/brunch is $8.75, and dinner is $9.45. About a block away is an In 'N Out Burger.

**Travel to UNLV**

**From McCarran Airport:**
- Take the Swenson Street exit towards Tropicana Avenue
- Go East (right) on Tropicana Avenue
- Go North (left) on Maryland Parkway
- Go West (left) on University Road (look for the In 'N Out Burger on the corner)

**Park and follow the campus map on page 31 of this Newsletter to proceed to the Student Union or Tonopah Hall. Be sure to either park in a metered lot or have a valid parking permit on display. See “Parking” below.**

**From Interstate 15 heading north (coming from Southern California):**
- Once in city limits, exit onto Interstate 215 East
- Take McCarran International Airport exit
- Exit Russell Road East (right)
- Go North (left) on Maryland Parkway
- Go West (left) on University Road (look for the In 'N Out Burger on the corner)

**Park and follow the campus map on page 31 of this Newsletter to proceed to the Student Union or Tonopah Hall. Be sure to either**
park in a metered lot or have a valid parking permit on display. See “Parking” below.

From Interstate 15 heading south (coming from Utah):
• Once in city limits, exit onto Flamingo Road East (left)
• Go South (right) on Maryland Parkway
• Go West (right) on University Road (look for the In ’N Out Burger on the corner)
• Park and follow the campus map on page 31 of this Newsletter to proceed to the Student Union or Tonopah Hall. Be sure to either park in a metered lot or have a valid parking permit on display. See “Parking” below.

From US 93/Interstate heading north (coming from Arizona):
• Once in city limits, exit onto Interstate 215 West
• Take McCarran International Airport exit
• Exit Russell Road East (right)
• Go North (left) on Maryland Parkway
• Go West (left) on University Road (look for the In ’N Out Burger on the corner)
• Park and follow the campus map on page 31 of this Newsletter to proceed to the Student Union or Tonopah Hall. Be sure to either park in a metered lot or have a valid parking permit on display. See “Parking” below.

**Parking**

To park on the UNLV Campus, all guests must display in their automobiles a valid visitor temporary parking permit or park in a metered stall. Metered parking is $1 per hour. Visitor temporary permits are $3 per day or $7 per week. Permits may be purchased in advance by checking either the appropriate box on the Housing Request form for those staying on campus (see page 26 of this Newsletter) or on the Advance Registration form for those commuting from off campus (see page 28 of this Newsletter), in which case the permit will be in the registration envelope you will receive upon check-in at the Pacific Division Registration Center. Permits may also be purchased upon check-in for your dorm room or Guest Suite if you are staying on campus. Additionally, permits may be available at the Pacific Division Registration Center, but if not purchased in advance must be paid for in cash only.

Visitor temporary parking permits are valid during the day in student spaces only. Visitors displaying a valid parking permit may park in F/S spaces after 5 p.m. with the exception of lot 1 (http://www.unlv.edu/parking/cost). Metered stalls, pay spaces, and marked visitor parking spaces are also located on campus.

Parking is enforced Monday – Thursday, 7 a.m. – 7 p.m., and Friday, 7 a.m. – 1 p.m. Parking for reserved, handicapped, and resident stalls is enforced 24/7.

**Registration Center**

The Registration Center will be set up on the second floor of the Student Union. Hours of operation are expected to be as follows, though these may change. Check the April Newsletter or website for updated information.

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**Digital Archiving of This Meeting**

At no cost to anyone, the Digital Scholarship Administrator at UNLV has offered to create a digital archive of this conference, to include abstracts, power point presentations, and posters. The presentations will be searchable, and authors can choose to receive an e-mail announcement when someone accesses their presentation. Presenters will be given the choice of whether or not to archive their presentations/posters. Additional information will be posted to the Pacific Division website as details are worked out.

**Meeting Rooms**

Technical sessions will meet in rooms on the second floor of the UNLV Student Union. All meeting rooms will be equipped with LCD projectors and computers running Windows and Microsoft Office. Speakers requiring other specialized equipment such as slide or overhead projectors must make their requests known when they submit their abstracts. If available, specialized equipment will be provided. If rental costs are incurred, payment will be the responsibility of the requestor.

**Times and Locations of Presentations**

The meeting rooms and times of presentations for the program will be published in the “Program with Abstracts” issue of the Proceedings (Vol. 32, part 1), which will be given to everyone who registers for the meeting. Speakers may obtain final confirmation of the time and place of their presentation by visiting the Pacific Division website (pacific.aaas.org) starting no later than 1 June 2013. Symposium planners will provide this information to their presenters in advance of this date.

**Computers and PowerPoint Presentations**

Meeting rooms in the Student Union will be outfitted with computers running Windows and PowerPoint, and will be connected to standard data projectors. If you are planning to use PowerPoint for your presentation, you must make sure that it will run on the Windows platform. Only CD-ROMs and thumb/USB/flash drives may be used to load presentations onto the computers. If you are preparing your presentation on a Macintosh computer, make sure it will load to a computer running Windows and that it looks on that platform the way you want it to appear.
CALL FOR PAPERS AND ABSTRACTS

Members of AAAS and its affiliated societies, students, teachers, and other scientists are encouraged to participate in the annual meeting by presenting papers. Those wishing to present an oral or poster paper at one of the sessions must follow the instructions below and on page 24 of this Newsletter (Call for Papers and Abstracts).

All authors should be listed sequentially, starting with the person who contributed the most and ending with the person who contributed the least. If more than one address occurs among the authors, use a superscripted number on the right of each author’s last name, followed by the corresponding superscripted number at the start of each unique address. Place an asterisk (*) next to the last name of the presenter. Submissions not formatted in this manner may be returned for reformatting or may be rejected.

Indent the first line of each paragraph of the text of your abstract 0.25 inches by using the first line indent command of your word processor. DO NOT USE THE TAB OR THE SPACEBAR! All text should be full justified.

Use 10 pt Times New Roman font and “NORMAL” style. If you use a different font, your abstract will be reformatted to this font. If your abstract contains special characters, in addition to submitting it via e-mail fax (541-552-8457) or mail (AAAS Pacific Division, Southern Oregon University, 1250 Siskiyou Blvd., Ashland, OR 97520) a printed copy with the special characters clearly marked and notations indicating the font used. Be aware that if you use an unusual character set for special characters there is a high likelihood that we will not be able to print it correctly, so please use common font sets such as Symbol or Wingdings for special characters.

All abstracts must be submitted via e-mail as Microsoft Word (.doc or .docx) or .rtf file attachments. DO NOT SUBMIT ABSTRACTS IN THE BODY OF AN E-MAIL OR AS A PDF FILE! E-mail a copy to the chair (and co-chair if one is listed) of the Pacific Division Section to which you are submitting it for review and acceptance into the program, and also copy your submission to the Pacific Division office (rchristi@sou.edu). The list of sections and their chairs/co-chairs can be found on page 23 of this Newsletter. The subject line of your e-mail submission should include the word “abstract” and your last name (e.g.: Abstract Smith). Including this information in the subject line will ensure that you receive an e-mail reply from the Division office confirming your submission.

The deadline for receipt of abstracts is 18 April 2013. Submissions will be given their final reviews in late April, with decisions regarding acceptance being sent via e-mail shortly thereafter. If you would like to discuss your submission with the chair of the section to which you are submitting it, please refer to page 23 of this Newsletter for contact information.

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 $100 for second place. Additionally, each winner receives a one-year student membership in AAAS, which includes weekly issues of Science magazine. Societies often supplement these awards with their own cash prizes.

In 2013, seven division-wide awards may be 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 Research; Best Poster Award (for posters only but otherwise unrestricted); and the AAAS–Robert I. Larus Travel Award, which will provide a reimbursement for travel and other meeting related expenses up to $1,000 for the awardees to attend the national meeting of AAAS in Chicago, Illinois, 13 – 17 February 2014 for the purpose of presenting their winning presentation as a poster. The Klauber, Lindsay, Dutro, Presidents, 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 for a sectional award or one of the division-wide awards, a student must be registered for the meeting prior to judging, be the primary presenter of the paper or poster, and be the principal research investigator. Student presentations, oral and poster, are judged on their abstracts, content, style of delivery or presentation, and audiovisual aids and/or handouts (if used). The evaluation forms for both oral and poster presentations are posted on the Division’s meeting web page (http://associations.sou.edu/aaaspd/2013LASVEGAS/index.html). Students who are competing for Awards of Excellence are invited to be guests of the Division at the annual banquet Tuesday evening, 18 June 2013. Festivities that evening include the announcement of student awards. If you are one of these students, please be sure to fill in the appropriate boxes on the Advance Registration form to let us know you will be attending the dinner.

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

SPECIAL EVENTS

The following special events are planned for the meeting.

