



Avery L. Russell

Department of Biology
 Missouri State University
 110 Temple Hall
 Springfield, MO 65897, USA

tel: (607) 220-4432
 email: alr204@pitt.edu
[Google Scholar](#)  [Website](#)  [Twitter](#)
 ORCID: 0000-0001-8036-2711

EDUCATION

Ph.D.	Insect Science, minor in Neuroscience, Graduate Interdisciplinary Program in Entomology and Insect Science, University of Arizona, AZ. Dissertation Title: Mechanisms of floral specialization by pollen-foraging bumblebees Major Advisor: Daniel R. Papaj	Dec 2016
B.S.	Double major: Entomology & Plant Sciences, College of Agriculture and Life Sciences. GPA: 3.759, Cornell University, Ithaca, NY. <i>Magna cum laude</i> , with honors in Entomology	May 2011

RESEARCH APPOINTMENTS

Assistant Professor of Evolutionary Biology , Department of Biology, Missouri State University, MO	Fall 2019-present
Pittsburgh Ecology and Evolution Postdoctoral Fellow , University of Pittsburgh, PA PIs: Dr. Tia-Lynn Ashman and Dr. Corinne Richards-Zawacki	Spring 2017-Fall 2019
Graduate Research Associate , NSF-funded, University of Arizona, AZ PIs: Dr. Anne Leonard, Dr. Dan Papaj, Dr. Wulfila Gronenberg, and Dr. Steve Buchmann	S 2014-S 2015, S 2016
Graduate Research Assistant , University of Arizona, AZ PIs: Dr. Anne Leonard, Dr. Daniel Papaj, Dr. Steve Buchmann, and Dr. Wulfi Gronenberg	Summer-Fall 2012
Undergraduate Researcher , Cornell University, NY PI: Dr. Cole Gilbert	Fall 2007-Summer 2011
Laboratory Assistant , Cornell University, NY Supervisor: Dr. Linda Rayor	Summer 2008

GRANTS, AWARDS, & HONORS**Grants & Fellowships**

Assessment of Student Learning Grant	\$500	Summer 2020
Council on Undergraduate Research, Biology Division, Research Supply Grant	\$250	Spring 2020
Assessment of Student Learning Grant	\$500	Fall 2019
Early Career Research Fellowship, UP with co-PI Dr. Na Wei	\$10000	Spring 2018
Pittsburgh Ecology and Evolution Postdoctoral Fellowship, UP	\$145779	Spring 2016
GPSC Travel Grant, UA	\$750	Fall 2015
GPSC Research and Project Grant, UA	\$2000	Spring 2015
GPSC Travel Grant, UA	\$750	Spring 2015
GPSC Research and Project Grant, UA	\$1000	Spring 2014
National SMART Grant, CU	\$4000	2009-2010
Academic Competitive Grant SO, CU	\$2050	2008-2009

Awards & Honors

Diversity Scholar Stipend Award	\$250	Fall 2019
International Society for Behavioral Ecology Travel Award	\$500	Spring 2018
XI International Symposium on Pollination Scholarship	€650	Spring 2018
Pacific Branch Entomological Society of America Photo Salon Most Outstanding Photo	\$50	Spring 2017
ABS 2017 Allee Symposium paper finalist		Spring 2017
Second Place Winner of the ICE2016 Graduate Student Oral Competition Section: Apidology, Sericulture, and Social Insects: Honey Bees I		Fall 2016

SICB 2017 Division of Animal Behavior Best Student Presentation Competition Finalist		Fall 2016
CIS Travel Award, UA	\$600	Fall 2016
Laurence A. Carruth Award, UA	\$1000	Summer 2016
Herbert E. Carter Travel Award, UA	\$600	Summer 2016
Environmental Graduate Student Travel Award, UA	\$300	Summer 2016
Animal Behavior Society Graduate Student Travel Award	\$500	Summer 2016
Environmental Graduate Student Travel Award, UA	\$500	Fall 2015
Poster chosen for GIDP Student Research Showcase, UA		Fall 2015
SICB 2016 Division of Animal Behavior Best Student Presentation Competition Finalist		Fall 2015
CIS Travel Award, UA	\$500	Fall 2015
GIDP Teaching Associateship, UA (two awardees per semester)		Fall 2015
R.F. Chapman Graduate Student Prize for Research in Insect Science, UA	\$1000	Summer 2015
Pacific Branch Entomological Society of America Student Travel Award	\$300	Spring 2015
Herbert E. Carter Travel Award, UA	\$600	Fall 2014
Sigma Xi Scientific Research Society Certificate of Recognition		
For best presentation in Behavioral and Social Sciences		Fall 2014
EIS Grad Student Research Support Award, UA	\$2000	Spring 2014
CIS Travel Award, UA	\$500	Spring 2014
Poster abstract finalist in EIS GIDP Showcase Poster Competition, UA		Fall 2013
GIDP Teaching Assistantship, UA (two awardees per semester)		Fall 2012
Honorable Mention, N.S.F. Graduate Research Fellowship Program, UA		Spring 2012
Charles A. Ring Memorial Award, CU	\$150	Spring 2011
Dean's List (every semester), CU		2007- 2011
Albert C. Murphy Scholarship, CU		2007- 2011
Boyce '26 Alfred Mullikin Scholarship, CU		2007- 2011
Hilda K. Karns Scholarship, CU		2007- 2011
CALS Undergraduate Honors Program, CU		2010
Rawlings III Cornell Presidential Research Scholars Program	\$5000	2009
Cornell Hughes Scholars Program	\$15180	2009
FASFA Award for Academic Achievement, CU		2009

PUBLICATIONS

*Undergraduate co-author, **Graduate co-author

*Journal Impact Factors and Google
Scholar Citations as of Dec 2020*

†Co-first author.

