

Curriculum vitae

S. Hollis Woodard
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I. Academic Positions:

2015-present	Assistant Professor of Entomology, University of California, Riverside
2013-2015	USDA NIFA Postdoctoral Fellow, University of Texas at Austin

II. Educational Background:

PhD (2012)	Biology, University of Illinois at Urbana-Champaign Advisor: Gene E. Robinson Dissertation: Genomic Studies of Social Evolution in Bees
BA (2005)	University of North Carolina at Wilmington Major: Biology and Anthropology, <i>summa cum laude</i>

III. Awards and Honors:

2017	Early Career Award of Excellence, Pacific Branch of the Entomological Society of America
2015	Rhom Rhome International Professional Development Award, The University of Texas at Austin

IV. Grants

1. "Development of the first ever gene disruption technique for bumble bees", UCR Small Seed Grant, \$10,000 (with O. Akbari)
2. "Living on the edge: Adaptation and resilience of threatened Arctic bumble bees and their pollination services", UCR Small Seed Grant, \$10,000 (A. Brelsford, PI) (2016)
3. "Bumble bee ecology and improved food security", USDA NIFA Postdoctoral Fellowship, \$150,000 (2013-2015)

V. Publications

Woodard SH. Bumble bee ecophysiology: integrating the changing environment and

the organism. *Current Opinion in Insect Science* (In Press; invited manuscript)

Woodard SH & Jha S. Wild bee nutritional ecology: predicting pollinator population dynamics, movement, and services from floral resources. *Current Opinion in Insect Science* (In Press; invited manuscript)

Romiguier J, Cameron SA, Woodard SH, Fischman BJ, Keller L, & Praz CJ (2016) Phylogenomics controlling for base compositional bias reveals a single origin of eusociality in corbiculate bees. *Molecular Biology and Evolution* 33: 670-678. DOI: 10.1093/molbev/msv258

Woodard SH, Lozier J, Strange J, Williams P, Goulson D, & Jha S (2015) Molecular tools and bumble bees: revealing hidden details of ecology and evolution in a model system. *Molecular Ecology* 24: 2916-2936. DOI: 10.1111/mec.13198

Woodard SH, Bloch G, Band MR, & Robinson GE (2014) Molecular heterochrony and the evolution of cooperative brood care behavior in bumble bees (*Bombus terrestris*). *Proceedings of the Royal Society of London B* 281: 20132419. DOI: 10.1098/rspb.2013.2419

Woodard SH, Bloch G, Band MR, & Robinson GE (2013) Social regulation of maternal traits in nest-founding bumble bee (*Bombus terrestris*) queens. *Journal of Experimental Biology* 216: 3474–3482. DOI: 10.1242/jeb.087403

Woodard SH, Fischman BJ, Venkat A, Hudson ME, Varala K, Cameron SA, Clark AG, & Robinson GE (2011) Genes involved in convergent evolution of eusociality in bees. *Proceedings of the National Academy of Sciences USA* 108: 7472-7477. DOI: 10.1073/pnas.1103457108

Fischman BJ, Woodard SH, & Robinson GE (2011) Molecular evolutionary analyses of insect society. *Proceedings of the National Academy of Sciences USA* 108: 10847-10854. DOI: 10.1073/pnas.1100301108

VI. Presentations

Invited talks

Molecular studies of bumble bee nutrition; Departmental seminar for Pennsylvania State University's Department of Entomology, 2017

Molecular studies of bumble bee nutrition; Departmental seminar for Utah State University's Department of Biology, 2017

Molecular studies of bumble bee nutrition; International Conference on Pollinator Biology, Health and Policy, Penn State, 2016

Nutritional genomics of bumble bees; XXV International Congress of Entomology in Florida, 2016

Nutritional genomics of bumble bees; Departmental seminar for UCLA's Department of Ecology and Evolution

Effects of nutrition on viability and fecundity across the life cycle of bumble bee (Bombus impatiens) queens; Annual meeting of the Entomological Society of America, Oregon, 2014

Feeding, nutrition, and colony development in bumble bees (Bombus impatiens); Annual meeting of the Entomological Society of America, Texas, 2013

Submitted talks

Bumble bee nutritional genomics; submitted talk presented at the Annual Meeting of the Pacific Branch of the Entomological Society of America in Honolulu, HI, 2016

