

# PERSpectives

Newsletter of the Pacific Estuarine Research Society

Winter 2014

## PRESIDENT'S REPORT



Tony D'Andrea—PERS President.

It seems like only a short while ago that 114 PERSians were gathered in Newport, Oregon at the PERS 2014 Meeting to reconnect with their friends and colleagues, exchange ideas, and revitalize the collective Pacific Northwest estuarine research community. A changing of the guard in PERS leadership occurred at the 2014 meeting. Two members of the board – Steven Rumrill (Past President) and Pascale Goertler (Student at large member) – were recognized for their service to the society. Gary Williams also passed the gavel to me as he transitioned to Past President. Thanks for all your efforts (and advice) over the last two years! We also welcomed new members of the PERS executive board including Jude Apple as the President Elect and Emily Lemagie as the Student At Large Member. In addition, one of our active PERS members, Jason Stutes, who recently moved to Alaska shared with the board his willingness to promote PERS in that region. During the meeting, he was nominated and appointed to a new Member-At-Large position for Alaska to formalize his role for PERS. Overall, the Newport meeting continued the tradition of good science,

exciting presentations, and a collegial environment that supports student participation in the society. Financially, the meeting was also profitable allowing both an increase in the PERS conference fund for future meetings and \$1,000 added to the Eldridge Memorial Fund that supports student research. A special thank you goes to Oregon Sea Grant who was the major sponsor of the meeting. Members left energized and looking forward to the 2015 Meeting.

Speaking of the 2015 meeting, Si Simenstad agreed to take on the responsibilities of chair for the 2015 PERS meeting in Seattle with assistance by

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### DECEMBER 2014

#### Special article of interest:

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- \* Fallen Stars
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- \* PERS 2015 Meeting News

## ANNOUNCEMENTS

- ◆ PERS 2015 Annual Meeting is March 19-21—see more details pg. 9
- ◆ PERS receives Tax Exempt Status—see more details pg. 10
- ◆ More options for CERF membership—see CERF corner 2
- ◆ PERS Student Funding opportunities increase see pg. 10



## CERF CORNER

### *1. CERF 2015 in Portland, Oregon, November 8-12, 2015*

A big thank you to the many PERSians that are volunteering their time as part of the CERF 2015 Planning Team. There will be PERS fingerprints throughout the conference program with members serving as the conference chairs, on the scientific program committee, organizing field trips and student activities, and as members of the advisory subcommittee. The scientific program is starting to come together with over 90 scientific sessions proposed around the conference theme of “Grand Challenges in Coastal and Estuarine Science”. There will be a keynote address before the President’s reception on the first evening of the conference and plenary sessions on Monday and Tuesday. CERF is still lining up our top choices for these sessions but the proposed topics are Sea Level Rise (Monday) and the Synergistic Effects of Multiple Uses and Stressors on Estuaries (Tuesday). Similar to the CERF 2013 / San Diego meeting, there will be multiple speakers for each of the plenaries across several disciplines (e.g. research, policy, outreach) to provide a broader perspective. A new idea for this conference is to create megaposters from the plenary sessions that will be displayed for the whole conference in the poster hall. The planning committee is also putting together a broad menu of social and networking activities, especially for students and young professionals. Stay tuned as the detailed schedule comes out over the next month or so. The call for abstracts should be announced in January. For the latest on the meeting, see the meeting website: <http://www.erf.org/cerf2015>

### *2. Changes in membership options for CERF*

There have been some big changes in membership options for CERF in the last couple of years. Examples include new membership categories for early career professionals and members from emerging and developing countries. One complaint we had from members was that memberships were based on the calendar year (Jan 1 – Dec 31). During conference years, many new members would pay their dues before the biennial meeting (November) then immediately be asked to renew for the following year in December. CERF now offers anniversary date memberships which al-

low you to receive an entire year of benefits from the day you join or renew.