16. **Russell, A.L.**, Kikuchi, D.W., Noah, W.G., Papaj, D.R. 2020. Sensory bias and signal detection tradeoffs maintain intersexual floral mimicry. *Philosophical Transactions of the Royal Society B* special issue. 375: 20190469
Journal impact factor: 6.1; Citations: 1

15. Rebolleda-Gomez, M., Forrester, N., **Russell, A.L.**, Wei, N., Fetters, A., Stephens, J., Ashman, T.-L. 2019. Gazing into the anthosphere: Considering how microbes influence floral evolution. *New Phytologist* special issue. 224: 1012–1020 **Journal impact factor: 7.3; Citations: 13**

14. **Russell, A.L.**, Rebolleda-Gómez, M., Shaible, T.S.*, Ashman, T.-L. 2019. Movers and shakers: bumble bee foraging behavior shapes the dispersal of microbes among and within flowers. *Ecosphere*. 10: e02714. **Journal impact factor: 2.7; Citations: 11**

13. Switzer, C., **Russell, A.L.**, Papaj, D.R., Combes, S., Hopkins, R. 2019. Sonicating bees demonstrate flexible pollen extraction without instrumental learning. *Current Zoology*. 65: 425-436 **Journal impact factor: 2.4; Citations: 7**

12. **Russell, A.L.**, Ashman, T.-L. 2019. Associative learning of flowers by generalist bumble bees can be mediated by microbes on the petals. *Behavioral Ecology*. 30: 746-755 **Journal impact factor: 3.3; Citations: 19**

11. **Russell, A.L.**, Papaj, D.R., Sabino, W.d.O. & Buchmann, S.L. Brawls bring buzz: male size influences competition and courtship in the solitary bee, *Diadasia rinconis*. *Journal of Insect Science*. 18: 1-11 **Journal impact factor: 1.3; Citations: 0**

10. Cardinal, S., Buchmann, S.L., & **Russell, A.L.** 2018. The evolution of floral sonication, a pollen foraging behavior used by bees (Anthophila). *Evolution*. 72: 590-600 **Journal impact factor: 3.8; Citations: 38**
9. **Russell, A.L.**, Mauerman, K.*, Golden, R.E.*, Papaj, D.R. 2018. Linking components of complex signals to morphological part: the role of anther and corolla in the complex floral display. *Animal Behaviour*. 135: 223-236 **Journal impact factor: 3.1; Citations: 7**
8. **Russell, A.L.**, Buchmann, S.L., & Papaj, D.R. 2017. How a generalist bee achieves high efficiency of pollen collection on diverse floral resources. *Behavioral Ecology*. 28: 991-1003 **Journal impact factor: 3.3; Citations: 22**
7. Papaj, D.R., Buchmann, S.L., & **Russell, A.L.** 2017. Division of labor of anthers in heterantherous plants: Flexibility of bee pollen collection behavior can act to keep plants honest. *Arthropod-Plant Interactions* special issue **Journal impact factor: 1.6; Citations: 10**
6. **Russell, A.L.**, Morrison, S.J., Moschonas, E.H.*, & Papaj, D.R. 2017. Patterns of pollen and nectar foraging specialization by bumblebees over multiple timescales using RFID tracking. *Scientific Reports*. 7:42448 **Journal impact factor: 4.1; Citations: 27**
5. **Russell, A.L.**, Leonard, A.S., Gillette, H.D.*, & Papaj, D.R. 2016. Concealed floral rewards and the role of experience in floral sonication by bees. *Animal Behaviour*. 120: 83-91 **Journal impact factor: 3.1; Citations: 23**
4. **Russell, A.L.**, Newman, C.R.*, & Papaj, D.R. 2016. White flowers finish last: Pollen-foraging bumble bees show biased learning in a floral color polymorphism. *Evolutionary Ecology, Plant-Animal Communication* special issue. 31: 173-191 **Journal impact factor: 2.1; Citations: 4**
3. Stanley, D., **Russell, A.L.**, Morrison, S.J., Rogers, C., & Raine, N.E. 2016. The impacts of field-realistic exposure to a neonicotinoid pesticide on bumblebee foraging and homing ability. *Journal of Applied Ecology*. 53: 1440-1449 **Journal impact factor: 5.7; Citations: 86**
2. **Russell, A.L.** & Papaj, D.R. 2016. Artificial pollen dispensing flowers and feeders for bee behaviour experiments. *Journal of Pollination Ecology*. 18: 13-22 **Journal impact factor: 1.9; Citations: 22**
1. **Russell, A.L.**, Golden, R.E.*, Leonard, A.S. & Papaj, D.R. 2016. Bees learn preferences for plant species that offer only pollen as a reward. *Behavioral Ecology*. 27: 731-740 **Journal impact factor: 3.3; Citations: 18**

In review or in preparation:

Russell, A.L., Feters, A.M., Ashman, T.-L. How intraindividual behavioral variation in a bee shapes its quality as a pollinator. *Submitted to Behavioral Ecology*.