Sunday Evening Public Panel: 6:30 p.m. – 8:00 p.m. Scientific Publishing: Where Are We, and Where Are We Going? Panelists: Cory Tucker, Head of Collection Management, UNLV Lied Library; Marianne Buehler, Digital Scholarship Administrator, UNLV Lied Library; Representative of Springer Publishing (to be determined); Science faculty member (to be determined); Graduate student (to be determined).
Sunday Evening Welcome Reception: 8:00 p.m. – 9:15 p.m.
Immediately following the conclusion of the panel discussion on scientific publishing, all registrants and their guests are invited to enjoy the conviviality of this event. Light refreshments will be available.

Monday Evening AAASPD Presidential Address: 7:00 p.m.
On this evening Dr. Owen McDougal (Department of Chemistry and Biochemistry, Boise State University, Boise, Idaho and President of the Pacific Division) will present the AAAS Pacific Division Presidential Address.

Monday Evening UNLV President’s Reception. Immediately following the AAAS, Pacific Division Presidential Address, UNLV President Neal Smatresk will host a reception for all meeting registrants and their guests. Non-registered guests are welcome, but must be accompanied by a registrant. Please wear your registration badge to this event.

Tuesday Evening Student Awards Banquet. Tuesday evening will be an exciting time for students as Division representatives will announce the names of student winners of sectional Awards of Excellence and also winners of the Division’s Laurence M. Klauer 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 Research, the Presidents’ Award for Excellence (unrestricted), the Best Poster Award (for poster presentations only but otherwise unrestricted), and the AAAS Robert I. Larus Travel Award.

The evening is planned to begin at 6:00 p.m. with a reception. Dinner service will begin about 6:45 p.m. After dinner will be the presentation of student awards, followed by a short program. The evening should end by about 9:00 p.m.
Banquet attendees can choose between three entrées: roasted and seasoned Top Round of Beef, Grilled Salmon with dill butter, and a yet unspecified Vegetarian Dish. All entrées come with a mixed green salad with raisins and cranberries tossed with raspberry vinaigrette, broccoli, roasted red potatoes, rolls and butter, dessert plate of three mini desserts—eclair, cream puff and cookie, and iced tea, iced water and, on request, coffee. Please note that details may change as we approach the banquet date. If a substitution must be made, every effort will be made to assure that the replacement is comparable to that which is listed above. A cash bar is planned during the reception and early part of the dinner for those wishing to purchase beer and/or wine. Banquet tickets are $40 each and must be purchased on the Advance Registration Form (see page 27 of this Newsletter). The deadline for ordering banquet tickets is the close of early registration for the meeting, 31 May.
Students in competition for Awards of Excellence are invited to be guests of the Division for this event. Be sure to check the appropriate box on the Advance Registration Form (see page 27 of this Newsletter) indicating your plans to attend and you will be provided a ticket at no cost. Note that if you request a complimentary ticket we expect you to attend the banquet. Please don’t dishonor the Division’s generosity. In offering you this opportunity to fully participate in the meeting with minimal out-of-pocket expenses by asking for a ticket and then not showing up!

Wednesday Morning Business Meeting of the Council of the Pacific Division. The Council of the AAAS, Pacific Division will hold its annual breakfast and business meeting at 7:00 a.m. on Wednesday, 19 June in one of the Tonopah classrooms. The Council will elect officers and Council members, discuss programs for the 2014 and 2015 annual meetings, and transact such other business as is required by the Division’s By-Laws. This is an open meeting and Pacific Division members with an interest in the governance of the Division are invited to attend.

Public Lectures/Programs
The following public lectures and programs are planned. Additional ones may be scheduled as time permits. All members of the public are invited to attend these lectures at no charge.

Sunday Evening Public Plenary Panel: 6:30 p.m. – 8:00 p.m. Scientific Publishing: Where Are We, and Where Are We Going? Please refer to page 14 of this Newsletter for details about this program.

Monday Noon Public Plenary Lecture. TBA

Monday Evening AAASPD Presidential Address: 7:00 p.m.
On this evening Dr. Owen McDougal (Department of Chemistry and Biochemistry, Boise State University, Boise, Idaho and President of the Pacific Division) will present the AAAS Pacific Division Presidential Address.

This lecture, presented by Rafael Malagoli Rocha (Department of Pathology, Hospital AC Camargo, Liberdade São Paulo, Brazil; rafael.malagoli@gmail.com), is dedicated to aspirant and young scientists, directed to the conflicts, challenges and experiences – the good, the bad and the ugly – that an emerging cancer researcher encounters.

Wednesday Noon Public Plenary Lecture. TBA
Please watch the Pacific Division website for updates on these and other lectures as they are added.

Field Trips
All field trips are open to meeting registrants and their families. At least one member of a family group must be registered for the meeting. Unregistered family members will be charged an additional one-time-only $10 field trip registration fee. This fee is paid only once for this meeting, regardless of how many field trips a non-registered participant takes.
Due to limited space, advance registration is required for all field trips. Reservation and payment of field trip fee(s) are included on the Advance Registration Form (see page 27 of this Newsletter).
A full refund will be granted if a trip is cancelled by the Division. If a registrant cancels via e-mail or written notification received in the Pacific Division office no later than 15 May 2013, the registrant will receive a refund of the fees paid less a $15 processing fee. If paid by credit card, an additional 3.5% of the original charge will be deducted from the amount being refunded to help pay for fees charged to the
Division by credit card companies. With the exception of the Division cancelling a field trip, no refunds will be granted after 6 June.

(1) Sunday, 16 June: 8:00 a.m. – 2:00 p.m. Engineering, Geology, and Engineering Geology of Hoover Dam and the O’Callahan-Tillman Bridge.

Hoover Dam lies within a Miocene (about 14 million years old) caldera. The walls of Black Canyon below the dam display spectacular exposures of volcanic ash (ashflow tuffs). This trip will include a special engineering-emphasis tour of Hoover Dam. We will view and discuss the engineering that went into the construction of the dam and also the construction of the new Mike O’Callahan-Pat Tillman bridge that crosses the Colorado River just downstream of the dam. We will walk across the bridge and view the volcanic rocks and faults that have fractured them.

Due to the access we will be granted during this field trip, all participants must be U.S. citizens; names and social security numbers need to be submitted at least two weeks in advance, so please be sure to provide the requested information on the Advance Registration form.

This field trip involves easy walking on paved surfaces.

Includes transportation by charter bus or 12 passenger van, box lunch and water, and miscellaneous fees. Minimum 10, maximum 40 participants. Cost: $60 per person.

(2) Sunday, 16 June: 8:00 a.m. – 3:00 p.m. Devils Hole and Ash Meadows National Wildlife Refuge.

The Devils Hole pupfish is one of the most famous endangered species in the world. A 1970s U.S. Supreme Court decision protecting the habitat of this pupfish was a landmark decision in American environmental law. This trip will include a visit to Devils Hole and other sites within Ash Meadows National Wildlife Refuge, located about 1.5 hours from Las Vegas. Many endemic species occur in Ash Meadows; boardwalks facilitate access to viewpoints where spring discharge and wildlife can be observed.

This field trip complements a symposium on the management of endangered species (Symposium #6: Management of Endangered Species in the American West: Policy and Practice) and involves easy walking on flat terrain.

Includes transportation by 4WD vehicles, box lunch, and water. Minimum 10, maximum 20 participants. Cost: $45 per person.

(3) Wednesday, 19 June: 5:00 a.m. – 3:00 p.m. Landscape Photography of the Desert Southwest.

Led by Dr. Peter Starkweather (Department of Biology, University of Nevada, Las Vegas, and photographer). Dr. Starkweather has 30 years of photographic experience in the region and throughout North America as well as in Asia and Africa; during this time he studied fine art landscape photography with the late Galen Rowell and photographic field techniques with Center for Creative Photography-inductee David Muench. Some of Dr. Starkweather’s work can be viewed at www.redwallphoto.com.

We will start early to catch the morning photographic “magic hour,” planning to be ready to shoot by sunrise (5:24 am PDT ‘round these parts!). The Desert Southwest provides unparalleled opportunities and substantial challenges for landscape photographers, with
striking visual contrasts, wide color palettes and – almost always – BLUE skies. Your leader will select specific destinations based on road conditions, weather and photo opportunities, but no matter where we go we are sure to become well-acquainted with the vibrant geological landscape, some desert biology and, if possible, some Puebloan rock art of the region. The trip philosophy will be that the photographer makes the photo, not the camera, and pro equipment definitely is not essential. That said, if participants happen to have tripods and remote shutter releases, plus familiarity with the manual functions of their cameras, those will come in handy for the best results.

