# JORDAN D. SATLER

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# CONTACT INFORMATION

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## CURRENT POSITION

## Postdoctoral Researcher

2016-present

Department of Ecology, Evolution, and Organismal Biology Iowa State University, Ames, Iowa Advisors: Dr. Tracy Heath & Dr. John Nason

# **EDUCATION**

The Ohio State University Ph.D. in Evolution, Ecology and Organismal Biology Advisor: Dr. Bryan Carstens	2012–2016
Louisiana State University Ph.D. in Evolution, Ecology and Organismal Biology Advisor: Dr. Bryan Carstens	2011–2012
San Diego State University M.Sc. in Evolutionary Biology Advisor: Dr. Marshal Hedin	2008–2011
San Diego State University B.Sc. in Biology	2002–2007

## **PUBLICATIONS**

## Total Citations [1384] | h-index [10]

[Google Scholar, 13 January 2021]

in review

Satler JD, Herre EA, Heath TA, Machado CA, Zúñiga AG, Nason JD. Genome-wide sequence data show no evidence of admixture and introgression among pollinator wasps associated with a community of Panamanian strangler figs. *Molecular Ecology*.

—(available as preprint on *bioRxiv*)

Houston DD, Satler JD, Stack TK, Carroll HM, Bevan AM, Moya AL, Alexander KD. A phylogenomic perspective on the evolutionary history of the stonefly genus Suwallia (Plecoptera: Chloroperlidae) revealed by ultraconserved genomic elements. Molecular Phylogenetics and Evolution.

#### published

- 13. **Satler JD**, Bernhard KK, Stireman JO, Machado CA, Houston DD, Nason JD. 2020. Community structure and undescribed species diversity in non-pollinating fig wasps associated with the strangler fig *Ficus petiolaris*. *Insect Systematics and Diversity*, 4:1–13.
- Satler JD, Herre EA, Jander KC, Eaton DAR, Machado CA, Heath TA, Nason JD. 2019. Inferring processes of coevolutionary diversification in a community of Panamanian strangler figs and associated pollinating wasps. *Evolution*, 73:2295–2311.
- Satler JD, Carstens BC. 2019. The Sarracenia alata pitcher plant system and obligate arthropod inquilines should be considered an evolutionary community. Journal of Biogeography, 46:485–496.
- 10. **Satler JD**, Carstens BC. 2017. Do ecological communities disperse across biogeographic barriers as a unit? *Molecular Ecology*, 26:3533–3545.
- 9. **Satler JD**, Carstens BC. 2016. Phylogeographic concordance factors quantify phylogeographic congruence among co-distributed species in the *Sarracenia alata* pitcher plant system. *Evolution*, 70:1105–1119.
- 8. **Satler JD**, Zellmer AJ, Carstens BC. 2016. Biogeographic barriers drive co-diversification within associated eukaryotes of the *Sarracenia alata* pitcher plant system. *PeerJ*, 4:e1576.
- 7. Garrick RC, Bonatelli IAS, Hyseni C, Morales A, Pelletier TA, Perez MF, Rice E, **Satler JD**, Symula RE, Thome MTC, Carstens BC. 2015. The evolution of phylogeographic datasets. *Molecular Ecology*, 24:1164–1171.
- 6. Reid NM, Hird SM, Brown JM, Pelletier TA, McVay JD, **Satler JD**, Carstens BC. 2014. Poor fit to the multispecies coalescent is widely detectable in empirical data. *Systematic Biology*, 63:322–323.
- Carstens BC, Pelletier TA, Reid NM, Satler JD. 2013. How to fail at species delimitation. Molecular Ecology, 22:4369–4383.
- 4. **Satler JD**, Carstens BC, Hedin MC. 2013. Multilocus species delimitation in a complex of morphologically conserved trapdoor spiders (Mygalomorphae, Antrodiaetidae, *Aliaty-pus*). **Systematic Biology**, 62:805–823.

3. Carstens BC, **Satler JD**. 2013. The carnivorous plant described as *Sarracenia alata* contains two cryptic species. *Biological Journal of the Linnean Society*, 109:737–746.

- Carstens BC, Brennan RS, Chua V, Duffie CV, Harvey MG, Koch RA, McMahan CD, Nelson BJ, Newman CE, Satler JD, Seeholzer G, Posbic K, Tank DC, Sullivan J. 2013.
   Model selection as a tool for phylogeographic inference: an example from the willow Salix melanoplis. Molecular Ecology, 22:4014–4028.
- Satler JD, Starrett J, Hayashi CY, Hedin M. 2011. Inferring species trees from gene trees in a radiation of California trapdoor spiders (Araneae, Antrodiaetidae, Aliatypus). PLoS ONE, 6(9):e25355.

