

PHYSIOLOGICAL ECOLOGY SECTION, 2014

MISSION, OFFICERS, AND MEMBERSHIP

The Physiological Ecology Section promotes research and teaching that explore interrelationships among the functions of organisms and their environments. **Jeannine Cavender-Bares** (University of Minnesota), the current President of the section, has been working to expand membership, support the activities of young scientists, including supporting mentorship opportunities and participation in the student awards competitions, and she continues to work with donors and corporate sponsors to help fund student travel to ESA. During autumn 2014, a new President will be elected. **Molly Cavaleri** and **Joseph Bump** (Michigan Technical University) were elected as Co-Secretaries for a two-year term starting in January 2014 with goals of promoting both plant and animal physiological ecology and increase student participation in section activities. Student Liaison **Aaron Ramirez** (UC Berkeley) has helped to engage corporate sponsors and to expand section membership. Webmaster Rob Jackson continues his long-term service to the section; our web site is <http://www.biology.duke.edu/jackson/ecophys/>.

We have broad section membership, and many members are also part of the Biogeosciences, Education, Rangeland Ecology, Researchers at Undergraduate Institutions, Soil Ecology, Urban Ecosystem Ecology, and Vegetation Sections.

STUDENT AWARDS

The physiological ecology section is very grateful to the judges who make it possible to offer these awards each year.

Student Travel Awards

Student travel awards were granted this year from financial gifts from two anonymous donors as well as LiCor BioSciences and Decagon Devices. Our long-time anonymous donor has again agreed to donate \$3000 each year until 2019 to support student travel to the ESA meetings. A new anonymous donor has gifted \$2500. A panel of five judges selected winners based on (1) the student's research and on (2) the potential for attending the conference to contribute to the student's professional development. Each student receives \$500 to help offset the cost of attending the annual ESA meeting.

Seven travel grants were awarded to students to attend the 2014 Sacramento meeting. The 2014 Travel Award winners are **Heather Kropp**, Arizona State University; **Alexandria Pivovarovoff**, University of California, Riverside; **Jennifer Wilkening**, University of Colorado; **Alice Broadhead**, North Carolina State University; **Marth Brabec**, Boise State University; **Chelsea Griffin**, Texas Tech University; and **Marta Percolla**, California State University.

The Billings Award, the New Phytologist Poster Award and the Plant, Cell and Environment Postdoctoral Award are given to students and post docs each year to recognize significant advancements in physiological ecology. Students giving oral and poster presentations at the annual ESA meetings can enter, and entrants are judged on the rigor, creativity, importance, and quality of presentation of the research. The **New Phytologist Trust** has long contributed to the Billings Fund, which supports prizes for both the Billings Award and the New Phytologist Poster Award. **CRC Press** supports student efforts by donating books to student winners and honorable mentions of the student award competitions. Plant, Cell and Environment (Blackwell Publishing, Dr. Keith Mott, Editor-in-Chief) supports the postdoctoral award.

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Billings Oral Presentation Award 2013

Fiona Soper, Cornell University, “Seasonal and individual variation in leguminous tree nitrogen fixation in a natural ecosystem” with co-authors Tom Boutton and Jed Sparks.

Honorable mentions: (1) **Aaron Ramirez**, University of California, Berkeley, “Wimpy leaves and sturdy stems: Decoupling of drought tolerance at the stem and leaf levels in island chaparral” with co-author David Ackerly; (2) **Rory Telemco**, Iowa State University, “Here be dragons: Proximate mechanisms mediating temperature and biogeography in alligator lizards” with co-authors Elizabeth A Addis, Anne M Bronikowski, Gerardo A Cordero, Rebecca L Polich

New Phytologist Poster Award, 2013

Elizabeth Wilson, Texas A&M University, “The effects of water stress on variability in mesophyll conductance of loblolly pine (*Pinus taeda* L.) leaves with co-authors Jason Vogel and Jason West

Plant, Cell and Environment Postdoctoral Oral Presentation Award 2013

Sean Michaletz, University of Arizona, “Intra- and interspecific tree growth rates across a broad climate gradient: Toward a general metabolic scaling model linking climate, functional traits, and individual plant growth” with co-authors Brian J. Enquist, James H. Brown, Vanessa R. Buzzard, Sean T. Hammond, Amanda N. Henderson, Michael Kaspari, Sean McMahon, Lina Shen, Irena Simova, Robert B. Waide, Michael D. Weiser, and Jizhong Zhou

SECTION ACTIVITIES AT THE SACRAMENTO 2014 ESA MEETING

Mixer and Business Meeting

In Sacramento August 13, 2014, our Physiological Ecology Section will hold its mixer and business meeting on **Wednesday evening, 6:30 PM-8:00 PM** Magnolia, Sheraton Hotel. The 2014 travel grant awardees and 2013 Billings, New Phytologist and Plant, Cell and Environment award winners will be announced. Topics for discussion include:

- (1) Developing a partnership with the American Society of Plant Biologists to foster methods training in physiological ecology.
- (2) Promoting animal physiological ecology.
- (3) How can we provide mentorship opportunities for students and enhance student activities?
- (4) Continued fundraising efforts and endowment option to support student travel grants.

SYMPOSIUM

Allocation, Stress Tolerance and Transport: How Does Phloem Physiology Impact Plant Ecology? (Friday, August 15, 8 am-11:30 am)

Have you ever wondered how we can better understand plant ecophysiology by considering the physiological-basis of carbon movement in plants? Please join us for an exciting symposium on the last day of ESA.

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RADIOISOTOPE WORKSHOP

Workshop 24 - Monday, August 11, 2014: 11:30 AM-1:15 PM

302/303, Sacramento Convention Center

Organizer: Chantal D. Reid

Co-organizer: Andrew Weisenberger

SECTION RESOURCES

Web site: Reminder! Our web site is <http://www.biology.duke.edu/jackson/ecophys/>. The web site is very dynamic and packed with information about:

- faculty, postdoc, graduate, technician, and undergraduate positions,
- meetings of interest to our membership and links to other societies
- resources for teaching and mentoring, time management, and writing
- books, equipment, and more!

Section booth at the ESA meetings: For the fifth consecutive year, we will run a Physiological Ecology Section Booth at the annual meeting. The booth serves as a Section focal point, featuring:

- an area to post job announcements
- a listing of all the student entrants in the award competitions (and the judging ballot box)
- display of the student awards from the 2013 meeting.

Submitted by: Jeannine Cavender-Bares
President, Physiological Ecology Section, ESA