Wade R. Roberts

Curriculum Vitae

Address: Department of Biological Sciences
University of Arkansas
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Education

2012 – 2018 Ph.D. Molecular Plant Sciences, Washington State University
Dissertation title: *Evolutionary genomics of flower diversification in the magic flowers* (Achimenes, *Gesneriaceae)*
Advisor: Eric H. Roalson
2007 – 2012 B.S. Biology, Whitworth University, Spokane
2007 – 2012 B.A. Art, Whitworth University, Spokane

Employment

2018 – present Postdoctoral Fellow, University of Arkansas, Fayetteville
Mentor: Andrew J. Alverson
2013 – 2018 Teaching Assistant, Washington State University, Pullman
2012 – 2013 Research Assistant, Washington State University, Pullman
2010 – 2012 Greenhouse worker, Whitworth University, Spokane

Publications

2018
Roberts WR, Roalson EH. 2018. Phylogenomic analyses reveal extensive gene flow within the magic flowers (*Achimenes*). *American Journal of Botany* 105(4): 726-740. DOI: 10.1002/ajb2.1058

2017
Roberts WR, Roalson EH. 2017. Comparative transcriptome analyses of flower development in four species in *Achimenes* (Gesneriaceae). *BMC Genomics* 18(1): 240. DOI: 10.1186/s12864-017-3623-8

2016
Roalson EH, Roberts WR. 2016. Distinct processes drive diversification in different clades of Gesneriaceae. *Systematic Biology* 65(4): 662-684. DOI: 10.1093/sysbio/syw012

Grant and Awards

2016 Doctoral Dissertation Improvement Grant, National Science Foundation
Evolution of gene expression in floral diversification of Neotropical Gesneriaceae
PI: Eric Roalson, Co-PI: Wade Roberts, $19,323
2016 Elvin McDonald Research Endowment Fund, The Gesneriad Society
Characterizing a red-to-blue flower color transition in Achimenes *(Gesneriaceae)*
PI: Wade Roberts, $1,750
2016 Best Poster Presentation, Inland Northwest Genomic Symposium
2015 Travel Award, American Society of Plant Taxonomists, $300
2012 Global Plant Sciences Initiative Fellowship, Washington State University
2011 NSF REU Fellow in Synthetic Biology, North Carolina State University

Presentations

Selected contributed abstracts
2018 *Gene co-expression network connectivity is an important determinant of selective constraint during flower diversification in the magic flowers* (Achimenes, *Gesneriaceae)*, Botany meeting, Rochester, MN
2017 *Genomic evidence for gene flow between species of magic flowers* (Achimenes, *Gesneriaceae)*, Evolution meeting, Portland, OR
2017 *Dissecting floral diversification in the magic flowers* (Achimenes, *Gesneriaceae)*, SBS Graduate Student Symposium, WSU
2015 *Understanding flower diversification in* Achimenes *(Gesneriaceae) using a comparative transcriptomics approach,* Botany meeting, Edmonton, AB

Invited departmental seminars

2017 *Evolutionary genomics in the magic flowers* (Achimenes, *Gesneriaceae)* Washington State University

2016 *Floral diversification in Gesneriaceae: macroevolutionary and genomics approaches* Washington State University

Selected poster presentations

2018 *Phylogenomic analyses reveal extensive gene flow within the magic flowers* (Achimenes), Botany meeting, Rochester, MN

2017 *Exploring phylogenetic relationships in* Achimenes *(Gesneriaceae) using transcriptome sequencing,* SBS Graduate Student Symposium, Moscow ID

2016 *Using comparative transcriptomics to understand flower diversification: an example from* Achimenes *(Gesneriaceae)*, Inland Northwest Genomics Research Symposium, Moscow, ID

2015 *Understanding flower diversification in* Achimenes *(Gesneriaceae) using a comparative transcriptomics approach*, Pan-Am Evo-Devo inaugural meeting, Berkeley, CA

2015 *Geographic processes drive diversification in different clades of Gesneriaceae,* SBS Graduate Student Symposium, Moscow, ID

2011 *Cloning and evolutionary analyses of SEPALLATA3 genes from dogwoods – deciphering the genetic links to bract petaloidy*, North Carolina State University Undergraduate Summer Research Symposium, Raleigh, NC

Teaching Experience

2018 Guest Lecturer, Systematic Botany, Washington State University

2013 – 2018 Teaching Assistant, Washington State University
- Biol 332 Systematic Botany, 3 semesters
- Biol 120 Introductory Botany, 3 semesters
- Biol 106 Introductory Biology: Organismal Biology, 5 semesters

2012 Supplemental Instructor, Whitworth University
- Biol 140 General Biology I: Organismal Biology

2010 – 2012 Teaching Assistant, Whitworth University
- Biol 363 Genetics, 1 semester
- Biol 153 Plant Biology, 2 semesters

Additional Experience

2016 – 2018 Fieldwork and Floristics, Hudson Biological Reserve, Washington State University

2011 Undergraduate Research Assistant, Whitworth University

2011 NSF Research Experience for Undergraduates, North Carolina State University

Professional Societies

Botanical Society of America
The Gesneriad Society
Society for the Study of Evolution

Service

2018 Volunteer Botanist, Palouse Conservation District

2016 – 2018 Faculty Representative, MPS Graduate Student Organization

2017 Co-Lead Organizer, Plant Science Day, Washington State University

2014 – 2016 Co-Lead, Palouse Discovery Science Center Committee

2016 Exhibit Leader, Plant Science Day

2015 Native Plant Guide, Palouse Outdoor Science Day

2014 – 2015 Greenhouse Tour Guide, Biology Open House

Scientific Peer Review

PhytoKeys, Plant Growth Development

Mentoring

Graduates

Joseph Kleinkopf, M.S., 2016 – 2018
Nan Zhang, visiting scholar, 2017 – 2018
Raimundo Luciano Saores Neto, visiting scholar, 2017

Undergraduates

Mara Huang, 2017
Connor McLeod, 2017

Tia Prudholm, 2017
Bethany Tegt, 2017

Honorific Names

'Wade Riley', M. Roberts, Tall Bearded Iris, The American Iris Society, 2007

References

Dr. Eric H. Roalson (Ph.D. advisor)
Professor
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eric_roalson@wsu.edu

Dr. Joanna L. Kelley (Committee member)
Assistant Professor
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Dr. Andrew McCubbin (Committee member)
Assistant Professor
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