

**CONTACT INFORMATION**

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**EDUCATION**

Ph.D. Molecular and Cellular Biology Arizona State University 2016  
Advisor: Reed Cartwright  
B.S. Bioinformatics and Genomics Arizona State University 2010  
*magna cum laude*

**PUBLICATIONS**

Furstenau, TN, and RA Cartwright (2016). The effect of the dispersal kernel on isolation-by-distance in a continuous population. *PeerJ* 4:e1848. doi:10.7717/peerj.1848

Pizzio GA, Paez-Valencia J, Khadilkar AS, Regmi K, Patron-Soberano A, Zhang S, Sanchez-Lares J, Furstenau T, Li J, Sanchez-Gomez C, Valencia-Mayoral P, Yadav UP, Ayre BG and RA Gaxiola (2015). *Arabidopsis* proton-pumping pyrophosphatase *AVP1* expresses strongly in phloem where it is required for PPi metabolism and photosynthate partitioning. *Plant Physiology* 167:1541-1553. doi:10.1104/pp.114.254342

**PRESENTATIONS****Talks**

- 2015 *Bayesian estimation of neighborhood size using composite marginal likelihoods*  
**Society for Molecular Biology and Evolution** · Vienna, Austria
- 2015 *Bayesian estimation of neighborhood size using composite marginal likelihoods*  
Molecular and Cellular Biology Colloquium · The Biodesign Institute
- 2014 *Evolution of Self-Incompatibility: Investigating the role of self-incompatibility systems in the prevention of biparental inbreeding.*  
Molecular and Cellular Biology Colloquium · The Biodesign Institute
- 2013 *Evolution of Self-Incompatibility: Investigating the role of self-incompatibility systems in the prevention of biparental inbreeding*  
Molecular and Cellular Biology Colloquium · Arizona State University
- 2012 *Is the  $H^+$ -pyrophosphatase involved in the regulation of sucrose transport in plants?*  
Molecular and Cellular Biology Colloquium · Arizona State University

**Posters and Abstracts**

- 2014 *The effect of the dispersal distribution on isolation-by-distance in a continuous population*  
Society for the Study of Evolution · Raleigh, NC
- 2014 *Characterization of Transgenic Arabidopsis thaliana overexpressing AVP1 and PLAFP*  
Undergraduate Research Poster Symposium · Arizona State University · Tempe, AZ  
Presented by Sean Wilson (undergraduate mentee)
- 2012 *H<sup>+</sup>-PPase AVP1 is necessary for phloem development in Arabidopsis thaliana*  
Molecular and Cellular Biology Graduate Student Retreat · Tempe, AZ
- 2012 *H<sup>+</sup>-PPase AVP1 is necessary for phloem development in Arabidopsis thaliana*  
American Society of Plant Biologists · Austin, TX

**RESEARCH EXPERIENCE**

- 2016-Present Postdoctoral Scholar with Viacheslav Fofanov  
Informatics and Computing Program  
Northern Arizona University · Flagstaff, AZ
- 2013-2016 Graduate Student with Reed Cartwright  
Center for Human and Comparative Genomics  
The Biodesign Institute  
Arizona State University · Tempe, AZ
- 2010-2013 Research Assistant with Roberto Gaxiola  
School of Life Science  
Arizona State University · Tempe, AZ
- 2009-2010 Undergraduate Student Researcher with Lei Lei  
School of Life Science  
Arizona State University · Tempe, AZ

**TEACHING EXPERIENCE****Arizona State University****Courses:**

2014	General Genetics	Head TA
2014	Introduction to Computational Molecular Biology	Innovative TA
2013	Concepts in Plant Biology iCourse	Instructor
2011-2015	General Genetics	Teaching Associate
2011	General Biology I & 2 Laboratory	Teaching Associate
2010	Genetic Engineering and Society Laboratory	Teaching Associate

**Undergraduate Mentorship:**

- 2011-2013 Honors Thesis Mentor · Sean Wilson  
Wilson S, Furstenu T, and R Gaxiola. Characterization of Transgenic *Arabidopsis thaliana* Overexpressing a Type I H<sup>+</sup> Pyrophosphatase and the Phloem Lipid-Associated Family Protein. <http://hdl.handle.net/2286/R.I.23607>

**AWARDS**

2015 ASU Graduate Education Travel Award  
2015 ASU School of Life Sciences Travel Award

**SERVICE AND OUTREACH**

2015 Molecular and Cellular Biology and Microbiology Retreat Poster Judge  
2015 Software Carpentry Workshop Helper  
2015 Night of the Open Door Volunteer  
2010-present Ask-A-Biologist Volunteer Correspondent  
2011-2013 Green Labs Initiative Coordinator and Promoter  
2012-2013 Phosphorus Sustainability Research Coordination Network Core Participant  
2011-2012 Obama Scholars Mentor

**SOCIETY MEMBERSHIPS**

Society for the Study of Evolution  
Society for Molecular Biology and Evolution  
Graduate Integrative Society for Environmental Interdisciplinary Research  
Central Arizona Chapter of the Association for Women in Science

**PROFESSIONAL DEVELOPMENT**

2013 Next Generation Population Genomics for Non-model Taxa Workshop  
American Genetics Association · Cornell University · Ithica, NY  
2011 Univector Plasmid-Fusion System training with Kendal Hirschi  
Childrens Nutritional Research Center · Baylor College of Medicine · Houston, TX

**PROGRAMMING LANGUAGES**

C++, PYTHON, R, BASH,  $\LaTeX$ , HTML/CSS, OPENBUGS, MATHEMATICA