

ALEXANDRIA L. PIVOVAROFF

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EDUCATION

Ph.D. current **Plant Biology** – University of California Riverside; Riverside, CA, USA
Advisor: Louis Santiago

B.A. 2010 **Biology** – Whittier College; Whittier, CA, USA
Research Advisor: Cheryl Swift

PROFESSIONAL APPOINTMENTS

2013, 2015 **Adjunct Professor** in Department of Environmental Science, Whittier College

2014 **National Science Foundation (NSF) Graduate Research Opportunities
Worldwide / Chateaubriand STEM Fellow** with Sylvain Delzon, University of
Bordeaux; Bordeaux, France.

2011 – current **NSF Graduate Research Fellow** with Louis Santiago, University of California
Riverside

2010 – 2011 **Graduate Student Researcher** with Louis Santiago, University of California
Riverside

2009 **Research Assistant** with Phil Rundel, University of California Los Angeles

2008 – 2010 **Research Assistant** with Cheryl Swift, Whittier College

FELLOWSHIPS, AWARDS, AND HONORS

2014 **Dissertation Year Program Fellowship**, University of California Riverside (\$37,000)

2014 **Earl C. Anthony Travel Award**, University of California Riverside (\$900)

2014 **Botany Graduate Student Association Mini-Grant**, University of California
Riverside (\$200)

2014 **Ecological Society of America Physiological Ecology Student Travel Award** (\$500)

2013 **NSF Graduate Research Opportunities Worldwide** (\$5000) / **Chateaubriand
STEM Fellowship** (Honorary)

2013 **W.W. Thomson Award for Outstanding Research**, Botany and Plant Sciences
Department, University of California Riverside

2011 **NSF Graduate Research Fellowship Program** (\$132,000)

2010 **Chancellor's Distinguished Fellowship**, University of California Riverside (\$29,700)

2010 **Outstanding Contribution to Research Award**, Whittier College

2010 **Beta Beta Beta Biological Honor Society**

2009 **Omicron Delta Kappa National Leadership Honor Society**

2009 **Rose Hills Foundation Scholarship for Science and Engineering** (\$20,000)

2006 **John Greenleaf Whittier Merit Scholarship**, Whittier College (\$80,000)

PUBLICATIONS

Pivovarovff, AL*, Swift C, Battaglia L, Kunz B, Platt WJ, & Yoder CL. (2014) Physiological profiles as indicators of response to hurricane disturbance for three coastal wetland species. *Journal of Coastal Research*, DOI: 10.2112/JCOASTRES-D-14-00073.1 ***Corresponding author.**

Pouzoulet, J, **Pivovarovff A**, Santiago LS, & Rolshausen PE. (2014) Can vessel dimension explain tolerance toward fungal vascular wilt diseases in woody plants? Lessons from Dutch elm disease and esca disease in grapevine. *Frontiers in Plant Science*, 5: 253.

Pivovarovff, AL*, Sack L, & Santiago LS. (2014) Coordination of stem and leaf hydraulic conductance in southern California shrubs: A test of the hydraulic segmentation hypothesis. *New Phytologist*, 203: 842-850. ***Corresponding author.**

Pivovarovff, A*, Sharifi R, Scoffoni C, Sack L, & Rundel P. (2014) Making the best of the worst times: traits underlying combined shade and drought tolerance of *Ruscus aculeatus* and *Ruscus microglossum* (Asparagaceae). *Functional Plant Biology*, 41: 11-24. ***Corresponding author; cover photo.**

SUBMITTED AND IN-PREP MANUSCRIPTS

Pivovarovff, AL, Pasquini SC, Alstad KP, De Guzman M, Stemke JS, & Santiago LS. Multiple pathways for drought survival among woody plant species at a desert – chaparral ecotone. *Submitted.*

Pivovarovff, AL, Vourlitis GL, Allen MF, Grantz DA, & Santiago LS. Individual hydraulic response strategies of four Mediterranean-type shrubs to long-term dry season nitrogen deposition. *In-prep.*