Wei, N.†, **Russell, A.L.**†, Jarrett, A.R., Ashman, T.-L. Plant-visitor interactions mediate floral microbial diversity and network in response to agrichemical disturbance. *Submitted to Molecular Ecology*.

Papaj, D.R., **Russell, A.L.** Floral preference and the pattern of switching in the eastern bumble bee, *Bombus impatiens*. *In-prep*.

Yeager J.†, **Russell A.L.**†, Donato E.V., Dugas M.B. & Richards-Zawacki C.L. The role of natural selection and predator learning in the maintenance of poison frog color polymorphism. *In-prep*.

Mauerman, K.*, Papaj, D.R., & **Russell, A.L.** Flexible foraging by bumblebees on flowers offering pollen and nectar. *In-prep*.

Theses:

Russell, A.L. 2016. Mechanisms of floral specialization by pollen-foraging bumblebees. Doctoral Dissertation presented to the Graduate Interdisciplinary Program in Entomology and Insect Science, UA.

Russell, A.L. 2011. Serial homology in the coxal proprioceptive-motor system in a flesh fly (Diptera: Sarcophagidae). Honors Thesis presented to the College of Agriculture and Life Sciences, Entomology, CU.

RESEARCH PRESENTATIONS

*Undergraduate co-author

Total: 56 presentations; Invited talks: 23. Conferences: 24 talks, 4 posters

Invited talks:

- Russell, A.L.** 2021. *Physical Mechanisms of Behavior, Society for Integrative and Comparative Biology*, virtual conference.
- Russell, A.L.** 2020. *Microbes, Too! Microbe-produced Semiochemicals as Mediators of Species Interactions, Entomology Society of America*, virtual conference.
- Russell, A.L.** 2020. *Missouri Native Plants* chapter meeting seminar, Springfield, MO.
- Russell, A.L.** 2019. *Summer Seminar Series*, Blandy Experimental Farm, University of Virginia, VA.
- Russell, A.L.** 2019. *Evolutionary Biomechanics: Form, function and ecological interactions in animals and plants, Evolution*, Providence, RI.
- Russell, A.L.** 2019. *Science Café series*, Atlanta Botanical Garden, GA.
- Russell, A.L.** 2019. *Insect Pollinators in the Human-Modified Landscape, Eastern Branch ESA meeting*, Blacksburg, VA.
- Russell, A.L.** 2019. *Biology Seminar Series*, Missouri State University, MO.
- Russell, A.L.** 2018. *Biodiversity Symposium*, Ruhr-Universität Bochum, GE.
- Russell, A.L.** 2018. *XI International Symposium on Pollination*. Berlin, GE.
- Russell, A.L.** 2018. *Entomology Seminar Series*, Pennsylvania State University, PA.
- Russell, A.L.** 2017. *Biology Seminar Series*, Bucknell University, PA.
- Russell, A.L.** 2017. *Pymatuning Laboratory of Ecology Seminar Series*, Linesville, PA.
- Russell, A.L., Buchmann, S.L., Papaj, D.R.** 2017. *Allee Symposium, Animal Behavior Society*, Toronto, ON.
- Russell, A.L.** 2017. *Spring 2017 Biology Seminar Series*, Muhlenberg College, PA.
- Russell, A.L., *Newman, C.R., Papaj, D.R.** 2017. *Advances in Understanding Floral Specialization in Bees symposium, Pacific Branch ESA meeting*, Portland, OR.
- Russell, A.L.** 2016. *PEEP Fellowship seminar*, Department of Biological Sciences, Pittsburgh, PA.
- Russell, A.L.** 2016. Arnold Arboretum, Harvard University. Cambridge, MA.
- Russell, A.L., Papaj, D.R.** 2015. *Data Blitz*, Department of Neuroscience, Tucson, AZ.
- Russell, A.L., Leonard, A.S., Papaj, D.R.** 2015. *Pollination Symposium, Pacific Branch ESA meeting*, Coeur d'Alene, ID.
- Russell, A.L.** 2015. *GradSlam presentation competition*, Tucson, AZ.
- Russell, A.L., Papaj, D.R.** 2014. *Hexapodium seminar*, Center for Insect Science, Tucson, AZ.
- Russell, A.L., Leonard, A.S., Papaj, D.R.** 2014. *Pollination Symposium, Pacific Branch ESA meeting*, Tucson, AZ.

Contributed presentations:

- Russell, A.L., Rebolledo-Gómez, M., Fetters, A., Shaible, T., James, E. Ashman, T.L.** 2019. *Animal Behavior Society*, Chicago, IL.
- Russell, A.L., Rebolledo-Gómez, M., Shaible, T., Ashman, T.L.** 2019. *Molecular Evolution Laboratory Discussion (MELD)*, Pittsburgh, PA.
- Russell, A.L., Ashman, T.L.** 2018. *Three Rivers Evolution Event (regional conference)*, Pittsburgh, PA.
- Russell, A.L., Ashman, T.L.** 2018. *University of Pittsburgh, Department of Biological Sciences Retreat*.
- Russell, A.L., Ashman, T.L.** 2018. *International Society for Behavioral Ecology*, Minneapolis, MN.
- Russell, A.L., Ashman, T.L.** 2018. *Animal Behavior Society*, Milwaukee, WI.
- Russell, A.L., Wei, N.** 2018. *Pymatuning Laboratory of Ecology Seminar Series*, Linesville, PA.
- Russell, A.L.** 2017. *Ecology & Evolution Department Seminar Series*, University of Pittsburgh, PA.
- Russell, A.L., Ashman, T.L.** 2017. *Three Rivers Evolution Event (regional conference)*, Pittsburgh, PA.
- Russell, A.L., Papaj, D.R.** 2017. *Building Our Methods Using Sound Science (bumble bee methods conference)*, Logan, UT. (Poster)
- Russell, A.L., Buchmann, S.L., Papaj, D.R.** 2016. *Society for Integrative and Comparative Biology*, New Orleans, LA.
- Russell, A.L.** 2016. *Doctoral Dissertation Defense talk*, Tucson, AZ.
- Russell, A.L., Buchmann, S.L., Papaj, D.R.** 2016. *International Congress of Entomology*, Orlando, FL.
- Russell, A.L., Buchmann, S.L., Papaj, D.R.** 2016. *Animal Behavior Society*, Colombia, MI.
- Russell, A.L., *Golden, R.E., Papaj, D.R.** 2016. *23rd GPSC Student Showcase*, Tucson, AZ. (Poster)
- Russell, A.L.** 2016. *Entomology and Insect Science graduate student luncheon*, Tucson, AZ.
- Russell, A.L., *Golden, R.E., Leonard, A.S., Papaj, D.R.** 2016. *Society for Integrative and Comparative Biology*, Portland, OR.

- Russell, A.L.**, *Golden, R.E., Papaj, D.R. 2015. *Graduate Interdisciplinary Program Student Research Showcase*, Tucson, AZ. (Poster)
- Russell, A.L.**, *Golden, R.E., Papaj, D.R. 2015. *First Annual GPSC Grant Winner Exposition*, Tucson, AZ. (Poster)
- Russell, A.L.**, Leonard, A.S., Papaj, D.R. 2015. *Animal Behaviour Society*, Anchorage, AK.
- Russell, A.L.**, Leonard, A.S., Papaj, D.R. 2015. *Society for Integrative and Comparative Biology*, West Palm Springs, Fl.
- Russell, A.L.**, Morrison, S.J., Papaj, D.R. 2014. *Sigma Xi International Research Conference*, Phoenix, AZ. (Poster)
- Russell, A.L.** 2014. *Entomology and Insect Science graduate student luncheon*, Tucson, AZ.
- Russell, A.L.**, Leonard, A.S., Stephen, L.B., Papaj, D.R. 2014. *International Society for Behavioral Ecology*, New York City, NY. (Poster)
- Russell, A.L.** 2014. *Entomology and Insect Science graduate student luncheon*, Tucson, AZ.
- Russell, A.L.** 2013. *Presentation to the public at the Tucson Insect Festival*, Tucson, AZ.
- Russell, A.L.**, Papaj, D.R. 2013. *Graduate Interdisciplinary Program Student Research Showcase - Poster Competition*, Tucson, AZ. (Poster)
- Russell, A.L.**, Gilbert, C. 2011. *RCPRS Senior Research Exposition*, Ithaca, NY. (Poster)
- Russell, A.L.**, Gilbert, C. 2011. *Jugatae Honors Thesis presentation*, Ithaca, NY.
- Russell, A.L.**, Paulk, A., Gilbert, C. 2010. *9th International Congress for Neuroethology*. Salamanca, Spain. (Poster)
- Russell, A.L.**, Gilbert, C. 2010. *25th Annual Spring Research Forum of the Cornell Undergraduate Research Board*, Ithaca, NY. (Poster)
- Russell, A.L.**, Gilbert, C. 2010. *Hughes Scholars presentation*, Ithaca, NY. (Poster)

Co-author on an additional 23 presentations: 17 by undergraduates, 2 by graduate students, 1 by a postdoc.

TEACHING EXPERIENCE

Instructor of Record, Introduction to Entomology (BIO 371) Designed and taught an entomology class for undergraduates. Missouri State University, MO. 24 students.	Spring 2020, Fall 2020
Instructor of Record, Evolution (BIO 515/616) Designed and taught an evolution class for graduate students and advanced undergraduates. Missouri State University, MO. 25-40 students/semester.	Fall 2019, Spring/Fall 2020
Instructor of Record, Plant-Animal Interactions (BIO 597/697) Designed and taught a student-centered plant-animal interactions course for graduate students and advanced undergraduates. Missouri State University, MO. 5 students.	Fall 2019
Instructor of Record, Plant-Animal Interactions Graduate Course (Biosc 2540) Designed and taught a student-centered advanced plant-animal interactions course. University Pittsburgh, PA. 12 students.	Spring 2019
Guest lecturer, Biology Seminar (BIO 301/302) Gave two mini-lectures / semester to the ~150 undergraduate students in the course.	Fall 2019, Spring 2020
Guest lecturer, Population Biology (Biosc 1320) Designed and taught a paper discussion for an undergraduate population biology course. University Pittsburgh, PA. 40 students.	Spring 2018
Instructor of Record, Behavioral Ecology Graduate Course (Biosc 2540) Designed and taught a student-centered advanced behavioral ecology course. University Pittsburgh, PA. 5 students.	Fall 2017
Guest lecturer, Advanced Ecology Graduate Course (Biosc 2361) Designed and taught "Mechanisms of floral specialization (by bees)" in Dr. Walter Carson's course. 5 students. University of Pittsburgh, PA	Fall 2017
Instructor of Record, Ecology 182 Lab (Introductory Biology II) Taught two 25 student 2:50hour laboratory sections each week. Designed components of lectures and activities and all quizzes. University of Arizona, AZ	Spring 2013
Graduate Associate, Teaching for Geological Perspectives (Geos 170A1) Taught weekly 2 hour study sessions and trained ~50 preceptors. Administered lecture activities and exams. University of Arizona, AZ	Fall 2012, Fall 2015
Undergraduate Assistant, Insect Biology Lab (Entom 2120) Assisted in arthropod collecting trips, taught proper insect handling, identification, and	Fall 2009