We likely will be in, or close to, federally-designated Wilderness areas, and hiking is the only way in to the really good spots. Participants should be prepared accordingly, with sturdy rock/sand footwear, appropriate clothing (in layers), hats and daypacks for carrying gear, snacks and water. Note that the local average daily high temperature for June 19 is 38°C (100°F), so the ability for each person to carry ~2 L of water is very important, as is wearing sunscreen.

Participants will be required to sign a Release of Liability form in order to participate in this trip. Before signing up for this field trip, go to http://associations.sou.edu/aaaspd/2013LASVEGAS/forms/release.pdf and download the form and read it! A completed and signed copy of this form must accompany your Advance Registration form if you plan to participate in this field trip.

This field trip involves short hikes over rocky desert terrain in what could be very warm weather.

Includes transportation by 12-passenger van, box lunch, water and snacks. Minimum 5, maximum 10 participants. Cost: $35 per person.

(4) Wednesday, 19 June: 3:00 p.m. – 6:30 p.m. Tule Springs Fossil Beds, Leader: Dr. Josh Bonde (College of Sciences, University of Nevada, Las Vegas).

Tule Springs Fossil Beds is a region in northern Las Vegas Valley with abundant and diverse Pleistocene fossils, including Columbian mammoths, camels, horses, bison, and sloths. Legislation is pending in Congress to create a new national monument for the protection, study, and interpretation of these fossils. Participants will visit an area of active, on-going paleontological research.

This field trip includes short hikes over irregular terrain. Be sure to bring sun hats, appropriate clothing, and wear sunscreen!

Includes transportation in 4WD vehicles and water; no food provided. Minimum 10, maximum 20 participants. Cost: $25 per person.

(5) Wednesday, 19 June: 4:45 p.m. – 9:15 p.m. Evening Hike to Potato Knoll in Red Rock Canyon National Conservation Area, Leader: Dr. Nick Saines (Geologist, Red Rock Canyon Interpretive Association).

This hike is the perfect way to experience the non-glitz, scenically spectacular side of Las Vegas. It is 7°F cooler at Red Rock Canyon (elevation 4000 ft) than in Las Vegas (elevation 2000 ft). On this hike we will walk into the shadow of the mountains where it is even cooler. Potato Knoll is a large slump block of Jurassic Aztec Sandstone that broke off from the Wilson Cliffs. The hike affords nice views of the majestic sandstone cliffs. We will see Triassic shales of the Moenkopi Formation near Oak Creek on our way to a ridge of Shinarump Conglomerate. The Shinarump is the lowest member of the Triassic Chinle Formation. Above the Shinarump is the Petrified Forest Member of the Chinle. We will see petrified logs and a strange controversial geological feature that has yet to be satisfactorily explained. What will you think? Dinner on the ridge, then back to the vehicles. The hike is about 3 miles round trip, with very little change in elevation. Bring a daypack for water and box dinner, and appropriate footwear.

This field trip complements the symposium on the Mesozoic paleontology and paleogeography of Utah, Nevada and adjacent states (see Symposium #10: Dinosaurs and Their Neighbors: Mesozoic Paleontology and Paleogeography of Nevada, Utah, and Adjacent States).

Included in this field trip is a three mile round trip hike with low relief during the cooler evening hours.

Cost includes transportation in 12-passenger vans, box dinner, and water. Minimum 10, maximum 15 participants. Cost: $30 per person.

(6) Thursday, 20 June: 8:30 a.m. – noon. Nevada Solar One 400 Acre Concentrated Solar Power Plant.

Nevada Solar One is a 400 acre, concentrated solar power plant located south of Boulder City, Nevada, about an hour from Las Vegas. The plant uses 760 parabolic trough concentrators with more than 182,000 mirrors to concentrate the sun’s rays onto more than 18,240 receiver tubes placed at the focal axis of the troughs and containing a heat transfer fluid. The trough concentrators track the sun’s location and concentrate its rays during peak demand hours. Nevada Solar One is the second solar thermal power plant built in the United States in more than 16 years, and the largest plant of its type built in the world since 1991. Its nominal capacity is 64 MW and maximum capacity is 75 MW. The plant went into operation in 2007.

Participants will tour the plant for about 45 minutes. Wear long pants and closed-toed shoes. Have sunscreen along for times with sun exposure.

Includes transportation in 12 passenger vans and water; no food is provided. Minimum 10, maximum 20 participants. Cost: $20 per person.

(7) Thursday, 20 June: 8:00 a.m. – 2:00 p.m. An Ecological Transect of the Sheep Range – A Great Basin Sky Island. Leaders: Drs. Dale Devitt (School of Life Sciences, University of Nevada, Las Vegas) and David Charlet (Department of Biology, College of Southern Nevada, Henderson, Nevada).

On this field trip we will visit a series of 10 meter tall, ecological-transect towers at successively higher elevations in the Sheep Range, north of Las Vegas, at elevations ranging from 900 m (~3,000 ft) in the creosote bush community to 2,000 m (~6,800 ft) in the pinyon-juniper community. Emphasis will be on ecological gradients, plant communities, and soil-plant-water relationships. For more information about the transect visit: http://digitalscholarship.unlv.edu/cgi/viewcontent.cgi?article=1040&context=epscor.

This field trip complements a symposium on soil-plant-water relationships in arid climates (Symposium #8: Soil-Plant-Water Relationships in Arid Environments).

Be sure to wear appropriate clothing, sun hats, and sunscreen.

Includes transportation by 4WD vehicles, lunch, and water. Minimum 10, maximum 20 participants. Cost: $35 per person.

(8) Thursday, 20 June 7:00 a.m. – Friday, 21 June 5:30 p.m. Zion
National Park: Geology, Natural Resource Management Policy, and Dinosaur Tracks. Leaders: Drs. Steve Rowland (Geosciences, University of Nevada, Las Vegas) and Steve Parker (Environmental Policy, University of Nevada, Las Vegas).

Travel by luxury coach about three hours from Las Vegas to visit Zion National Park in southwestern Utah. This trip will have a dual theme of Jurassic geology/paleontology and natural resource policy. On Thursday morning we will travel to St. George, Utah, visit a wonderful exhibit of in situ dinosaur tracks and trackways at the Dinosaur Discovery Site at Johnson Farm, have lunch on an outcrop of Shinarump Conglomerate overlooking the Virgin Anticline, and arrive in Springdale, Utah early in the afternoon. Thursday afternoon will be spent hiking and exploring Zion Canyon. Dinner on your own. Evening discussion of management issues with National Park staff. Friday morning breakfast on your own. Group hike on Friday morning and continued discussion of natural resource policy issues. Lunch on your own in Springdale.

This field trip complements a symposium on the management of protected lands (Symposium #6: Management of Endangered Species in the American West: Policy and Practice) and also a symposium on Mesozoic paleontology (Symposium #10: Dinosaurs and Their Neighbors: Mesozoic Paleontology and Paleogeography of Nevada, Utah, and Adjacent States).

Hiking in Zion National Park will be on park trails; optional hikes may include moderately steep sections of trail. Bring daypack and appropriate footwear. Be sure to wear appropriate clothing, sun hats and have an ample supply of sunscreen available. Days will be warm; evening may be cool.

Double-occupancy lodging in Springdale, Utah at the Zion Park Inn (Best Western Motel). Box lunches will be provided on Thursday. Water will be provided throughout the trip.

Please note that, due to contractual requirements, the deadline for signing up for this field trip is Wednesday, 15 May 2013.

Includes transportation by charter bus, overnight stay in motel, lunch on Thursday, snacks and water. Participants are expected to purchase on their own dinner Thursday, and breakfast and lunch Friday. Minimum 18, maximum 36 participants. Cost: $225 per person, double occupancy; $415 per person, single occupancy. If you are an individual who would like to join this tour with a double occupancy room but don’t have a roommate, please mark the appropriate box on the Early Registration form and we will assign a roommate of the same gender for Thursday night.

Workshops

DockoMatic: Docking Calculations and Homology Modeling

Half-day workshop organized by C. Mark Maupin (Chemical and Biological Engineering Department, Colorado School of Mines, Golden, Colorado; cmmaupin@mines.edu) and Owen M. McDougal (Department of Chemistry and Biochemistry, Boise State University, Boise, Idaho; owenmcdugal@boisestate.edu). Currently scheduled for Tuesday afternoon, 18 June.

This workshop will focus on the use of the program DockoMatic. Created at Boise State University, DockoMatic is a wrapper that links several different codes, including AutoDock4 and Modeller, into a single user friendly graphical user interface (GUI). During this workshop the participants will be guided through the use of DockoMatic to create a homology model of a macromolecule. After the successful creation of the 3D structure for the macromolecule, DockoMatic will then be used to automate docking calculations between the macromolecule and a ligand. The workshop will finish with an analysis of the calculations and a question answer phase to help participants formulate ways in which to use DockoMatic for their own research or teaching needs.