### *3. Request for candidates for the Governing Board*

Several elected positions on the CERF Governing Board are up for election in 2015. Walter Boynton, CERF Past-President, will be making a call for nominations out to the broader membership early in 2015. The CERF Board positions that are open for nominations include: President Elect (6 year term), Members at Large (2 positions, 4 year term), Secretary (2 year term), and Student Member (2 year term). If you know of any potential candidates for these positions or would like to nominate yourself, let me know and I will pass on those names to Walter.

### *4. New committees to expand member participation in CERF governance*

One of the more promising developments that emerged during the recent CERF Governing Board (GB) meetings was a recognition by many Board members of the need to provide opportunities for more participation by the membership in CERF. In response, two new committees have been established: (1) Outreach and Career Development Committee; and (2) the Standing Committee of Past, Current, and Presidents-Elect of CERF Affiliate Societies.

The Outreach and Career Development Committee was established to provide leadership opportunities within CERF and provide career development services for students and early career members. An additional goal is to enhance CERF’s communication strategy via social networks and other digital media. The overall goal is to provide services that create more value for CERF membership to students and early career professionals that should help recruit and maintain membership as they establish themselves within the field of estuarine and coastal sciences. The committee is currently chaired by Leanna Heffner (CERF GB Student at Large member) and is unique in that it also includes Student at Large members from the affiliate societies, including our own Emily Lemagie from PERS, as well as additional students and young professionals from the CERF membership. This new committee provides an excellent opportunity for students to gain leadership experience in CERF and provide feedback to the Board on the needs of students and early career professionals that are not currently being met by the society. Emily provides a short report on her experience as a

(President's Corner continued from page 1)

meeting co-chair Jude Apple. They have already finalized the venue and dates for the meeting. It will be held at the Talaris Conference Center near the University of Washington campus on March 19-21, 2015. See the announcement later in this issue, and the PERS website for more details on the meeting venue, lodging, and estimated registration costs.

As 2014 comes to a close, I call on all PERSians to renew their memberships to keep PERS financially strong and I encourage members to send in their CERF membership dues. I hope everyone is looking forward to the CERF 2015 conference in Portland. Meeting co-chairs and PERSians extraordinaire Ron Thom and Walt Nelson are putting together a great conference program.

I am looking forward to seeing everyone in Seattle!

Tony D'Andrea, PERS President

(CERF Corner continued from page 2)

member of the committee in the Student Corner section of the PERS newsletter.

The second new group is the Standing Committee of Past, Current and Presidents-Elect of CERF Affiliate Societies which was established as a standing committee at the recent GB meeting in October by Ken Heck, current CERF President. The role of Affiliate Society Presidents in CERF governance was a topic of discussion this past fall. The short-term results of these discussions was the establishment of a new standing committee composed of the President, President-Elect, and Past-President of the CERF Affiliate Societies that would meet quarterly via conference call to discuss CERF-Affiliate society relationships and other issues important to the Affiliate Societies. An additional goal of this new committee is to provide more continuity for Affiliate Society membership on the GB by providing experience for President-Elects before their terms on the GB. The committee will have its first meeting in January 2015.

## Fallen Stars: Sea Star Wasting Syndrome along the Pacific Coast

By Steve Rumrill, Shellfish Program Leader, Oregon Department of Fish and Wildlife



Sea star communities (Cl. Asteroidea) were decimated by a mysterious mass mortality event along the west coast of North America during 2013-2014. Large-scale die-off of the sea stars has been attributed to an unparalleled outbreak of Sea Star Wasting Syndrome (SSWS), which is a poorly-known disease that appears episodically among populations of asteroid echinoderms. The syndrome begins with abnormal behavior of the afflicted sea stars and then progresses rapidly through the formation of lesions in the epidermis, tissue decay, fragmentation of the body, and death. Substantial loss of sea stars occurred in sub-tidal and intertidal marine and estuarine habitats in British Columbia, Washington, and California in 2013, and SSWS also affected populations in Oregon, Alaska and Baja California in the spring and summer seasons of 2014. Although the exact number of deaths is unknown, it is likely that hundreds of thousands to millions of sea stars have succumbed to SSWS over the past 24 months.