preservation, and exam grading. 20 students.
Cornell University, NY

MENTORING

Masters' Students Research Mentoring

Parker Fane

Summer 2020 - present

Masters' Students Committee Member

Caleb O'Neal

Fall 2020-present

David Fleshman

Fall 2019 - present

Kerry Kassabaum

Fall 2019 - present

Allison Sieja

Fall 2019 - present

Eric Stegmann

Fall 2019 - Spring 2020

Sarah White

Fall 2019 - present

Undergraduate Research Mentoring - mentee statements on my mentoring efficacy available upon request

Mentor for 23 undergraduates (Latinx, veteran, LGBTQIA, 19 women): Abigail Rose Jarrett, Ana Suarez Venot, Bekah Golden, China Rae Newman, Cynthia Trefois, Daniel Rojas, Eleni Moschonas, Ellie James, Faith Dall, Heather Gillette, Kevin Mauerman, Vanessa Morales, Abilene Mosher, Liam Wilson, Maggie Mayberry, Mary Irene McIntosh, Nina Ascoli, Ross Ferreter, Sarah White, Steph Sanders, Tara Hall, Tierney Shaible, Randie Rogers.

Mentored 6 undergraduates and 1 graduate student, Missouri State University, MO

Fall 2020

One undergraduate awarded a competitive Beta Beta Beta Research Foundation research grant (\$500); received second place in the CNAS Undergraduate Research Symposium. Another undergraduate received an honorable mention for her presentation at the Arkansas Idea Network of Biomedical Research Excellence conference <https://inbre.uark.edu/>

Mentored 4 undergraduates and 1 graduate student, Missouri State University, MO

Summer 2020

Mentored 4 undergraduates, Missouri State University, MO

Spring 2020

One undergraduate awarded a highly competitive Sigma Xi Grant in Aid of Research (\$1000).

Mentored 2 undergraduates, Missouri State University, MO

Fall 2019

Mentored 1 undergraduate, University of Pittsburgh, PA

Spring-Summer 2019

Mentored 1 undergraduate, University of Pittsburgh, PA

Fall 2018

One undergrad awarded a highly competitive Pennsylvania Space Grant Consortium Research Scholarship (\$1500)

Mentored 1 undergraduate, University of Pittsburgh, PA

Summer 2018

Mentored 2 undergraduates, University of Pittsburgh, PA

Spring 2018

One undergrad presented a research poster in an on-campus session and at a regional research conference.

Mentored 1 undergraduate, University of Pittsburgh, PA

Summer - Fall 2017

Mentored 1 undergraduate, University of Arizona, AZ

Two undergrads co-authored a research publication (Publication #9)

Fall 2016

Mentored 2 undergraduates, University of Arizona, AZ

One undergrad co-authored a research publication (Publication #6)

Summer 2016

Mentored 3 undergraduates, University of Arizona, AZ

One undergraduate completed and submitted their Honors Research Thesis. Another student was awarded Outstanding Senior. Undergraduates presented a total of 5 research posters in on-campus sessions. One undergrad co-authored a research publication (Publication #5)

Spring 2016

Mentored 3 undergraduates, University of Arizona, AZ

Co-mentored honors research for two students. One completed their Honors Research Grant project and co-authored a research publication (Publication #4)

Fall 2015

Mentored 2 undergraduates, University of Arizona, AZ

One undergraduate was awarded a highly competitive Honors Research Grant (\$1500); 3 undergraduates presented 2 research posters in on-campus sessions.

Summer 2015

Mentored 4 undergraduates, University of Arizona, AZ

One undergrad co-authored a research publication (Publication #1)	Spring 2015
Mentored 6 undergraduates, University of Arizona, AZ	
Two undergrads won prestigious Leslie N. Goodding Scholarship based on their research.	Fall 2014
Mentored 4 undergraduates, University of Arizona, AZ	
Taught a weekly summer research reading group.	Summer 2014
Mentored 6 undergraduates, University of Arizona, AZ	Spring 2014
Undergrads presented 2 research posters in on-campus sessions; one placed third.	
Mentored 1 undergraduate, University of Arizona, AZ	Fall 2013-Spring 2014
Undergraduate Advising	
Advisor for 11 undergraduates, Missouri State University, MO	Fall 2020
Advisor for 1 undergraduate, Missouri State University, MO	Fall-Spring 2019