PRESENTATIONS

20. **Pivovarovff, AL**, Vourlitis GL, Allen MF, Grantz DA, & Santiago LS. Individual hydraulic response strategies of two chaparral and two coastal sage scrub shrubs to long-term dry season nitrogen deposition. International Mediterranean Ecosystems Conference (MEDECOS) XIII, Olmue, Chile. October 2014. (Talk).
19. **Pivovarovff, AL**, Vourlitis GL, Allen MF, Grantz DA, & Santiago LS. Individual hydraulic response strategies of four Mediterranean-type shrubs to long-term dry season nitrogen deposition. Ecological Society of America (ESA), Sacramento, California. August 2014. (Poster).
18. **Pivovarovff, AL**. The leaf hydraulic bottleneck in Californian chaparral and coastal sage scrub. Xylem Meeting, Besse, France. May 2014. (Talk).
17. **Woods, V***, **Pivovarovff A**, Santiago L, Pouzoulet J, & Rolshausen P. Detecting negative effects of fungal wood pathogens in *Vitis vinifera* prior to symptoms expression. Southern California Conference for Undergraduate Research (SCCUR), Whittier, California. November 2013. (Poster). ***Undergraduate mentee.**
16. **Brodie, M***, De Guzman M, **Pivovarovff A**, & Santiago L. Water use and xylem cavitation resistance in two invasive *Tamarix* species in Mojave Desert riparian ecosystems. SCCUR, Whittier, California. November 2013. (Poster). ***Undergraduate mentee.**

15. **Pivovarovff, AL** & Santiago LS. Functional traits better correlate with wet season than dry season water potentials in a Californian chaparral plant community. ESA, Minneapolis, Minnesota. August 2013 (Poster).
14. **Nunez, A***, **Pivovarovff A**, & Santiago L. Plant water relations in *Nicotiana glauca*, an invasive tree in arid southern California. University of California Riverside Undergraduate Research Symposium, Riverside, California. April 2013. (Poster). ***Undergraduate mentee.**
13. **Pivovarovff, A**, De Guzman M, Yates L, Hill G, & Santiago LS. Hydraulic strategies of woody plant species in the San Geronio Wilderness. California Desert Research Symposium, Riverside, California. October 2012. (Poster).
12. **Pivovarovff, A**, Sack L, & Santiago L. Coordination of stem and leaf hydraulic conductances in California chaparral and coastal sage scrub: A test of the hydraulic segmentation hypothesis. ESA, Portland, Oregon. August 2012. (Talk).
11. Santiago, LS, Sickman JO, Goulden ML, DeVan CM, Pasquini SC, & **Pivovarovff AL**. Seasonality of leaf carbon isotopic composition and leaf water isotopic enrichment in a mixed evergreen forest in Southern California. Eos Trans. American Geophysical Union Meeting, San Francisco, California. December 2011. (Poster). Suppl., Abstract 92(52): B21H-0364.
10. **Pivovarovff, A**, Sharifi R, Scoffoni C, Sack L, & Rundel P. Best of two worlds: gas exchange and hydraulics of shade and drought tolerant species *Ruscus aculeatus* and *R. microglossum*. MEDECOS XII, Los Angeles, California. September 2011. (Talk).
9. Santiago LS, Alstad KP, De Guzman ME, Pasquini SC, & **Pivovarovff AL***. Consequences of drought-induced vegetation change for water cycling along a desert-shrubland gradient. MEDECOS XII, Los Angeles, California. September 2011. (Talk). ***Presenter.**
8. Santiago LS, Alstad KP, Pasquini SC, **Pivovarovff AL**, Ambriz J, & Stemke JA. Xylem vulnerability and hydraulic architecture as determinants of plant drought resistance on a desert-shrubland gradient. ESA, Austin, Texas. August 2011. (Talk).
7. **Pivovarovff, A** & Santiago L. Decoupled stem and leaf hydraulic conductance in California chaparral and coastal sage scrub plant species. ESA, Austin, Texas. August 2011. (Poster).
6. Santiago LS, Alstad KP, Pasquini SC, **Pivovarovff AL**, Ambriz J, & Stemke J. Xylem vulnerability and hydraulic architecture as determinants of drought resistance in desert chaparral vegetation. Southern California Academy of Sciences (SCAS), Pomona, California. May 2011. (Talk).
5. **Pivovarovff, A**, Sharifi R, Sack L, & Rundel P. Best of both worlds: gas exchange and hydraulics of shade and drought tolerant species *Ruscus aculeatus* and *R. microglossum* (Ruscaceae). ESA, Pittsburgh, Pennsylvania. August 2010. (Talk).
4. **Pivovarovff, A***, Sharifi R, Sack L, & Rundel P. Eco-physiological study of *Ruscus aculeatus* and *R. microglossum*: Morphology, gas exchange, and hydraulics. SCAS, Los Angeles, California. May 2010. (Talk). ***Received ‘Honorable Mention in Ecology and Evolution’**
3. **Pivovarovff, A**, Sharifi R, Sack L, & Rundel P. Best of both worlds: gas exchange and hydraulics of shade and drought tolerant species *Ruscus aculeatus* and *R. microglossum* (Ruscaceae). SCCUR, Carson, California. November 2009. (Talk).
2. **Pivovarovff, A**, Swift C, & Battaglia L. Species response to changing light and water availability along a gulf coast salt marsh forest gradient. ESA, Albuquerque, New Mexico. August 2009. (Poster).
1. **Pivovarovff, A** & Swift C. Identifying species response to changing light and salinity at Week Bay. SCCUR, Pomona, California. November 2008. (Poster).