Over twenty species of asteroid echinoderms have been effected by the current outbreak of SSWS. Particularly high rates of mortality have been observed for *Pycnopodia helianthoides*, *Solaster dawsoni*, *Orthasterias koehlerii*, *Pisaster brevispinus*, *P. giganteus*, *P. ochraceus*, *Evasterias troschelii*, *Dermasterias imbricata*, and *Patiria miniata*. These sea stars serve important ecological roles as keystone predators, carnivores, and scavengers in marine and estuarine communities. Large-scale mortality of the sea stars is expected to have widespread ecological consequences in the rocky intertidal zone, in kelp beds, in sub-tidal hard-bottom habitats, and in soft-sediment communities. The proximal cause of SSWS is not fully understood, and new work was recently published to identify densovirus as the likely disease agent. The proximal cause of SSWS appears

to be a two-step process where the victims are compromised by: (1) an initial viral insult, followed by (2) a secondary bacterial infection. Observations and experiments indicate that the outbreaks of SSWS and mass mortality of sea stars have been associated with elevated seawater temperatures, although high temperatures alone cannot account for the spatial pattern of outbreaks along the west coast.

Sea stars are most commonly associated with fully marine habitats in shallow and deep waters. However, sea stars can also be conspicuous members of invertebrate communities in the marine-dominated regions of bays and estuaries along the Pacific coast. In particular, the ochre star (*Pisaster ochraceus*) is an important predator that inhabits a variety of hard substrata such as pilings, bridge supports, bulkheads, and rip-rap where they prey upon mussels, barnacles, and snails. Other sea stars such as the giant pink star (*Pisaster brevispinus*) and the sunflower star (*Pycnopodia helianthoides*) are voracious and important predators of bay clams, snails, and other molluscs in eelgrass beds and soft sediment habitats in the subtidal zone of bays and estuaries.

Outbreaks of SSWS and other diseases have caused mass mortality among echinoderm populations along the west coast in the past. For example, a large-scale die-off of sea urchins, sea stars, and sea cucumbers was observed in California during the 1970's, and additional die-offs (primarily urchins and sea stars) have occurred during each successive decade. However, the current outbreak of SSWS in 2013-2014 is unprecedented in magnitude, geographic extent, and duration.

Some species of sea stars (*Pisaster ochraceus* and *Pycnopodia helianthoides*) are widely regarded as keystone predators in the intertidal and subtidal zones. Consequently, it is clear that mass mortality of sea stars along the Pacific coast will disturb ecological communities, disrupt food webs, and alter trophic relationships. It is unclear, however, to what extent the dramatic decline in sea star populations will contribute to shifts in community structure and ecological processes in intertidal and subtidal habitats. New field experiments and monitoring efforts have been initiated to track the ecological impacts of SSWS at select locations along the coast.

(Continued on page 5)

### Charleston Bridge Southwest support May 2, 2014 (tide-0.7 MLLW)



Same red sponge for reference



### Charleston Bridge Southwest support May 16, 2014 (tide -1.5 MLLW)

Photos: Scott Groth, ODFW

Time series photos of a rapid die off event of *Pisaster ochraeus* attributed to Sea star Wasting Syndrome observed between May 2 and May 16, 2014 at Charleston Bridge, Coos Bay, Oregon. Photo by Scott Groth, Oregon Department of Fish and Wildlife

(Sea Star Wasting, continued from page 4)

What are the prospects for recovery of west coast sea star populations following the current large-scale SSWS event? With the exception of *Heliaster kubiniji* (which experienced a substantial die-off in the Gulf of California in the late 1970s), echinoderm communities have largely recovered from the past mortality events. In addition, some scattered populations of sea stars appear to be relatively unaffected by the 2013-2014 event, and healthy populations have been observed intermittently along the coast. It is also encouraging that unusually large numbers of juvenile sea stars have been observed in the intertidal and subtidal zones at several locations. It is not clear if the juveniles are the result of mass spawning by infected adults in response to the SSWS event, or if they preceded the outbreak of SSWS and emerged from cryptic habitats following the decline in adults. It is likely that the low densities of remaining adult sea stars may pose a substantial hurdle to reproductive success in the immediate future. Surviving adults will be isolated from other mature individuals, and fertilization success may be problematic for the species which broadcast their gametes directly into the surrounding seawater.

