Fall 2019

\$250

# Avery L. Russell

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

Diversity Scholar Stipend Award

(607) 220-4432 tel: 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 RESEARCH APPOINTMENTS	May 2011
Assista MO	ant Professor of Evolutionary Biology, Department of Biology, Missouri State University,	Fall 2019- present
Pittsb	urgh Ecology and Evolution Postdoctoral Fellow, University of Pittsburgh, PA PIs: Dr. Tia-Lynn Ashman and Dr. Corinne Richards-Zawacki	Spring 2017- Fall 2019
Gradu	<b>Particular Research Associate</b> , 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
Gradu	PIs: Dr. Anne Leonard, Dr. Daniel Papaj, Dr. Steve Buchmann, and Dr. Wulfi Gronenberg	Summer- Fall 2012
Under	rgraduate Researcher, Cornell University, NY PI: Dr. Cole Gilbert	Fall 2007- Summer 2011
Labor	ratory Assistant, Cornell University, NY Supervisor: Dr. Linda Rayor	Summer 2008

Supervisor: Dr. Linda Rayor Summer 2008

# **GRANTS, AWARDS, & HONORS**

Grants & Fellowships		
Missouri Department of Conservation Grant, single PI	\$104,256	2023-2026
Missouri Department of Conservation Grant, single PI	\$9525	2022-2023
Assessment of Student Learning Grant	\$500	Fall 2021
Faculty Research Grant	\$7500	Spring 2021
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		
MSU College of Natural and Applied Sciences Excellence in Research Award		Spring 2023
MSU College of Natural and Applied Sciences Diversity Award		Spring 2021

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**

[UG]Undergraduate, [G]Graduate, [T]lab technician, †Co-first author Lab members underlined

Journal Impact Factors and Google Scholar Citations as of Sept 2022

- 26. Vallejo-Marín, M., **Russell, A.L.** Harvesting pollen with vibrations: Towards an integrative understanding of the proximate and ultimate reasons for buzz pollination. *Provisionally accepted* to *Annals of Botany*. **Journal impact factor: 4.2; Citations: NA**
- 25. <u>Wilkins, R.[T], Mayberry, M.[G]</u>, Vallejo-Marín, M., **Russell, A.L.** Hold tight or loosen up? Functional consequences of a shift in anther architecture depend substantially on bee body size. *Oecologia*. 200:119-131 **Journal impact factor: 3.2; Citations: 1**
- 24. Vallejo-Marín, M., Nunes, C.E.P., **Russell, A.L.** 2022. Anther cones increase pollen release in buzz-pollinated *Solanum* flowers. *Evolution*. **Journal impact factor: 3.7; Citations: 8**
- 23. Jankauski, M., Ferguson, R.[UG], **Russell, A. L.**, Buchmann, S. L. 2022. Structural dynamics of real and modeled Solanum stamens: Implications for pollen ejection by buzzing bees. *Journal of the Royal Society Interface*. **Journal impact factor: 4.5; Citations: 8**