Fee: None for meeting registrants; one-day registration fee for non-registrants.

Grant-Writing Workshop for Foundations

Half-day workshop organized by Peter Kraus (J. Willard Marriott Library, University of Utah; peter.kraus@utah.edu). Currently scheduled for Tuesday afternoon, 18 June.

Participants will review the process of writing effective grant applications and assembling a good proposal to foundations. The basic components of a competitive grant proposal will be presented including the common pitfalls to avoid in grant writing and submission. Appropriate project funding sources will be discussed as well as establishing positive sponsor relationships, satisfying sponsor requirements, and the proposal review process.

Limited to 50 participants.

Fee: None for meeting registrants; one-day registration fee for non-registrants.

Technical Sessions

Symposia

The following symposia are being planned for the annual meeting. Although symposia are typically organized around invited papers, organizers often will consider adding one or more contributed papers if they are relevant to their programs. Should you wish to participate in one of these symposia, contact the symposium organizer directly. Should you prefer to present a paper in one of the contributed paper sessions, refer to pages 14 and 24 for instructions and page 23 for names of sections and program organizers in this Newsletter. Check the Division’s website, pacific.aaas.org, for the latest information on symposia and other program events.

Please remember that at this time the listings contained herein are tentative and still 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 contact the Division office at 541-552-6869 or aaasdp@sou.edu to confirm the status of the session(s) before committing travel funds. Additional symposia added to the program will be posted on the Division’s website and published in the April Newsletter.
(1) Recent Advances in Pharmacology and Toxicology. Organizer: Kristen Mitchell (Department of Biology, Boise State University, Boise, Idaho; kristenmitchell@boisestate.edu). Currently scheduled for Tuesday morning, 18 June.

The development of novel therapeutic strategies requires a detailed understanding of mechanisms that regulate homeostasis, along with an appreciation of the balance that exists between the therapeutic and toxic effects of chemical compounds. This session will focus on recent advances in understanding the pharmacological and toxicological effects of drugs, chemicals and environmental contaminants. Investigators are invited to present research on the identification of targets for new drug development, new drug screening strategies, and novel mechanisms of drug action. Emphasis will also be placed on the identification of mechanisms of toxicity for drugs, chemicals and environmental contaminants.

(2) Mechanisms of Tumor Progression and Cancer Therapeutics. Organizer: Cheryl Jorcyk (Department of Biology, Boise State University, Boise, Idaho; cjorcyk@boisestate.edu). Currently scheduled for Tuesday afternoon, 18 June.

Cancer is a large group of different diseases, all involving uncontrolled growth of cells in the body. During tumor progression, cells proliferate, form malignant tumors, invade to nearby parts of the body and metastasize, or spread, to more distant parts of the body through the lymphatic system or bloodstream. This program will provide scientific presentations addressing different mechanisms of tumor progression and metastasis, as well as mechanistic discussions on established and emerging cancer therapeutics. This symposium is designed for all types of biomedical researchers, undergraduate and graduate students, physicians and oncologists, nurses, pharmacists, and others who research or manage patients with cancer.

(3) Library Science and Archives: Forming Partnerships, Making Connections. Organizers: Crystal Goldman (Dr. Martin Luther King, Jr. Library, San Jose State University, San Jose, CA; crystal.goldman@sjsu.edu), Frank Jacobitz, (Mechanical Engineering Program, University of San Diego, San Diego, CA; jacobitz@sandiego.edu), Michel Davison (Idaho State Archive Division of the Idaho State Historical Society, Boise, ID; michel.davison@ishs.idaho.gov), Silke Higgins (Digital Initiatives Librarian, King Library, San Jose State University, San Jose, CA; silke.higgins@sjsu.edu), Susan Kendall (Collection Development Coordinator, King Library, San Jose State University, San Jose, CA; susan.kendall@sjsu.edu), and Eva Stowers (University Libraries, University of Nevada, Las Vegas, Las Vegas, NV; eva.stowers@unlv.edu). Currently scheduled for all day Monday, 17 June.

Libraries and archives in the digital age are often strengthened by developing partnerships. The form these take are as varied as the individuals who create them, but they can expand the capabilities of all involved and make possible projects that would otherwise not be realized. Librarians and archivists are often accustomed to working in a team structure, which fosters a cooperative environment that capitalizes on the strength of many. This interconnectedness can lead to innovation within the library or archives, and outreach to other individuals or groups can lead to progressive new projects.

This symposium will focus on the strengths of libraries and archives, both traditional and innovative, that serve to build the success of the academy as a whole. Rarely is such success achieved in a vacuum; thus, this symposium will also focus on the partnerships and connections librarians or archivists create with each other, with teaching faculty members, with other departments, other institutions, and other academic organizations in order to advance initiatives in instruction, reference, collection development, and digital projects.

(4) Science and Feeling in the Arts. Co-organizers: Robert L. Chianese (Department of English, Emeritus, California State University Northridge, Northridge, CA; rlichianese@gmail.com) and Jesse James Thomas (Department of Religious Studies, San Diego State University, San Diego, CA; jthomas@mail.sdsu.edu). Currently scheduled for all day Wednesday, 19 June.

This interdisciplinary symposium brings together the humanities and sciences in an exploration of the connections between science and aesthetics. It features two distinct though related topics: 1) scientific analysis and understanding of our responses to art (visual art, sculpture, music, dance, literature, film, architecture, etc.), and 2) the emotional/psychological responses we experience in relation to science-inspired art and the impact science-based art has on our appreciation of it.

The first topic seeks discussions of such matters as the scientific measurement of the impacts of the arts on intelligence, consciousness, mood, etc.; the attempts of psychology and brain science to explain our emotional responses to art; the semiotic processing of art; and the connections between scientific and artistic creativity.

The second topic explores the aesthetics of special categories of art—science-inspired art and eco-art—by exploring such questions as “Does using science as a source for art compromise our appreciation of it?”; “Do we have to understand the science principles behind it in order to respond appropriately?”; and “Does knowing that a work of eco-art actually performs some restorative function change our responses to it?”

(5) Ion channels: Integration of Computer Simulations with Experiments. Organizers: C. Mark Maupin (Department of Chemical and Biological Engineering, Colorado School of Mines, Golden, CO; cmmaupin@mines.edu) and Owen McDougal (Department of Chemistry and Biochemistry, Boise State University, Boise, ID; owenmcdougal@boisestate.edu). Currently scheduled for Tuesday afternoon, 18 June.

Due to the difficulty of crystallizing transmembrane ion channel proteins, the use of computational techniques such as homology modeling, docking calculations, and molecular dynamics are increasingly being used to generate molecular-level information. These computational techniques are rapidly becoming a complementary component to experiment in an effort to unravel ion channel structure, functional, and interactions with ligands. This symposium will address experimental and computational work conducted on ion channels with an emphasis on complimentary techniques that enhance our understanding of ion channels.

(6) Management of Endangered Species in the American West: Policy and Practice. Organizer: Rob Mworka (Center for Biological Diversity; rmworka@biologicaldiversity.org). Currently scheduled for Wednesday afternoon, 19 June.
This symposium will focus on the successes and failures of the Endangered Species Act in preserving vulnerable species in the west, with case studies and progress reports.

An optional field trip to Devils Hole and Ash Meadows National Wildlife Refuge complements this symposium (see Field Trip #2: Devil’s Hole and Ash Meadows National Wildlife Refuge). A second optional field trip to Zion National Park also complements this symposium (see Field Trip #8: Zion National Park: Geology; Natural Resource Management Policy, and Dinosaur Tracks).

(7) Innovations and Trends in K-16 STEM Education. Organizer: Larry Rudd (School of Education, Nevada State College; Lawrence.Rudd@nscc.edu). Currently scheduled for Wednesday morning, 19 June.

How can we be more effective in STEM (science, technology, engineering, mathematics) education? How will on-line courses, technological gadgetry, and increasingly tight budgets affect teaching-learning dynamics in the sciences? Teachers and science education professionals at all levels are invited to participate in this symposium to share their successful strategies and war stories.

(8) Soil-Plant-Water Relationships in Arid Environments. Organizer: Dale Devitt (School of Life Sciences, University of Nevada, Las Vegas; dev50@clark.nscee.edu). Currently scheduled for Wednesday morning, 19 June.

The Nevada System of Higher Education (UNLV, UNR, and Desert Research Institute) is in the final stages of a multiyear NSF-funded project to support infrastructure associated with regional climate change research. One component of this project involves water/ecology. This symposium will focus on the results of these studies, as well as work by other researchers in arid environments. Complementing this symposium is an optional field trip to examine the Mojave Desert transect in the Sheep Range of Southern Nevada—a series of 10 meter tall towers equipped with a wide array of sensors to monitor atmospheric, soil, and plant parameters over time (see Field Trip #7: An Ecological Transect of the Sheep Range – A great Basin Sky Island).