Numerous academic institutions, state and federal agencies, public aquaria, coordinated monitoring programs, citizen scientist organizations, and other groups have initiated activities to monitor the progression and ecological impacts of SSWS along the west coast. For example, information about the location and severity of SSWS is being gathered by academic investigators (in California, Oregon, Washington, and British Columbia), state agencies (CADFW, ODFW, WADFW), the west coast network of Marine Reserves and Marine Protected Areas, federal agencies (NOAA, Sea Grant Programs, National Marine Sanctuaries, National Parks and Seashores; USGS, USFWS), the Multi-Agency Rocky Intertidal Network (MARINe), and by several public aquaria and marine life centers. Still other scientists (in New York, Washington, Oregon, and California) are working to identify the infectious agent and etiology of SSWS. All of these groups will benefit when the data and information are gathered in a coordinated manner that will increase our collective knowledge of the current SSWS event of 2013-2014.

## STUDENT CORNER

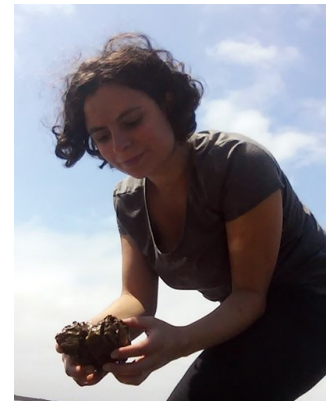
### Student Profiles

#### Iria Giménez

##### EVALUATING THE POSSIBLE FEEDBACKS BETWEEN BIVALVE AGGREGATIONS AND ALKALINITY CYCLING UNDER ACIDIFICATION CONDITIONS

Iria Giménez is a PhD student working with Dr. George Waldbusser at the College of Earth, Ocean and Atmospheric Sciences (CEOAS), Oregon State University. As part of her dissertation work, she investigates the biogeochemical structure and function of bivalve aggregations such as oyster reefs and clam beds and the impacts of ocean acidification on these systems.

She presented the theoretical framework of her work, as well as the plan for her field and laboratory experiments at PERS 2014 and received great feedback from the PERSian community. Her presentation was the runner up in the graduate student poster awards. She is currently starting the first pilot studies on assembled shell aggregations, will start the field studies early next year and hopes to present some interesting results at the PERS 2015 meeting in Seattle.



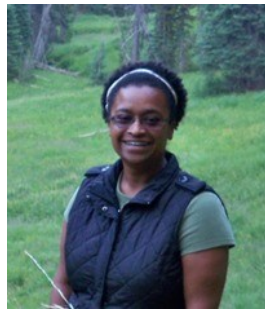
#### Chanté Davis

##### FINE-SCALE POPULATION STRUCTURE AMONG CHINOOK SALMON (*ONCORHYNCHUS TSHAWYTSCHA*) OF THE SILETZ RIVER IN OREGON: A PRELUDE FOR INCORPORATION OF RIVERSCAPE GENETICS

Chanté Davis is a 3rd year PhD student in the Coastal Oregon Marine Experiment Station at the Hatfield Marine Science Center, of Oregon State University. The aim of her research is to analyze the functional genetic diversity of Chinook salmon in the Pacific Northwest and develop models to determine how the riverscape influences the spatial and temporal distribution of populations. She is interested in the ecology and evolution of life history traits and how these and environmental factors contribute to population substructure. Her work provides the first fine-scale analysis of genetic di-

iversity for Chinook salmon within Siletz River. Current findings indicate that there may be four spawning subpopulations within this system. There was evidence for interaction among physical, environmental, and anthropogenic factors that lead to the complexity of subpopulation structure observed. This scenario provides a context for the application of riverscape genetics theory to understand how pattern and process are working to maintain the Chinook salmon substructure.