PROFESSIONAL AND ACADEMIC SERVICE

Provost Diversity Committee member, Missouri State University	Fall 2020-present
Ad Hoc Committee of the Faculty Handbook Revision Committee on New Language on Diversity and Inclusion member, Missouri State University	Fall 2020-present
Inclusive Admissions Committee member, Missouri State University	Fall 2020-present
Advocate for diversity, equity, and inclusion in graduate admissions at MSU	
Diversity Committee member, Animal Behavior Society	Spring 2020-present
Co-organizer for the Animal Behavior Society 2020 Cultural Competency Workshop	Summer 2020
Received \$2000 to organize a 1.5 hour workshop to improve cultural competency among researchers of all stages. Invited speakers will have their registration waived	
CNAS Diversity Donuts Mixer co-host with other Diversity Committee faculty	Fall 2019
CNAS 3 Minute Thesis competition judge	Fall 2019
Judged Masters' presentations for advancement to university-wide competition	
CNAS Majors Fair, Department of Biology, Missouri State University	Fall 2019
Volunteer to provide information to students about biology and CNAS majors	
Wildlife Conservation and Management Committee member, Department of Biology, Missouri State University	Fall 2019-present
Discuss and address issues in this degree program	
Advisor for the Missouri State University Aerialist Club	Fall 2019-present
CNAS Diversity Committee member, Missouri State University	Fall 2019-present
Advocate for diversity, equity, and inclusion in the College of Natural and Applied Sciences	
CNAS Greenhouse Committee member, Missouri State University	Fall 2019-present
Co-organizer for the Animal Behavior Society 2019 Cultural Competency Workshop	Animal Behavior Society meeting 2019
Received \$1000 to organize with Cameron Jones and Montraí Spikes a 1.5 hour workshop to improve cultural competency among researchers of all stages. Two invited speakers, 6 panelists, 8 discussion exercise leaders, and 103 participants	
Guest speaker, General Biology (BIOSC 0067), University of Pittsburgh	Summer 2019
Answered student questions about flower microbiomes and pollinators	
Co-interviewee with Dr. Rainee Kaczorowski for an Allderdice High School student	Summer 2019
Discussed climate change with student Sophia Connelly as part of her long term biology class project	
Course judge for Pittsburg Ecology and Evolution Postdoctoral fellowship applicants	Spring 2019
Scored the proposals of fellowship applicants	
Skype-in guest speaker, Biology of Sex Undergraduate Course (BIOL 3041), University of Cincinnati	Spring 2019
Answered student questions as part of the "Ask the Author" series	
Co-organizer for a European Society for Evolutionary Biology 2019 symposium	ESEB 2019
"Eco-evolutionary feedback between pollinator behaviour and floral evolution"	
Selection of plant taxa for the Penn State University Arboretum Pollinators' Garden	Fall 2018-present
Serving as an expert consultant for choosing exhibit themes and taxa to plant	

Pollination outreach showcase, University of Pittsburgh retreat	Fall 2018
Outreach activities demonstration for the Department of Biological Sciences	
2018 Three Rivers Evolution Event committee member, UP	Summer-Fall 2018
Co-chair of the scientific programming committee and the diversity and inclusion committee. We had 193 registered attendees from 35 institutions and 12 states: 48 oral presentations, 99 poster presentations. Facilitated the diversity roundtable discussion. Conference URL: https://sites.google.com/view/treepgh	
Abstract judge, International Society for Behavioral Ecology 2018	Spring 2018
2017 Three Rivers Evolution Event organizing committee (1 of 6 members), UP	Summer-Fall 2017
<i>The 2017 Three Rivers Evolution Event (TREE)</i> is a regional evolution conference, sponsored by SMBE and ASN. We had 168 registered attendees from 45 institutions: 48 oral presentations, 61 poster presentations. Conference URL: https://sites.google.com/view/tree2017	
Graduate Student Representative, Department of Entomology, UA	Spring 2014-Fall 2016
Attended monthly faculty meetings where served as a liaison and took minutes	
Pacific Branch Entomological Association of America volunteer	Spring 2015
Henry Hagedorn Speakership host & coordinator, Entomology & Insect Science, UA	Spring-Fall 2015
Organized all elements, from invitation to completion of visit	
Travel Grants Judge, Graduate Professional Student Council, UA	March 2015
President of the Entomology Graduate Student Association, UA	Fall 2014-Spring 2015
Organized and lead 14 1.5hr biweekly meetings of graduate students to discuss research, classes, funding, and outreach. Attended by 50% of the Entomology & Insect Science graduate student cohort.	
Vice President of the Entomology Graduate Student Association, UA	Fall 2013-Spring 2014
Assisted in organization and advertising. Wrote public entomological blog posts	
Reviewer for peer-reviewed journals and grant agencies	Reviewer for 36 manuscripts or proposals
<i>BMC Biology, JoVE, Animal Behaviour (2x), ISME, Journal of the Royal Society Interface, Plant Biology, Ecological Entomology, Arthropod-Plant Interactions, Journal of Pollination Ecology, Biological Invasions, Biology Letters (with Daniel Papaj), Annals of Botany (2x) (*Andrea Fетters), FEMS Microbiology & Ecology (*Maria Rebolleda-Gomez), New Phytologist (*Zach Portman), NSF-DEB 2017 proposal, Behavioral Ecology (2x), The American Naturalist, Naturwissenschaften (2x), Insectes Sociaux, American Journal of Botany (2x), Scientific Reports, PeerJ (4x), PLoS One (2x), Evolutionary Ecology, Oecologia (with Daniel Papaj), The Canadian Entomologist, New Phytologist (with Daniel Papaj), and for NSF-DDIGs 2015; Publons.com peer review profile identifier</i>	
	*Invited these co-reviewers