(9) Climate Change, Sustainability, and Water Resources in the Arid West. Organizer: Sajjad Ahmad (Department of Civil Engineering, University of Nevada, Las Vegas; sajjad.ahmad@unlv.edu). Currently scheduled for Tuesday morning, 18 June.

This symposium will focus on the energy-water nexus in arid portions of North America, in the face of climatic uncertainties. What range of climate change should we expect, and how will natural ecosystems and human communities respond? Optional field trips to Hoover Dam and Nevada Solar One concentrated solar power plant complement this symposium.

(10) Dinosaurs and Their Neighbors: Mesozoic Paleontology and Paleogeography of Nevada, Utah, and Adjacent States. Organizer: Josh Bonde (Department of Geosciences, University of Nevada, Las Vegas; Joshua.Bonde@unlv.edu). Currently scheduled for Wednesday morning, 19 June.

Until very recently, dinosaurs were essentially unknown from strata in Nevada. In contrast, Utah is perhaps the epicenter of dinosaur diversity for the entire Milky Way galaxy. On the Nevada side of the state line, that picture has changed dramatically within the past few years. We now have spectacular dinosaur trackways (along with trackways of co-existing protomammals and arthropods) in southern Nevada and also a diverse assemblage of dinosaur body fossils from both southern and central Nevada. Meanwhile, paleontologists in Utah continue to discover new taxa at an amazing rate. This symposium will focus on recent research on Mesozoic fossils, stratigraphy, and paleogeography in Nevada, Utah, and adjacent states.

Two optional field trips complement this symposium: (1) an evening hike into Red Rock Canyon National Recreation Area (see Field Trip #5: Evening Hike to Potato Knoll in Red Rock Canyon National Conservation Area), and (2) a two-day, post-meeting field trip to Zion National Park and the Johnson Farm Dinosaur Discovery Site in St. George, Utah (see Field Trip #8: Zion National Park: Geology; Natural Resource Management Policy, and Dinosaur Tracks).

(11) Recent Advances in Genetics and Cell Biology. Organizer: Pamela Marshall (School of Mathematics and Natural Sciences, New College of Interdisciplinary Arts and Sciences, Arizona State University at the West Campus; pamela.marshall@asu.edu).

This program was withdrawn by the organizer. Please send abstracts to the Chair of the Cell and Molecular Biology Section. Papers will appear in the contributed paper session for that section.

(12) Boise Extravaganza in Set Theory (BEST). Organizers: Liljana Babinkostova, Andres Caicedo, Samuel Coskey and Marion Scheepers (Department of Mathematics, Boise State University, Boise, Idaho liljanababinkostova@boisestate.edu). Currently scheduled for all day Monday and Tuesday, 17 and 18 June and possibly Wednesday morning 19 June if needed.

This program is a continuation of the well-known conference BEST (Boise Extravaganza in Set Theory). BEST focuses on the mathematical discipline called Set Theory, and its applications in other disciplines in Mathematics. BEST was for its first nineteen years hosted in Idaho at Boise State University.

Set Theory is the mathematical foundation for the study of the infinitary objects that routinely arise in Mathematics and its applications, and in the mathematical sciences. Contemporary set theoretic research addresses basic questions about probability, consistency and independence, and the relative strength of postulates or hypotheses in mathematized scientific theories. The methods developed by set theory serve as powerful tools for applications in many other mathematical disciplines, including algebra, analysis, combinatorics, complexity, topology and more.

The invited speakers for this program are successful set theorists from different career stages and will present high level scientific talks in several areas of set theory and its applications. The BEST symposium will also host contributed talks in Set Theory and its applications by participants. Undergraduate and graduate students will also present research accomplishments in these areas.

(13) International Protected Area Exchange. Organizers: Margaret N. Rees (Vice–Provost for Educational Outreach and Executive Director of Public Lands Institute, University of Nevada, Las Vegas, Las Vegas, Nevada; peg.rees@unlv.edu) and Allison Brody (Project Manager, Public Lands Institute, University of Nevada, Las Vegas, Las Vegas, Nevada; allison.brody@unlv.edu). Currently scheduled for Tuesday afternoon, 18 June.
This symposium invites presentations on advances in understanding protected area management, including conceptual and empirical research results, reviews, case studies, and meta-analyses. Whether study outcomes have global, regional, or local impact, their findings positively contribute to or provide compelling examples of natural or cultural heritage protection.

Collectively around the globe, protected areas secure irreplaceable natural, ecological, and cultural treasure. Without healthy ecosystems, sustained human health and well-being is impossible. Effective management of these protected areas is critical, regardless of their designation, particular objectives, multiple uses, or administrative authorities. Furthermore, it requires balancing the environmental, cultural, economic, and political issues within and surrounding the management area. Approaches to achieving this balance are being creatively developed and applied. Specific vulnerabilities, challenges, and responses vary based on availability of data, geographical location, and other parameters often closely tied to a site’s location (e.g., biome type, political stability, levels of poverty). Modern stressors, such as climate change and increases in urbanization at the wildland-urban interface, require ongoing adaptation in management strategy. However, fundamental to all sustainable protected area management is the adoption of more participatory, inclusive, and equitable models, which consider a variety of benefits and values while utilizing effective partnerships, including with the local community within and adjacent to the area and relevant governance and policy-makers. Designed to facilitate information transfer and foster new connections, this symposium provides a forum for an international exchange of insights and findings related to the cooperative conservation of healthy ecosystems and the services and benefits they provide.

(14) Patient-Centered Outcomes Research and Patient Targeted Therapies. Organizers: Francesco Chiappelli (UCLA School of Dentistry, University of California, Los Angeles, California; fchiappelli@dentistry.ucla.edu) and Adrian Bot (Chief Scientific Officer, Kite Pharma Inc., Los Angeles, California). Currently scheduled for Tuesday afternoon, 18 June.

Current global trends in health care emphasize patient-centered outcomes research of molecular-targeted evidenced-based interventions. Treatment modalities in medicine, nursing, dentistry and psychotherapy increasingly integrate translational research - going from the patient to the laboratory bench and back to the patient (NIH) - with translational effectiveness - integrating the best available evidence for optimizing evidence-based healthcare interventions in specific clinical settings (AHRQ). Innovative models of patient targeted therapies are timely and critical. This symposium is dedicated to the dissemination of the current state of knowledge about targeted molecular therapies in the context of patient-centered outcomes research. Its scientific focus will pertain to the patient-centered identification of disease-specific biomarkers for the elucidation of targeted molecular therapies in selected clinical conditions. Specifically, this symposium will present a concerted program of presentations that are aimed to address current, timely and cutting edge research about patient-centered targeted small molecule therapies (both small molecules and biomolecules, with broad therapeutic applicability and benefiting from a patient-centered outcomes), in the context of translating cost- and benefit effectiveness into specific clinical settings.

(15) Forensic and Clinical Psychological Science Issues in Antiterrorism: An International Paradigm. Organizer: Ronn Johnson (School of Leadership and Education Sciences, University of San Diego, San Diego, California; ronnjohn@ronnjohn.ets.com). Currently scheduled for Monday afternoon, 17 June.

Acts of terrorism are traumatic incidents that have no international border restrictions. The lessons learned from 9/11 taught Americans that no target is invulnerable to acts of terror. Moreover, successful and thwarted acts of terrorism and reconnaissance response probes have fueled a growing need for mental health professionals to expand health safety-related trainings to include behavioral threat assessments related to terrorism. Why? Because terrorists use a variety of tactics, techniques, and procedures to achieve their often unstated objectives. Research has consistently demonstrated that Post-traumatic Stress Disorder (PTSD) can be one of the clinical outcomes for terrorism that can potentially result in forensic consequences. At the same time, the speed of globalization fused with ideology has resulted in a need to address issues of radicalization. Unfortunately, there is a non-linear relationship between timely intelligence gathering, acts of terror, and understanding radicalization. The objective of this symposium is to review several areas related to mental health professionals implementing anti-terrorism responses.

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Some of the projected symposium paper presentation titles include:

- Is there a nexus between historical trauma and PTSD vulnerability in military personnel?
- Evidence-based treatment issues for victims of terrorism
- Radicalization of prison inmates: An antiterrorism paradigm
- Can stress inoculation training be used as an evidence-based antiterrorism strategy?
- Radicalization resistance training as an antiterrorism strategy: Is this a pipe dream?

(16) Forensic Psychological Science of Juvenile Fire Setters and Bomb Makers. Organizer: Ronn Johnson (School of Leadership and Education Sciences, University of San Diego, San Diego, California; ronnjohn@ronnjohn.cts.com). Currently scheduled for Monday morning, 17 June.