Her presentation at the PERS 2014 meeting represented a preliminary assessment of Chinook salmon population structure and won the award for best graduate student poster. Her next steps are to generate a new set of functional markers and select riverscape variables that are hypothesized to influence Chinook salmon fitness. The finer-scale genetic variability that may be present within individual basins, such as the Siletz River, is currently not part of recovery planning. It is hoped that the new research and models in development provide improved understanding of how populations may be shaped by the environment and better inform conservation planning strategies for this species in the future.



### Joshua Morel Matos

#### CONSEQUENCES OF SALINITY ON GROWTH AND TISSUE CHEMISTRY IN EELGRASS (*ZOSTERA MARINA*)

Joshua Morel is a Biology Undergraduate student at the Interamerican University of Puerto Rico, San Germán Campus, graduating in December 2014. From January to June 2014 he had the chance to be part of a NSF funded program called Multicultural Initiative in the Marine Sciences: Undergraduate Program (MIMSUP) where he stayed at Shannon Point Marine Center in Anacortes, WA, and learned more about Marine Biology and the Pacific Northwest. While in the program he researched the effects of salinity on eelgrass populations, and how it would affect its susceptibility to the pathogen/protist *Labyrinthula zosterae*. He presented his research findings to NOAA at their Western Regional Center in Seattle, DNR via video conference and at the PERS 2014 conference where he won first place for best undergraduate poster. Because of the distance between Puerto Rico and Washington he de-

ecided to leave his research findings with his advisor Sylvia Yang, who continues her work on eelgrass in the Pacific Northwest.

In December he started a contract with USFW at the Cabo Rojo National Wildlife Refuge, Puerto Rico, where he will be in charge of the nurseries of native, endemic, and endangered flora, with the tasks of inventory, propagation and collection of seeds to be propagated. He also volunteered as a research assistant/technician to various projects, including the monitoring and recording of various American Kestrel nests placed in key areas of the Cabo Rojo refuge and the recovery of the critically endangered Puerto Rican crested Toad. He aspires to continue his work and research toward the recovery and protection of terrestrial and marine wildlife.



### Darren Wostenberg

#### MICROSATELLITE DESIGN AND APPLICATION IN *WATERSIPORA* (BRYOZOA), A COMPLEX OF INVASIVE SPECIES

Darren Wostenberg is a student at San Jose State University working on his M.S. thesis titled "Investigation of population structure and distribution of the invasive bryozoan *Watersipora* spp. along the California coast using nuclear and mitochondrial DNA" and he presented a poster at the 2014 PERS conference in Newport, Oregon. The focus of his research is designing DNA microsatellite markers and using nuclear DNA microsatellites and the mitochondrial gene cytochrome *c* oxidase I (COI) to examine the distribution and structure of the *Watersipora* cryptic species

complex along the California coast. The project will attempt to answer questions regarding invasion patterns and hybridization among *Watersipora* spp. and is part of a larger project to determine how comparisons of factors such as temperature and vector activity increase the predictability of marine invasions. Darren is finishing his thesis and begins employment with Animal and Plant Health Inspection Service at the National Wildlife Research Center located in Fort Collins, Colorado in January, 2015.



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### *PERS Updates for Students*

### **CERF Outreach and Social Media Update** By Emily Lemagie, PERS Student Representative

This year I have participated with the CERF social media team and we have made a lot of progress in outreach and engagement.



Our mission has been to increase awareness of CERF meetings, CERF science, CERF publications and CERF scientists amongst CERF members, potential members, coastal scientists, students, natural resource managers, decision makers, and the general public through social media.