COMMUNITY ENGAGEMENT

POSITIONS HELD

Insect Discovery Graduate Associate, University of Arizona, AZ	Fall 2013
Led 50 Tucson classrooms in hands-on entomological activities. Reached 1200+ students, k-8 th grade.	
Contributed to 4 ‘science nights’ at underserved Tucson schools to educate the public about entomology – each ‘science night’ received several hundred visitors.	
Insect Festival Organizing Committee Member, University of Arizona, AZ	Fall 2013
Part of the organizing committee for the Insect Festival. Chaired an Insect Festival presentation room.	
Naturalist Outreach Speakers Bureau member	2010
Led ten Ithaca classrooms in hands-on entomological activities. Reached 200+ students, k-8 th grade.	

OUTREACH EVENTS & PUBLIC TALKS

Springfield Conservation Nature Center	Summer 2020
Gave two plant-pollinator-microbe talks (with lab member Parker Fane) to 26 Nature Center volunteers	
Entomology outreach at Ozark Middle School	Summer 2020

Co-led (with lab member Maggie Mayberry) 6 th -8 th grade students in two 60 minute entomology activities. ~40 attendees.	
Discovery Center Springfield, Springfield, MO	Spring 2020
Led 21 3rd-8 th grade students in two 30 minute pollination activities	
Bee sociobiology and health talk to the Missouri State University Bee-Keeping Club	Spring 2020
Plants, Pollinators & People event hosted by the Nature Conservancy Western Ozark Water Coordinator, Sierra Club. Church of Unity, Springfield	Spring 2020
Panelist (1 of 6) giving expertise on pollination ecology. ~100 attendees.	
BioBlitz at the Phipps Conservatory, Pittsburgh, PA.	Summer 2019
Coordinator, volunteer, and pollinator-microbe-interactions booth designer. ~400 attendees of BioBlitz, ~100 to our booth.	
Market Science at the Bloomfield Saturday Market, Pittsburgh, PA.	Fall 2018
Coordinator, volunteer, and “Spooktacular Arthropods: Exo-skeleton Extravaganza” booth designer. ~90 attendees.	
Yough Intermediate/Middle School 12th Annual Science Fair, PA	Spring 2018
Coordinator and volunteer. The event introduced members of the rural public to pollination and entomology. ~75 attendees.	
Carnegie Science Center SciTech Days Festival, Pittsburgh, PA.	Spring & Fall 2017 & 2018
Co-coordinator, volunteer, and pollinator booth designer. Biannual. ~200 attendees/event.	
Market Science at the Bloomfield Saturday Market, Pittsburgh, PA.	Summer 2017
Coordinator, volunteer, and “Pollinators and Polli-nation” booth designer. ~100 attendees.	
Bee Thinking “Happ-bee Hour” public talk, Portland, OR.	Spring 2017
Invited public talk: “Getting buzzed: bee-havior and floral rewards”. 26 attendees.	
Avonworth Community Park, PA.	Spring 2017
Co-coordinator and volunteer. The event introduced the public to local pollinators and plant ecology. ~25 attendees.	
Public talk at the Tucson Insect Festival, Tucson, AZ	Fall 2016
Public talk: “How bees forage on flowers”.	
Arnold Arboretum Tree Mob – Pollinators Present, Harvard University, MA	Summer 2016
Co-led tour at the Leventritt Garden and concurrent discussion of local pollinators. ~15 attendees.	
Rincon Heights Community Garden Outreach, Tucson, AZ	Spring 2016
Led 45 elementary student sin hands-on pollinator activities.	
Presentation to the Tohono Chul Park docents, Tucson, AZ.	Spring 2016
Invited public talk: “Rewarding bee-havior”. ~30 attendees.	
Tucson Hebrew Academy annual STEM Festival, Tucson, AZ	2015-2016
Founder, coordinator, volunteer, and “Pollinator Booth” designer. ~500 attendees/yr.	
“After Dark” event at the Oregon Museum of Science and Industry	March 2016
Featured videos of our work on buzz pollination (NSF-funded)	
Tucson Festival of Books, University of Arizona, AZ	2012-2016
Introduced neuroscience to the public at the Annual Brain Works tent. ~1500 attendees/yr.	
Pollinator Paradise Booth, annual Arizona Insect Festival	2011-2016
Coordinator. 7000 total attendees/yr.	
Exhibit at the Oakland Museum of California - Bees: Tiny Insect, Big Impact.	2015
The exhibit features videos of our work on buzz pollination (NSF-funded)	
“Arachnophobia booth” booth at Flandrau Science Center’s Spooktacular Science	Fall 2014
Coordinator, volunteer and booth designer. ~50 attendees.	
“Brain Zoo” event at the Senita Valley Elementary School, Tucson, AZ	2012
Introducing neuroscience to the public. Volunteer.	
Insectapalooza, Cornell University, NY	2007-2010
Annual showcase of entomology. Volunteer. 3000 total attendees/yr.	