Juvenile fire setting (JFS) or as it is referred to by the current term, Youthful Misuse of Fire (YMF) has received considerable research attention over the past several decades in public safety. There has been little systematic review of integrated risk assessments and treatment factors for these often diverse clinical groups. For example, what are some the differences between JFS/YMF and bomb makers? How many sessions should a JFS/YMF client receive? This symposium presents an overview of a variety of risk assessment factors that are of particular relevance to consider for any work done with juvenile fire setters in clinical or forensic settings. The presentation considers the importance of JFS-YMF across a broad array of clinical domains, including developmental, diagnostic, and the prognostic utility anticipated by the release of the DSM-5. National standards and risk assessment levels are examined. The presentation provides a starting place for developing conceptualizations for the diverse assessment and cross-cultural evidenced-based treatment needs for these treatment populations. Preliminary data from the JFS research project of the Burn Institute of San Diego County will be presented.

Some of the projected symposium paper presentation titles include:

- Use of the DSM-5 with juvenile fire setters and bomb makers
- Psychological evaluations and risks assessments of juvenile fire setters and bomb makers using the CBCL
- Clinical and forensic psychological issues in work with Latino/a juvenile fire setters
- Clinical decision making in the treatment of juvenile fire setters referred by the courts: Transdisciplinary service coordination
- The process of accessing and assessing research data in community-based juvenile fire setter program: From headaches to nirvana

(17) Accelerating Biomedical Discovery with Advanced Molecular Simulation and Computational Biology. Organizer: Dong Xu (Department of Biomedical and Pharmaceutical Sciences, College of Pharmacy, Idaho State University; dxu@pharmacy.isu.edu).

THIS PROGRAM WAS COMBINED WITH SYMPOSIUM #19 TO FORM SYMPOSIUM #21, Structural and Computational Approaches for Novel Therapeutics Development and Biomedical Insights. See BELOW.

(18) Current Progress in Infectious Disease Research and Therapeutic Interventions. Organizer: Dong Xu (Department of Biomedical and Pharmaceutical Sciences, College of Pharmacy, Idaho State University; dxu@pharmacy.isu.edu). Currently scheduled for all day Wednesday, 19 June.

This research symposium focuses on the current experimental and computational research progress in infectious disease molecular pathology and therapeutic design. The purpose of the symposium is to provide a dynamic forum to facilitate the exchange of research advancements and ideas among infectious disease experts, and to report the latest discovery and development in the understanding, prevention and inhibition of the most life-threatening, pandemic and drug-resistant pathogens.

(19) Structural Insights for the Development of New Therapeutics. Organizers: Todd T. Talley and Dong Xu (Department of Biomedical and Pharmaceutical Sciences, College of Pharmacy, Idaho State University; talley@pharmacy.isu.edu and dxu@pharmacy.isu.edu).

This program was combined with Symposium #17 to form Symposium #21, Structural and Computational Approaches for Novel Therapeutics Development and Biomedical Insights. See BELOW.

(20) Medicinal Chemistry and Biological Insights for the Treatment of Cancer. Organizers: Todd T. Talley and Nicole Frank (Department of Biomedical and Pharmaceutical Sciences, College of Pharmacy, Idaho State University; talley@pharmacy.isu.edu and frannic2@pharmacy.isu.edu). Currently scheduled for all day Tuesday, 18 June.

This symposium focuses on new experimental methods to better understand and combat cancer. By bringing together researchers from various disciplines involved in the study of cancer we hope to provide a forum for discussion and collaboration in this important field.

(21) Structural and Computational Approaches for Novel Therapeutics Development and Biomedical Insights. Organizers: Todd T. Talley and Dong Xu (Department of Biomedical and Pharmaceutical Sciences, College of Pharmacy, Idaho State University; talley@pharmacy.isu.edu and dxu@pharmacy.isu.edu). Currently scheduled for all day Monday, 17 June.

During the past decade there has been rapid growth in the number of crystal structures of known drug targets and the advancements of state-of-the-art computational methods. Putting this wealth of information to use requires the skills of researchers from a wide array of fields including biophysics, medicinal chemistry, molecular and computational biology. The goal of this symposium is to facilitate the exchange of ideas and develop collaborations to take advantage of the data and methods now available.

Contributed Papers

Those wishing to submit papers for presentation at a contributed paper session (oral or poster) should refer to the “Call for Papers and Abstracts” on pages 14 and 24 of this Newsletter for instructions on abstract preparation, formatting, and submission.

The deadline for submitting abstracts is 18 April 2013. If an abstract comes in after this date, it may not be listed in the program. Also, be aware that the abstract you submit will be published as written. It will not be edited. If it contains errors, they will appear as submitted. Be sure to keep the length of your abstract to no more than 250 words and use 10-point Times New Roman font (no exotic fonts,
Posters will be assigned a display space of 48” tall x 48” wide (1.2 m x 1.2 m) and will be grouped by discipline and subject matter. Posters will be mounted using map pins on foam core backings (supplied). In order to assure fairness, the Pacific Division Council took action stating that all student posters must fit within the assigned display space to be eligible for student Awards of Excellence. A request for extra space will disqualify a student from the awards competition.

Student posters will be judged for Awards of Excellence. Students must be present for a two hour period to allow judges the opportunity to discuss their work and to evaluate their posters. If you need a bit of help organizing the content of your poster, a website containing excellent information on poster preparation is http://www.ncsu.edu/project/posters.

**Societies and Pacific Division Sections Accepting Contributed Papers for Presentation at the Meetings**

**Arizona–Nevada Academy of Sciences.** Please submit your abstract to the appropriate section from this list.

**Sigma Xi, The Scientific Research Society.** Please submit your abstract to the appropriate section from this list.

**Agriculture and Horticultural Science.** Section chair and program organizer: Dr. Michael D. MacNeil, Delta G, 145 Ice Cave Rd., Miles City, MT 59301. Contact: 406-232-6331 or 406-853-4748 (cell); macneildelta@mac.com.

**Anthropology and Archaeology.** Section chair and program organizer: Dr. Herbert G. Maschner, Delta G, 145 Ice Cave Rd., Miles City, MT 59301. Contact: 406-232-6331 or 406-853-4748 (cell); maschner@isu.edu.

**Atmospheric and Oceanographic Sciences.** Section chair and program organizer: Dr. Clive E. Dormann, Research Oceanographer, Scripps Institution of Oceanography Dept 0209, University of California, San Diego, La Jolla, CA 92093-0209. Contact: cdormann@ucsd.edu.

**Cell and Molecular Biology.** Section chair and program organizer: Dr. Kristen Mitchell, Department of Biology, Boise State University, Boise, ID 83725. Contact: 208-426-4620; kristenmitchell@boisestate.edu.

**Chemistry and Biochemistry.** Section chair and program organizer: Dr. Owen M. McDougal, Department of Chemistry and Biochemistry, Boise State University, Boise, ID 83725. Contact: 208-426-3964; owenmcdougal@boisestate.edu.

**Computer and Information Sciences.** Section chair and program organizer: Dr. C. Mark Maupin, Department of Chemical and Biological Engineering, Colorado School of Mines, Golden, CO 80401. Contact: 303-273-3720; cmmaupin@mines.edu.

**Earth Sciences.** Section chair and program organizer: Dr. Jad D’Allura, Department of Geology (emeritus), Southern Oregon University, Ashland, OR 97520. Contact: 541-899-7010 or 541-690-7739; dallura@sou.edu and rockit@dishmail.net (copy e-mail to both accounts).

**Ecology, Organismal Biology, and Environmental Sciences.** Section chair and program organizer: Dr. Richard Van Buskirk, Environmental Studies, Pacific University, 2043 College Way, Forest Grove, OR 97116. Contact: 503-352-2251; vanbuskirk@pacificu.edu.

**Engineering, Technology and Applied Sciences.** Section chair and program organizer: Dr. Frank Jacobitz, Department of Engineering, University of San Diego, 5958 Alcalá Park, San Diego, CA 92110. Contact: 619-260-7820; jacobitz@sandiego.edu.

**General and Interdisciplinary.** Section chair and program organizer: Dr. Robert L. Chianese, Department of English (Emeritus), California State University Northridge, 1000 E Victoria Street, Carson, CA 90747. Contact: 310-243-3985; rchianese@gmail.com.

**History and Philosophy of Science.** Section chair and program organizer: Dr. Donald McGraw, P.O. Box 515, Ephraim, UT 84627. Contact: 619-947-5108; donaldmcgraw@mac.com.

**Mathematics.** Section chair and program organizer: Dr. Liljana Babinkostova, Department of Mathematics, Boise State University, 1910 University Drive, Boise, ID 83725. Contact: 208-426-1172; liljana.babinkostova@boisestate.edu.