We tweet and post almost daily to the CERF Twitter feed (<https://twitter.com/cerfscience>), Facebook page (<https://www.facebook.com/CERF.Estuaries.Coasts>) and the designated student Facebook page (<https://www.facebook.com/CERFstudents>) to disseminate Estuaries and Coasts related news, CERF conferences and promotions, and relevant conferences, workshops, fellowships, and news. The CERF social media team also has a workshop session at the upcoming CERF 2015 meeting in Portland, “Social Media & Science,” so look for us there.

Recently, we started participating in a Twitter initiative to highlight publications by early career scientists (students and scientists who have graduated within 3 years) as lead author. You can find more info about this initiative at <http://www.innge.net/?q=node/379>. Every Thursday we tweet early career papers that have been recently published in Estuaries and Coasts. I am particularly excited about this initiative, which resonates with my goals as the PERS Student Representative, and have taken the team lead. Please participate by tweeting about these papers with the hashtag #ECRpaper or by sending me updates with the paper, author, and topic to post.

I am hoping to apply what I have learned from the CERF team to advance PERS outreach and social media, so listen for a call at the Seattle meeting for student volunteers to form our own PERS social media team.

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**Seattle, WA—Home of PERS 2015**

# **Tides of Change? Summary of the PERS Member Survey (2014)**

**By Jude Apple, PERS President-Elect**

Prior to the 2014 meeting in Newport, OR we had asked PERSians to participate in a survey that inquired about our preferences for annual meetings, use of the PERS website, and potential avenues of engaging more in web-based and social media platforms. We had over fifty respondents to the survey, which is a return that would make many social scientists envious – so thanks for your input. Approximately 70% of the respondents self-identified as researchers/scientists, with resource managers, educators, graduate students, and faculty each contributing equally to the remaining 30%. These professional demographics are a good reminder that our organization could be more deliberate about promoting opportunities for and hearing the voices of our graduate students and early-career scientists who are moving into our ranks, specifically as it pertains to ideas about the nature of our annual meetings and the role of technology and social media in science and communication.

## **The Annual Meeting**

When asked about the annual meeting, we continue to place a high priority on the value of both poster and oral sessions, having a guest speaker at the banquet was valuable, and we overwhelmingly agree that meeting annually is a tradition we should continue. Only a third of respondents (34%) had participated in field trips at the PERS meeting, although those who did found these experiences valuable and an important part of their meeting experience.

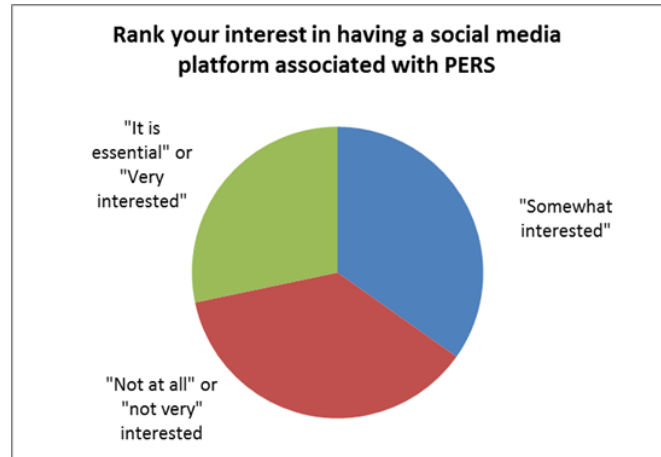
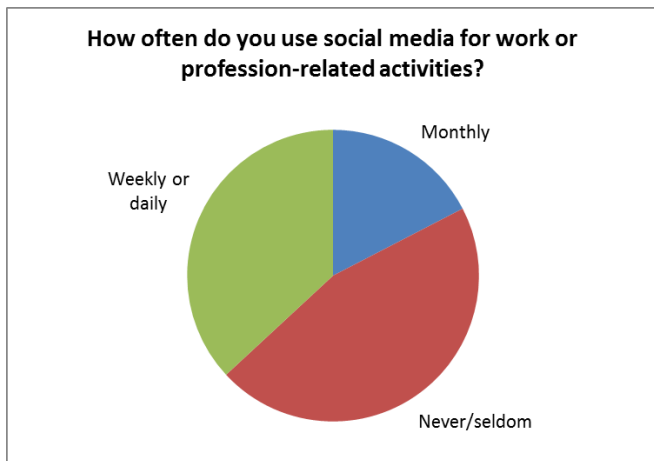
Many PERSians – and in particular the graduate student contingency – thought the annual meeting could be a better resource for early career scientists and provide more deliberate opportunities for networking and professional development. Almost everyone (92%) was interested in technology-based professional development workshops (e.g. R-graphics tutorial) associated with the meeting. Many respondents offered suggestions to promote networking and career preparedness, including speed dating with potential employers or short talks on “a day in the life of a scientist” to dispel the romanticized image of trudging across a wetland mitigation site in hip waders with the wind blowing through your hair. Many of the younger PERSians are interested in figuring out what it really takes to be a successful estuarine scientist in the Pacific Northwest and how PERS can help foster these skills and open doors into academia or state and federal agencies.