## GRANTS & SCHOLARSHIPS

2016. Presidential Fellowship (The Ohio State University)	\$26,016
2015. Doctoral Dissertation Improvement Grant (NSF)	\$20,020
2013. Rosemary Grant Award (Society for the Study of Evolution)	\$2,250
2013. Graduate Student Research Award (Society of Systematic Biologists)	\$2,000
2010. American Arachnological Society and Vincent Roth Research Funds	\$1,400
2010. Theodore (Ted) Cohn Evolutionary Biology Scholarship (SDSU)	\$500
2010. San Diego State University Travel Grant	\$100
2009. American Ararchnological Society Travel Grant	\$314
2009. Harry E. Hamber Memorial Scholarship (SDSU)	\$1,400

## PROFESSIONAL MEETINGS & PRESENTATIONS

- 2019. **Satler JD\***, Herre A, Jander C, Eaton D, Machado C, Heath TA, Nason J. Modeling the process of codiversification in Panamanian figs and fig wasps. *Botany*, Tuscan, Arizona.
- 2018. **Satler JD\***, Herre A, Jander C, Eaton D, Machado C, Heath TA, Nason J. Elucidating the evolutionary processes producing cophylogenetic patterns of Panamanian figs and fig wasps in the genomic era. *Evolution*, Montpellier, France.
- 2018. Quinteros K\*, **Satler JD**, Nason J. Phylogeography of a Mexican fig wasp pollinator: testing effects of biogeography and vicariance. *Evolution*, Montpellier, France.

   POSTER
- 2018. **Satler JD\***, Herre A, Jander C, Eaton D, Machado C, Heath T, Nason J. Elucidating the evolutionary processes producing cophylogenetic patterns of Panamanian figs and fig wasps in the genomic era. *Society of Systematic Biology*, Columbus, Ohio, USA.
- 2017. **Satler JD\***, Herre A, Jander C, Eaton D, Machado C, Heath TA, Nason J. UCEs and tangled trees: elucidating co-phylogenomic patterns in Panamanian figs and fig wasps. *Evolution*. Portland, Oregon, USA.
- 2016. **Satler JD\***, Carstens BC. Testing for co-diversification in an ecological community: an example from the *Sarracenia alata* pitcher plant system. *Evolution*. Austin, Texas, USA.
- 2014. **Satler JD**\*, Carstens BC. Do ecological communities co-diversify? An investigation into the *Sarracenia alata* pitcher plant system. *Evolution*. Raleigh, North Carolina, USA.
- 2012. **Satler JD\***, Carstens BC. Species delimitation in the carnivorous plant species *Sarracenia alata. Evolution*. Ottawa, Ontario, Canada.

2012. Reid NM\*, Hird SM, **Satler J**, Pelletier TA, McVay JD, Brown J, Carstens BC. Do multispecies coalescent models fit empirical data? *Evolution*. Ottawa, Ontario, Canada.

– Society of Systematic Biology invited symposium talk.

- 2011. **Satler JD**\*, Starrett J, Hayashi CY, Hedin M. Inferring species trees from gene trees in a radiation of California trapdoor spiders (Araneae, Antrodiaetidae, *Aliatypus*). *American Arachnological Society*. Portland, Oregon, USA.
- 2011. **Satler J\***, Hedin M. Multigenic species delimitation and species tree inference in a complex of California trapdoor spiders (Mygalomorphae, Antrodiaetidae, *Aliatypus*). *Evolution*. Norman, Oklahoma, USA.
- 2010. **Satler J\***, Hedin M. *Aliatypus thompsoni* (Mygalomorphae, Antrodiaetidae) in the Transverse Ranges of southern California: comparative phylogeography and delimitation of cryptic species. *Evolution*. Portland, Oregon, USA.

   POSTER
- 2010. **Satler J\***, Hedin M. Multigenic species delimitation and species tree inference in the *Aliaty-pus thompsoni* (Mygalomorphae, Antrodiaetidae) species complex. *American Arachnological Society*. Greenville, North Carolina, USA.
  - 2nd place Student paper competition
- 2010. **Satler J\***, Hedin M. *Aliatypus thompsoni* (Mygalomorphae, Antrodiaetidae) in the Transverse Ranges of southern California: comparative phylogeography and delimitation of cryptic species. *Southwestern Association of Naturalists*. Junction, Texas, USA.
  - Moderator of Invertebrate Systematics session
- 2010. **Satler J\***, Hedin M. *Aliatypus thompsoni* (Mygalomorphae, Antrodiaetidae) in the Transverse Ranges of southern California: comparative phylogeography and delimitation of cryptic species. *San Diego State University Student Research Symposium*. San Diego, California, USA.
- 2009. **Satler J\***, Hedin M. "Aliatypus thompsoni (Mygalomorphae, Antrodiaetidae) in the Transverse Ranges of southern California: comparative phylogeography and delimitation of cryptic species. American Arachnological Society. Russellville, Arkansas, USA.