**Oral Biology and Dental Medicine.** Section chair and program organizer: Dr. Francesco Chiappelli, UCLA School of Dentistry, CHS 63-090, Los Angeles, CA 90095-1668. Contact: fchiappelli@dentistry.ucla.edu.

**Physics and Materials Science.** Section chair and program organizer: Dr. George Quainoo, Department of Physics and Engineering, Southern Oregon University, 1250 Siskiyou Blvd, Ashland, OR 97520. Contact: 541-552-6404; quainoo@sou.edu.

**Psychology.** Section chair and program organizer: Dr. Veronica Galván, Department of Psychology, University of San Diego, San Diego, CA 92110. Contact: 619-260-7739; vgalvan@SanDiego.edu.

**Social, Economic and Political Sciences.** Section chair and program organizer: Dr. Carl A. Maida, UCLA Schools of Dentistry and Medicine, University of California, PO Box 951668 CHS, Los Angeles, CA 90095. Contact: 805-492-5613; cmaida@ucla.edu.

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94th Annual Meeting
Las Vegas, Nevada
16 – 19 June 2013

Call for Papers and Abstracts

Members of AAAS and its affiliated societies, students, teachers and other scientists are encouraged to participate in the annual meeting of the Pacific Division of AAAS by presenting papers and/or posters. Procedures for submitting abstracts for inclusion in the technical sessions of this meeting are below and also on page 14 of this Newsletter. Read both carefully before submitting an abstract!

For a contributed paper, e-mail the title, abstract and other required information (see instructions below and also on page 14 of this Newsletter) as a Word (.doc or .docx) or .rtf attachment to the chair of the appropriate society or section (see page 23 of this Call for Papers and Abstracts) and also the Pacific Division office at rchristi@sou.edu. If your abstract contains special characters, fax a copy of it with the special characters marked and the name of the fontface used to the Pacific Division office, 541-552-8457, in addition to the e-mail submission. The deadline for contributed paper abstract submissions is 18 April 2013. Students wanting to compete for an Award of Excellence must identify themselves as such on Line 7 of their abstract submissions so that judges will know to evaluate their presentations.

Presenters in symposia should submit their abstracts directly to the symposium planner. The deadline for symposium abstracts is 1 April 2013.

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

Format your submission as follows:

Line 1: Submitter’s name
Line 2: Submitter’s telephone number and e-mail address
Line 3: Presenter’s name (if different from above) or “SAME” (if same as above)
Line 4: Presenter’s telephone number and e-mail address (if different from above)
Line 5: Society, section or program to which you are submitting your presentation for review (see page 23 of this Call for Papers and Abstracts)
Line 6: Type of presentation (ORAL or POSTER)
Line 7: Is the presenter a student? (STUDENT or NOT A STUDENT)
Line 8: Special equipment needs (in addition to standard computer, computer projector, and PowerPoint)
Line 9: Paper Title Italicized and in Title Case, AUTHOR’S NAME(S) (Full address(es), including institution, mailing address, city, state, zip code, and e-mail address(es)). Refer to the example below for additional information.

Example of a properly formatted abstract submission (lines 9 ff and 10 ff), plus additional information

Formatting an Abstract for Submission to a Pacific Division Section Chair and the AAASPD Meetings Office, SAMUEL P KRAFT-ER¹, YESIMAN AUTHOR², and IDIDA DeREADING³ (¹Department of Biology, Southern Oregon University, 1250 Siskiyou Boulevard, Ashland, OR 97520; ²Department of Academic Speech, Bureau of Speech Employment, 12 Back Street, Medford, OR 97504; ³spkraft@biology.sou.edu).

All authors should be listed sequentially, starting with the person who contributed the most and ending with the person who contributed the least. If more than one address occurs among the authors, use a superscripted number on the right of each author’s last name, followed by the corresponding superscripted number at the start of each unique address. Place an asterisk (*) next to the last name of the presenter. Submissions not formatted in this manner may be returned for reformatting or rejected.

Indent the first line of each paragraph of your abstract (Line 10 ff) 0.25 inches by using the first line indent command of your word processor. Do not use the tab or the spacebar! All text should be full justified.

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

Send your abstract as a Word (.doc or .docx) or rich text format (.rtf) file attached to an e-mail addressed to the appropriate section chair (see Line 5 above) and also the AAASPD office at rchristi@sou.edu. Do not send your abstract in the body of an e-mail or as a PDF file as these will be rejected!

E-mail us at aaaspd@sou.edu
Second Call for Symposium and Workshop Proposals

Members of AAAS and its affiliated societies, students, teachers and other scientists are encouraged to participate in the 2014 annual meeting by developing symposia and/or workshops. Persons wishing to develop a program for the Riverside meeting should e-mail the title, description and other information (see instructions below) to the Pacific Division office at rchristi@sou.edu.

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

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

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

Please format your submission as follows:

1: Organizer’s name
2: Organizer’s full mailing address, including academic/professional affiliation, telephone number and e-mail address
3: Co-organizer’s name(s) (if any)
4: Co-organizer’s full mailing address, including academic/professional affiliation, telephone number and e-mail address
5: Is this a Workshop or a Symposium?
6: Number of 1/2-day sessions requested (a session is roughly three to three and a half hours, depending on the needs of the program)
7: Pacific Division section(s) and/or affiliated society requested to sponsor this program (see page 23 of this Newsletter). Note: You must identify at least one section or society to sponsor your program.
8: Title of proposed program
9: Brief description of proposed program (please limit to 250 words)
10: If a symposium, list the names of proposed (confirmed?) speakers, including academic/professional affiliation, and e-mail address for each. Presentation titles are optional at this time and will be requested later, along with an abstract for each presentation.
   If a workshop, indicate facilities and/or special equipment required and number of participants that can be accommodated.

541-552-6747 • rchristi@sou.edu • http://pacific.aaas.org
AAAS, Pacific Division 94th Annual Meeting
UNIVERSITY of NEVADA RESIDENCE HALL DORM APPLICATION

To register for a Guest Suite, please go to this web page, http://www.unlv.edu/eventservices/guestsuites, and follow the directions.

One form must be filled out for each individual requesting campus housing.
Type or print this form legibly! If faxing, use black ink.

Name ________________________________________________________________________  □ Male  □ Female

Address _______________________________________________________________________

City, State, Zip ___________________________________________________________________

Phone (day): __________________ Phone (evening): __________________ E-mail: __________________

If requesting a double room, check one:
☐ roommate’s name is: _______________________________________________________________________

OR
☐ please assign a roommate

Refer to page 11 of this Newsletter for a description of the accommodations and options listed below.
No refunds can be given for unused nights of stay.

RATES:
Three night basic housing package –
Check in Sunday, 16 June; check out Wednesday, 19 June
Double, per person $ 90.00
Single $180.00

Additional nights in conjunction with three night basic package –
Double, per person per night $30.00
Single, per night $60.00

Parking: $7.00/week

HOUSING REQUEST:
Three night housing package
☐ Double, per person $ ______
☐ Single $ ______

Additional nights (nights must be contiguous with nights of three night basic package)
☐ Friday, 14 June $ ______
☐ Saturday, 15 June $ ______
☐ Wednesday, 19 June $ ______
☐ Thursday, 20 June $ ______
☐ Friday, 21 June $ ______

ON-CAMPUS PARKING PERMIT
$7.00 per week $ ______

Total Amount $ ______

Deadline for Application
The completed application for housing must be received in the Pacific Division office no later than 15 May 2013. Space is on an “as available” basis.

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

Cancellation/refund Policy
All cancellation/refund requests for housing on this form must be made in writing to the Pacific Division office via USPS or e-mail. Requests must be received no later than 15 May 2013. Refunds are subject to a $15 processing charge and an additional 3.5% of the total if payment was by credit card.

Payment by Credit Card
Type of Card  □ Visa  □ Master Card  □ Discover  □ Am Ex

Card Number _________________________________________

Expiration Date ____________ Today’s Date ____________
Name on Card (print) ________________________________

Complete Card Billing
Address ____________________________________________

City __________________________ State ______ Zip _________

Cardholder ____________________________
Signature ____________________________
ADVANCE REGISTRATION FORM
FOR EARLY REGISTRATION, FIELD TRIPS, and OTHER SPECIAL EVENTS

Send this form directly to
AAAS, Pacific Division • Southern Oregon University • 1250 Siskiyou Blvd • Ashland, OR 97520
or call with information: 541-552-6869 or FAX to our dedicated line: 541-552-8457

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

Name: ________________________________________________________ Date: ______________
Mailing Address: ___________________________________________________________________________
City, State, Zip: ___________________________________________________________________________
E-mail: ___________________________________________ Day Phone: _______________________
Institution/Company (for your name tag – if blank, city & state will be used): __________________________________________________________________
Memberships: AAAS ☐ Yes ☐ No ANAS ☐ Yes ☐ No Sigma Xi ☐ Yes ☐ No
Other Affiliated Society Membership: ____________________________________________________________

How did you first hear about this meeting? ____________________________________________________________

Did you receive the April Newsletter for this meeting? ☐ Yes ☐ No
If yes, how? ☐ sent as attachment by someone ☐ downloaded after notification via postcard
☐ downloaded after notification via Pacific Division e-mail ☐ other ________________________________

Would you be willing to help judge student presentations at this meeting? ☐ Yes ☐ No
Please see page 6 of this Newsletter for information about judging. If you check the “yes” box, you will be contacted for additional information.