## **PERS and Technology**

Although everyone’s daily use of technology is generally high (how many hours are consumed with phones, laptops and tablets?), interactions among the PERS community has remained more traditional and centered on personal interactions during the annual meeting. Indeed, most respondents (68%) only use the PERS website in the weeks before the meeting for meeting logistics and travel plans, but seldom during the remainder of the year. Suggestions for a stronger web-presence included using the PERS website to post publications relevant to estuarine research in the PNW and highlighting research and professional resources that PERSians have to offer to the broader community.

Regarding our interaction with professional and social media, almost 50% of PERSians “never” or “seldom” use these platforms. So are we all Luddites that eschew the use of technology in our work and destined to the path of the dinosaurs? I think not, it is just that we have each found what works for us in our habits of professional and social communication. However, it is important to recognize that there is a potential for growth, interaction and dissemination of ideas for PERS through these emergent web-based platforms. Indeed, over one third of PERSians use social media at least weekly – if not daily – and engage in a number of social and professional media platforms (e.g. Facebook, LinkedIn, ResearchGate, Twitter, etc). When asked if they were interested in having a social media platform associated with PERS, over one third (35%) of the respondents indicated that they were “not very” or “not at all” interested. This was juxtaposed by 17% who think that having a social/professional media platform is “essential” for PERS. Not surprisingly, this divide also falls along professional demographic lines (I will leave you to guess which represent the graduate student perspective). I believe our next step is to explore the most relevant and effective ways to increase our web presence and connectivity, and empower the early adopters in our organization to help with this transition.





Results of the 2014 PERS members social media survey.

## ANNOUNCEMENTS

### *Save the Date: PERS 2015 Meeting in Seattle on March 19-21, 2015*

PERS 2015 will convene at the Talaris Conference Center (<http://www.talarisconferencecenter.com/>) near the University of Washington campus and the University Village. Talaris is an exquisite, serene setting somewhat removed from the area's commercial district. The program will foster the best in research presentations and discussions, as at other PERS meetings. Registration and an evening social will begin on Thursday, scientific program will run all day Friday followed by a banquet dinner, and the final scientific program on Saturday morning will end at noon with lunch provided. The Thursday evening social (3/19) is tentatively planned to be hosted at the UW's School of Aquatic and Fishery Sciences on the southwest corner of the UW campus. The remainder of the meeting will be held at Talaris. Your registration will cover the social Thursday evening, continental breakfasts, lunches and the banquet on Friday evening, 3/20.