\* indicates presenter

## INVITED SEMINARS

- 2017. Iowa State University. Ames, Iowa, USA.
- 2017. Louisiana State University. Baton Rouge, Louisiana, USA.
- 2016. Iowa State University. Ames, Iowa, USA.
- 2011. Louisiana State University. Baton Rouge, Louisiana, USA.

## TEACHING EXPERIENCE

#### Instructor of Record

2018. BIOL 394, 3 Credits, Study Abroad: Summer Tropical Forest and Coral Reef Experiences in Belize, Iowa State University.

#### Guest Lecturer

2019. BIOL 211, Principles of Biology I (undergraduate-level general biology course). Guest lectured for one day on Cnidarian and Lophotrochozoan systematics and diversity, Iowa State University.

2017–2018. EEOB/BCB 546X, Computational Skills for Biological Data (graduate-level course). Guest lectured for two days on python programming, Iowa State University.

## Teaching Assistant

- 2014–2015. EEOB 3320, Organismal Diversity, Teaching Assistant, The Ohio State University.
- 2013–2014. Biology 1114, Biological Sciences: Form, Function, Diversity, and Ecology, Teaching Assistant, The Ohio State University.
- 2012. Biology 1209, Biological Laboratory for Science Majors II, Teaching Assistant, Louisiana State University.

## Workshops

- 2015. Acarology Summer Workshop, Teaching Assistant, The Ohio State University.
- 2014. Model-based Phylogeography. Co-instructor for two-week workshop in Brazil. Universidade Estadual de Campinas, Campinas, Brazil.

## Undergraduate Student Mentoring

2018-present. Cecilia Hodson. Iowa State University.

2018. Patrick Mendoza. Iowa State University.

2017–2018. William Mejia-Garcia. Iowa State University.

2014. Brandon Peterson. The Ohio State University.

2011–2012. Erin Oliver. Louisiana State University.

## WORK EXPERIENCE

- 2010–2011. Lab technician for Organismal Biology lab, San Diego State University.
- 2008–2010. BRCC Collections Assistant, Departments of Entomology, Birds and Mammals, Pale-ontology, and Botany, San Diego Natural History Museum.

## UNIVERSITY & DEPARTMENTAL SERVICE

- 2015–2016. Graduate Studies Committee, The Ohio State University, EEOB.
- 2014–2015. Moser Chair Search Committee Member, The Ohio State University, EEOB.

## PEER REVIEW

- 2017. Proposal Reviewer, The Society of Systematic Biologists Graduate Student Research Award Competition
- 2016. ad hoc Reviewer, National Science Foundation (DEB)

2011-present. Systematic Biology, Evolution, Molecular Ecology\*, PLoS ONE, Molecular Phylogenetics and Evolution, BMC Evolutionary Biology, Journal of Biogeography, Zoological Journal of the Linnean Society, Journal of Arachnology, Journal of Insect Science, Organisms Diversity and Evolution, PeerJ

\*Top Reviewer for Molecular Ecology 2014 & 2015 (awarded to reviewers rated in the top 8%)

## COMPUTER SKILLS

Python, R, shell scripting (Linux/Unix), SQL, LATEX, Markdown

# **OUTREACH**

- 2018. Co-led a birdwatching trip to central Iowa with students from the Iowa State STEM Scholars Program.
- 2015–2016. Museum of Biological Diversity open house at The Ohio State University. Volunteer for the Spiders and Mites division.
- 2010. Bio Blitz at Torrey Pines State Reserve, hosted by the San Diego Natural History Museum, San Diego, CA. Co-captain of Team Arachnids. Contributed to the collection and identification of arachnids.
- 2009. Bio Blitz at Mission Trails Regional Park, hosted by the San Diego Natural History Museum, San Diego, CA. Member of Terrestrial Arthropod team. Contributed to the collection and sorting of terrestrial arthropods.
- 2008. Animal Grossology at the Reuben H. Fleet Science Center, San Diego, CA. Public outreach for the research conducted in the lab of Dr. Marshal Hedin (SDSU). Provided visitors with hands-on experience with arachnids.

## **FIELDWORK**

- 2017. 16 day trip collecting spiders and harvestmen (O. Opiliones) in Tasmania, Australia.
- 2015. 10 day arthropod collecting trip in pitcher plant bogs found in Texas, Louisiana, Mississippi and Alabama.
- 2014. 5 day trip collecting spiders in the Amazon rainforest, Rio Branco, Brazil.
- 2011–2013. Arthropod and plant collecting in pitcher plant bogs found in Texas, Louisiana, Mississippi and Alabama for dissertation (PhD) work.
- 2011. 7 day trip collecting harvestmen (O. Opiliones) in Oregon and Washington state.
- 2009. 10 day trip collecting mygalomorph spiders and harvestmen (O. Opiliones) in Missouri, Arkansas, Oklahoma and Illinois.
- 2008–2011. Mygalomorph spider collecting in the Transverse Ranges, Sierra Nevada Mountains and Coast Ranges of California for thesis (Master's) work.