RESEARCH PRESS

CNAS NewsWatch – interview with Ashley Lenahan	Aug 6, 2020
URL: https://blogs.missouristate.edu/cnas-newswatch/2020/08/06/bias-as-behavior-understanding-cultural-competency/	
CNAS NewsWatch – interview with Ashley Lenahan	July 2, 2020

- URL: <https://blogs.missouristate.edu/cnas-newswatch/2020/07/02/from-ploy-to-pollination-how-flowers-plant-tricks-on-bees/>
- PBS and KQEDscience Deep Look** – panelist and interview with Josh Cassidy April 23, 2020
URL: <http://www.youtube.com/watch?v=EKWjPcd2WHM>
- KSMU Stem Spots** – interview with David Cornelison Aug 15, 2019
URL: <https://www.ksmu.org/post/springfield-researcher-studies-how-microbes-affect-pollination-0>
- Pittwire** – interview with Kimberly Barlow June 17, 2019
URL: <https://www.pittwire.pitt.edu/news/bee-friendly-pitt-sets-campus-abuzz>
- In Defense of Plants** – interview and podcast with Matt Candeias May 19, 2019
URL: <http://www.indefenseofplants.com/podcast/2019/5/19/ep-213-buzzing-bees-and-the-floral-microbiome>
- Entomology Today** – article and interview with Joe Rominiecki Sept 13, 2018
URL: <https://entomologytoday.org/2018/09/13/busy-bees-up-close-look-one-bee-species-scramble-mate-diadasia-rinconis/>
- University of Arizona News** – article and interview by Kristina Makansi April 5, 2018
URL: <https://research.arizona.edu/stories/new-study-reveals-evolution-sonicating-bees>
- Scientias** – article by Jente Ottenburghs April 3, 2018
URL: <https://www.scientias.nl/zoembbevruchting-en-de-evolutie-van-zoemende-bijen/>
July 26, 2017
- BioScience Talks - Society of Integrative and Comparative Biology podcast (@ 13:13)**
URL: <http://bioscienceaibs.libsyn.com/the-society-for-integrative-and-comparative-biology-2017-annual-meeting>
- University of Arizona News and EurekAlert!** - article and interview with Daniel Stolte June 29, 2017
URL: <https://uanews.arizona.edu/story/buzz-or-scrabble-foraging-bees-thats-question>
URL: https://www.eurekalert.org/pub_releases/2017-06/uoa-tbo063017.php
- The RFID Journal** - article and interview with Claire Swedberg Mar. 5th, 2017
URL: http://www.rfidjournal.com/articles/view?15748/&utm_medium%3Dnewsfeed_rss
- The Daily Wildcat** - article and interview with Rebekah Ulmer Mar. 3rd, 2017
URL: <http://www.wildcat.arizona.edu/article/2017/03/food-for-bees-foraging-patterns-in-bumblebees>
- Televisa Chapultepec** Mar. 2017
- Discovery Channel - Canada** Feb. 21, 2017
- Digital Trends** - article and interview with Dyllan Furness Feb. 21, 2017
URL: <http://www.digitaltrends.com/cool-tech/bumblebee-microchip/>
- University of Arizona News and EurekAlert!** - article and interview with Daniel Stolte Feb. 17, 2017
URL: <https://uanews.arizona.edu/story/scientists-use-bigbrother-technology-spy-bumblebees>
URL: https://www.eurekalert.org/pub_releases/2017-02/uoa-rub021717.php
- The New York Times Science** - article by Joanna Klein Dec. 2, 2016
URL: <http://www.nytimes.com/interactive/2016/12/02/science/bees-pollen-senses.html>
- Alibiflora** - article by Dr. Peter Zschunke Oct. 4, 2016
URL: <http://www.alibiflora.eu/blog/?p=1616>
- National Public Radio KJZZ 91.5** - on-air interview with Steve Goldstein Sept. 23, 2016
URL: <http://kjzz.org/content/369205/whats-behind-bees-buzz>
- The New York Times Science** - article and video with Robin Lindsay & James Gorman Sept. 5, 2016
URL: <http://www.nytimes.com/2016/09/06/science/bees-sonication.html>
- University of Arizona News** - article and interview with Robin Tricoles Apr. 4, 2016
URL: <https://uanews.arizona.edu/story/study-bees-pollenforaging-habits-could-create-buzz>

OTHER PRESS

- CNAS NewsWatch** – interview with Ashley Lenahan Aug 6, 2020
URL: <https://blogs.missouristate.edu/cnas-newswatch/2020/08/06/bias-as-behavior-understanding-cultural-competency/>
- Springfield News-Leader** – interview with Gregory Holman Jan 14, 2019
URL: <https://www.news-leader.com/story/news/local/ozarks/2020/01/14/coxhealth-ladybugs-postpone-surgeries-cox-medical-center-branson/4460000002/>

PROFESSIONAL AFFILIATIONS

Member

Society for the Study of Evolution	2019-present
International Commission for Plant-Pollinator Relationships	2018-present
Animal Behavior Society (ABS)	2015-present
Full Member of Sigma Xi	2014-present
Society for Integrative and Comparative Biology (SICB)	2014-present
International Society for Behavioral Ecology (ISBE)	2014-present
Entomological Society of America (ESA)	2014-present
International Congress for Neuroethology (ISN)	2010-present