Tentative Registration Cost:

Member: \$180.00  
 Student: \$90.00  
 Non-Member: \$225.00

The call for abstracts will be out in early January. Be sure to check out the meeting website for the most current information: <http://www.pers-erf.org/pers2015.html>

### *Updated PERS Student Funds Page makes it easier for members to donate!*

It is exciting to hear that 2015 will be the first year PERS will be awarding student grants from the Eldridge Research Grant fund. Jeannie recently updated the student awards page on the PERS website including links to our PayPal pages for members to make donations to these student funds: <http://pers-erf.org/studentgrants.html>

Our student members are an important part of our society and I encourage everyone to continue to support our PERS student members! In addition we are happy to announce that your donations are now tax deductible.

**Happy Holidays to PERSians and their families and best wishes for the new year!**

## Student Funding Update

Jeannie Gilbert—Secretary/Treasurer

We have established a page on the website <http://pers-erf.org/studentgrants.html> detailing the different types of funding we have available to our student members.

Annual Meeting Awards—Some of our students asked us to provide this information on the website so newer members can be informed about potential benefits to presenting at PERS Annual Meetings.

Travel Fund— Student presenters at the annual meeting can apply for funding to defray travel expenses to the meeting. Deadline for PERS 2015 is 3/10/2015.

Heinle Award—Named for a founding member of the PERS society this Award provides up to \$500 in travel support to a CERF national meeting in on of the 2 years following the year it is awarded. Best overall Graduate presentation receives this award at the PERS Annual Meeting.

Eldridge Memorial Fund—Our newly launched and long in the works research support fund is now available. Applications are available on the website. Deadline for 2015 awards is 2/25/2015.

## PERS Tax Status

Jeannie Gilbert—Secretary/Treasurer

As some of you may be aware, for several years PERS has been a non-profit society as our mission statement has stated since the beginning. We have no employees and no property so that has not been an issue. In recent years though as we have stepped up our student support it had become clear that donors, particularly of larger sums may need a tax deductible donation, so we began the process of being recognized as a Tax Exempt organization that can accept donations and provide a tax deductible receipt. As of 2014 PERS is now classified as a public charity and has received 509 (a) (2) status which falls under the umbrella of the same rules as a 501 (c) (3) in regards to tax deductions for donations. This also means we can receive bequests, devises, transfers or gifts.

There is a long story and loads of confusion that goes with this story but thanks to improvements in forms, procedures, filing, and many other aspects of our status we have finally gotten our status settled both at the state and federal levels.

Should you consider a gift to PERS please contact our Treasurer to assure you get a receipt for that donation. There are donation buttons on the website to provide an easy method for a quick dash of support for our student programs and/or our society.



PERS 2014 Meeting student award winners with Tony D'Andrea, PERS President (on the far left). Award winners (from L to R): Katelyn Bosley (Best Graduate Oral Presentation), Torian Jones (Honorable Mention Undergraduate Student Presentation), Josh Morel Matos (Best Undergraduate Student Presentation), Iria Gimenez Calvo (Honorable Mention Graduate Poster Presentation), Chanté Davis (Best Graduate Poster Presentation), Katrina Poppe (Honorable Mention Graduate Oral Presentation), and Emily Lemagie (Don Heinle Award for best overall student presentation at the conference). Photo by Gary Williams.

**PACIFIC  
ESTUARINE  
RESEARCH  
SOCIETY**

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## A Look Back

### PERS 2014—Newport, OR



Steven Rumrill (Center) describes eelgrass restoration in Yaquina Bay, OR on the field trip during the PERS 2014 Annual Meeting in Newport, OR. Photo by Gary Williams.



Plenary speakers David Wethey (left) and Sally Woodin (right) during the PERS 2014 meeting. Photo by Gary Williams.

## PERS BOARD OF DIRECTORS

### PERS Executive Officers:

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Oregon Department of Fish and Wildlife,  
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Anchorage, AK

### Student Representative:

**Emily LeMagie**  
University of Oregon  
Corvallis, OR

### PERS Administrators:

**Newsletter Editor:** vacant

**List Serve Coordinator**  
vacant