Check all that apply: ☐ presenter ☐ program planner ☐ field trip planner
If box checked above, in which program, field trip, or section? ____________________________________________

MEETING REGISTRATION FEES:
(above must be filled out in order to receive program planner/presenter rate)

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One-day of Meeting

| Professional          | ☐ $65.00             | ☐ $75.00             | ☐ $85.00 |
| Select day: ☐ Sun    | ☐ Mon    ☐ Tues ☐ Wed |

Teacher K-14 stipend? ☐ Yes ☐ No

DIVISION BANQUET: The Division banquet will be held on the evening of Tuesday, 18 June and will include announcements of the student award winners. Students who are registered for the meeting and who present either orally or a poster are invited to be guests of the Division at the banquet and do not have to pay to attend but must check the appropriate box below. Refer to page 15 in this Newsletter for descriptions of the entrees.

Student presenter ticket @ no charge (choose one): ☐ Salmon ☐ Top Round ☐ Vegetarian

Tickets @ $40.00 ea. Indicate quantity by each choice: ___ Salmon ___ Top Round ___ Vegetarian

Please complete reverse side before sending or faxing form.
FIELD TRIPS: All trips are priced per person (pp). See page 15 of this Newsletter for details.

Field trip registration fee for non-registrants (once per person) ___ regs. @ $10 $ __________

Name(s) of people registered for field trips only: __________________________________________

For field trips that include a box lunch: ☐ meat sandwich ☐ vegetarian sandwich

Sunday, 16 June

Field Trip #1 Hoover Dam SSN: ____________________ ___ tickets @ $60 pp $ __________

Field Trip #2 Devil’s Hole and Ash Meadows ___ tickets @ $45 pp $ __________

Wednesday, 19 June

Field Trip #3 Landscape Photography ___ tickets @ $35 pp $ __________

Field Trip #4 Tule Springs Fossil Beds ___ tickets @ $25 pp $ __________

Field Trip #5 Red Rock Canyon Hike ___ tickets @ $30 pp $ __________

Thursday, 20 June

Field Trip #6 Nevada Solar One ___ tickets @ $20 pp $ __________

Field Trip #7 Ecological Transect ___ tickets @ $35 pp $ __________

Field Trip #8 Zion Canyon National Park* ___ tickets @ $225 pp double $ __________
☐ please assign a roommate for this excursion

___ tickets @ $415 pp single $ __________

*deadline for signing up for this field trip is Wednesday, 15 May 2013

WORKSHOPS: See page 18 of this Newsletter for workshop details.

Please check which workshops you are planning to attend.

☐ DockoMatic (no charge)
☐ Grant Writing for Foundations

Registration Total $ __________
Banquet Total $ __________
Field Trips Total $ __________
Parking Permit ($7/week) $ __________

TOTAL DUE $ __________

(Please make checks payable to AAAS, Pacific Division or use your credit card – see below.)

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

___ Monday Evening UNLV President’s Reception (no charge to registrants and family)

CREDIT CARDS

To pay for your advance registration by credit card, you may
• mail this completed form to the address below, or
• phone the information to 541-552-6869 between about 12:00 p.m. and 4:00 p.m. Pacific Time, or
• fax this completed form to 541-552-8457 (dedicated fax line into the Pacific Division office).

Type of Card: ☐ Visa ☐ Master Card ☐ Discover ☐ AmEx

Credit Card Number ___________________________________ Expiration Date ________________

Name on Card _______________________________________________________________________

Complete Billing Address for Card ______________________________________________________

Signature of Cardholder _____________________________________________________________ Date ________________

COMPLETE AND RETURN THIS FORM WITH YOUR PAYMENT TO:

AAAS, Pacific Division • Southern Oregon University • 1250 Siskiyou Blvd • Ashland, OR 97520

Should you have questions, e-mail us at aaaspd@sou.edu or call 541-552-6869 M – F 12:00 p.m. to 4:00 p.m., Pacific Time.
105 things you didn’t (and 3 you probably shouldn’t) know about some of your most respected colleagues.

One more data point on why you should spend more time at membercentral.aaas.org. There you can enjoy a feast of blogs, videos, webinars, discounts, and downloads created by and for the most insatiable brains around.
Any Book Listed Below $10.00 and Second Book Free*  
With this form only  •  Sale ends 1 May 2013  
*Does not apply to Art inspired by Science  
Please PRINT CLEARLY or TYPE this form. If faxing, use black ink.

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<td>Agroecosystems and the Environment: Source, Control, and Remediation of Potentially Toxic, Trace Element Oxyanions (1998; cloth, 213 pp. – ISBN 0-934394-12-1); $20.00</td>
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<td>Other Institutions of Natural History: Past, Present, and Future (2004; paper, 325 pp. – ISBN 0-940228-60-2); $35.00</td>
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<td>San Francisco Bay: The Ecosystem (1996; cloth, 542 pp., color plates – ISBN 0-934394-11-3); $45.00</td>
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Proceedings Series  
Meeting Program with Abstracts (Proceedings Vol. 1, Part 1, 1982 through Vol. 31, Part 1, 2012); $10.00 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 • 1250 Siskiyou Blvd. • Ashland, OR 97520  
Phone orders: 541-552-6869  •  dedicated FAX orders: 541-552-8457  •  E-mail: aaaspd@sou.edu  
ALL SALES FINAL — NO RETURNS  
Payment must accompany all orders. Make checks payable to AAAS, Pacific Division.

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**SHIPPING (see note to left)**

**TOTAL DUE WITH ORDER**

**CREDIT CARD**

- Visa
- Master Card
- Discover
- American Express

Credit Card # ___________________________ Expiration Date ____________

Name on Card ___________________________ Signature of Cardholder ___________________________

Complete Billing Address for Card ___________________________

Page 30  
E-mail us at aaaspd@sou.edu
Map of UNLV campus. Meeting buildings are within the black box on the map. 38 is the Student Union. 35 is the Tonopah Complex, the location of on-campus housing for the meeting. 34 is the Dining Commons (open to everyone, with payment upon entry) and 36 is the Bookstore. Visitors can park in any student lot with a temporary parking permit on display. Convenient student lots are U and H on this map. U also contains pay metered spaces.
AAAS, Pacific Division  
94th Annual Meeting  
University of Nevada, Las Vegas  
Las Vegas, Nevada  
16 – 19 June 2013  
UPDATED ANNOUNCEMENT of SYMPOSIA, FIELD TRIPS and OTHER EVENTS  

SYMPOSIA  
(a sampling; complete list starts on page 18)  
• Mechanisms of Tumor Progression and Cancer Therapeutics  
• Recent Advances in Pharmacology and Toxicology  
• Current Progress in Infectious Disease Research and Therapeutic Interventions  
• Forensic and Clinical Psychological Science Issues in Antiterrorism: An International Paradigm  
• International Protected Area Exchange  
• Boise Extravaganza in Set Theory (BEST)  
• Recent Advances in Genetics and Cell Biology  
• Climate Change, Sustainability, and Water Resources in the Arid West  
• Soil-Plant-Water Relationships in Arid Environments  
• Management of Endangered Species in the American West: Policy and Practice  
• Ion channels: Integration of Computer Simulations with Experiments  
• Library Science and Archives: Forming Partnerships, Making Connection  

WORKSHOPS  
(see page 18)  
• DockoMatic: Docking Calculations and Homology Modeling  
• Grant Writing for Foundations  

FIELD TRIPS  
(starting on page 15)  
• Engineering, Geology, and Engineering Geology of Hoover Dam and the O’Callahan-Tillman Bridge  
• Devils Hole and Ash Meadows National Wildlife Refuge  
• Landscape Photography of the Desert Southwest  
• Tule Springs Fossil Beds  
• Evening Hike to Potato Knoll in Red Rock Canyon National Conservation Area  
• Nevada Solar One 400 Acre Concentrated Solar Power Plant  
• An Ecological Transect of the Sheep Range – A great Basin Sky Island  
• Zion National Park: Geology, Natural Resource Management Policy, and Dinosaur Tracks  

NOTE: These programs are being planned as of 17 March 2013. However, changes in offerings occasionally occur. For up-to-date information, please visit the Pacific Division website, pacific.aaas.org