Queen bumble bee nutrition across the life cycle; Annual meeting of the North American Pollinator Protection Campaign, Washington, DC, 2014

Social regulation of maternal traits in nest-founding bumble bee (Bombus terrestris) queens; Annual meeting of the Entomological Society of America, Nevada, 2011

Molecular signatures of selection reveal convergent and lineage-specific paths to eusociality; Congress of the International Union for the Study of Social Insects, Copenhagen, Denmark, 2010

Identification of lineage-specific adaptive changes in the genomes of 10 bee species; Annual meeting of the Entomological Society of America, Indiana, 2009

Co-author on presentations

Examining bumble bee pollen foraging in the Arctic: A comparison between species and castes along a latitudinal gradient; invited talk presented at the Annual Meeting of the Pacific Branch of the Entomological Society of America in Portland, OR, 2017; co-author with Natalie Fischer

Age effects on nectar feeding preferences in queen bumble bees; poster presented at the Annual Meeting of the Pacific Branch of the Entomological Society of America in Honolulu, HI, 2016; co-author with Natalie Fischer

VII. Academic advising

PhD students

Kaleigh Fischer, Department of Entomology (2016-)

Postdoctoral researchers

Dr. Michelle Duennes, USDA NIFA Postdoctoral Researcher

Undergraduate researchers

Natalie Fisher (major in Biology, 2015-)

Mauricio Flores (major in Cellular, Molecular and Developmental Biology, 2016-)

Alex Vanecek (major in Entomology, 2016-)

Jade Bratu (major in Biology with Honors, 2016-)

Rebecca Moon (major in Biochemistry, 2016-)

Stephanie Reimer (major in Biochemistry at Fullerton Community College, 2016-)

Sunakshi Garg (major in Cellular, Molecular and Developmental Biology, 2015-2016)

VIII. Teaching

Insect Behavior (ENTM 162): fall 2016

Evidence for Evolution (ENTM 050): winter 2015 (co-taught)

IX. Mentorship programs

UC Riverside's Computational Entomology REU Program, summer 2016

UC Riverside's Fellowships and Internships in Extremely Large Data Sets (FIELDS)
Research Internship Program, fall 2016

X. Outreach presentations

Canaries in a coal mine: Why pollinators are sensitive to global change and how you can help them; Presentation for UCR's public Science Lecture Series, 2016

Desert Pollinators; Presentation for UC Cooperative Extension / Palm Desert Campus, 2016

XI. Media

6 Scientists, 1,000 Miles, 1 Prize: The Arctic Bumblebee; New York Times' Science Section, October 2016; https://www.nytimes.com/2016/10/11/science/alaska-bumblebee.html?_r=0

XII. National and international service

Co-organizer of the upcoming bumble bee-focused Building Our Methods by Using Souther Science (BOMBUSS) Conference, 2016-

Member of the Pacific Branch of the Entomological Society of America's 2019 annual meeting Site Selection Committee, 2016-
Participant in the Environmental Protection Agency's Pesticide Exposure Assessment Paradigm for Non-Apis Bees Workshop, 2016
Member of Nominations Committee for the North American Section of the International Union for the Study of Social Insects, 2013-2016
Co-author of the Entomological Society of America's Position Statement on Pollinator Health, 2015
Co-organizer of five symposia for annual meetings of the Entomological Society of America, the Pacific Branch of the Entomological Society of America, and the International Congress in Entomology
Reviewer for more than 10 journals, including *Molecular Ecology*, *Journal of Insect Science*, and *Journal of Insect Physiology*, among others
Section Editor for upcoming Special Issue on pollinators in *Current Opinion in Insect Science*

XIII. University service

Member, Pollination Cluster Hire Search Committee, 2016
Member, Institute for Integrative Biological Collections
Member, Institute for Integrative Genome Biology
Member, Center for Conservation Biology
Chair, Departmental Seminar Committee 2016-2017
Speaker, Friends of UCR, 2016

XIV. Memberships and Affiliations:

Entomological Society of America, Pacific Branch
International Union for the Study of Social Insects
American Association for the Advancement of Science
Network for Arthropods of the Tundra
Association of Polar Early Career Scientists