INVITED TALKS/SEMINARS

Pushing water through a stick: California chaparral and coastal sage scrub plant hydraulic properties in drought adaptation. University of California Riverside, Department of Botany and Plant Sciences. April 2013.

The role of hydraulics in plant drought strategies in southern California. Whittier College, Department of Environmental Science. February 2012.

COURSES TAUGHT

Introduction to Environmental Science, Whittier College

Natural History of Southern California, Whittier College

PROFESSIONAL PARTICIPATION, SERVICE, AND OUTREACH

Professional participation

- Moderator and volunteer, Southern California Conference for Undergraduate Research, Whittier, California, November 2013
- Student Liaison; Ecological Society of America, Physiological Ecology Section, 2012 – 2013
- Reviewed manuscripts for *Canadian Journal of Plant Science*; *Theoretical and Experimental Plant Physiology*; *Global Ecology and Biogeography*; *Environmental Management*; *African Journal of Agricultural Research*.

Service to the Botany and Plant Sciences Department, University of California Riverside

- Search committee member for Integrative Plant Physiologist, 2014
- Volunteer, Plant Biology Table for ‘Highlander Day,’ April 2013
- Treasurer, Botany Graduate Student Association, 2012-2013
- Fundraiser volunteer: November 2012, November 2013

Community outreach / Broader impacts

- Women in Math and Science (WIMS), University of California Riverside, 2012 – current
- Organizer, WIMS ‘Career Development Panel and Discussion Lunch,’ University of California Riverside, April 2013
- K – 12 science fair judge for (1) Riverside Union School District ‘Science and Engineering Fair’ in Plant Biology, senior division, February 2013; (2) St. Catherine of Alexandria Elementary School ‘Science Fair,’ January 2013
- Volunteer, Botany Table for Value of One ‘Walk & Roll and Resource Fair’ (a community event for people with disabilities), Riverside, California, October 2012
- Volunteer, California State University Fullerton ‘Kathleen E. Faley Memorial Special Games’ (a non-competitive game day for developmentally disabled K – 12 students), Fullerton, California, May 2008.

PROFESSIONAL MEMBERSHIP

2009 – current **Ecological Society of America**