- 22. Crowley, B.[G], **Russell, A.L.** 2021. Nectar bacteria grow by germinating and bursting pollen. *Current Biology*. Invited Dispatch. 31, R1120-R1122 **Journal impact factor: 10.8; Citations: 0**
- 21. **Russell, A.L.**, Fetters, A.M.[G], James, E.I.[UG], Ashman, T.-L. 2021. Pollinator effectiveness is affected by intraindividual behavioral variation. *Oecologia*. 197: 189-200 **Journal impact factor: 3.2; Citations: 10**
- 20. Russell, A.L.†, Sanders, S.R.[UG]†, Wilson, L.A. [UG], Papaj, D.R. 2021. The size of it: Variation in flower size does not influence visitation by bees to deceptive floral mimics. Frontiers in Ecology and Evolution, Sensory Ecology of Plant-Pollinator Interactions special issue. Journal impact factor: 4.2; Citations: 1
- 19. Nevard, L.[G], **Russell, A. L.**, Foord, K., Vallejo-Marín, M. 2021. Transmission of bee-like vibrations in buzz-pollinated plants with different stamen architectures. *Scientific Reports*. 11, 13541 **Journal impact factor: 4.4**; **Citations: 13**
- 18. Rico-Guevara, A., Hurme, K. J., Elting, R.[T], **Russell, A.L.** 2021. Bene'fit' assessment in pollination coevolution: mechanistic perspectives on hummingbird bill-flower matching. *Integrative and Comparative Biology*. 1-15. **Journal impact factor: 3.3; Citations: 15**
- 17. Wei, N.†, Russell, A.L.†, Jarrett, A.R., Ashman, T.-L. 2021. Plant-visitor interactions mediate floral microbial diversity and network in response to agrichemical disturbance. *Molecular Ecology*. 30: 2235-2247 **Journal impact factor: 6.2; Citations: 9**
- 16. **Russell, A.L.**, Kikuchi, D.W., Noah, W.G.[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: 6.2; Citations: 9**
- 15. Rebolleda-Gomez, M., Forrester, N.[G], **Russell, A.L.**, Wei, N., Fetters, A.[G], 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: 10.2; Citations: 50**
- 14. **Russell, A.L.**, Rebolleda-Gómez, M., Shaible, T.S.[UG], 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: 3.2; Citations: 28**
- 13. Switzer, C.[G], **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: 20**
- 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: 2.7; Citations: 34**
- 11. **Russell, A.L.,** Papaj, D.R., Sabino, W.d.O. & Buchmann, S.L. 2018. 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: 1.9; Citations: 4**
- 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: 3.7; Citations: 110**
- 9. **Russell, A.L.**, Mauerman, K.[UG], Golden, R.E.[UG], 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: 2.8; Citations: 12**
- 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: 2.7; Citations: 48
- 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: 26**

- 6. **Russell, A.L.**, Morrison, S.J., Moschonas, E.H.[UG], & 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: 4.4; Citations: 61**
- 5. Russell, A.L., Leonard, A.S., Gillette, H.D.[UG], & 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: 2.8; Citations: 36
- 4. **Russell, A.L.**, Newman, C.R.[UG], & 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: 2.7; Citations: 10**
- 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: 6.5; Citations: 160**
- 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: 25**
- 1. **Russell, A.L.**, Golden, R.E.[UG], 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: 2.7; Citations: 40**

### In review or in preparation:

Gould et al. (300 authors; **Russell, A.L.** is a middle author). Same data, different analysts: variation in effect sizes due to analytical decisions in ecology and evolutionary biology. *Submitted* to *BMC Biology*. **Journal impact factor: 5.4** 

**Russell, A.L.**, Buchmann, S.L., Zenil-Ferguson, R., Jolles, D., Kriebel, R, Vallejo-Marín, M. Widespread evolution of poricidal flowers: A striking example of morphological convergence across flowering plants. *Submitted*.

Gould et al. (300 authors). Same data, different analysts: variation in effect sizes due to analytical decisions in ecology and evolutionary biology. *Submitted* to *BMC Biology* 

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.[UG], 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 propriosensory-motor system in a flesh fly (Diptera: Sarcophagidae). Honors Thesis presented to the College of Agriculture and Life Sciences, Entomology, CU.

### Non-peer reviewed contracted reports:

2023 bumble bee field survey research report to the Missouri Department of Conservation and to the Missouri Prairie Foundation

2022 bumble bee field survey research report to the Missouri Department of Conservation and to the Missouri Prairie Foundation

### RESEARCH PRESENTATIONS

[UG]Undergraduate, [G]Graduate, [T]lab technician

Total: 66; Invited: 29; Conferences: 28 talks, 4 posters

### **Invited Talks:**

**Russell**, **A.L.** 2023. *Grassland bumble bee microbiome grant proposal presentation*, Missouri Department of Conservation Science Branch, Columbia, MO.

Russell, A.L. 2023. Biological Sciences Departmental Seminar, Missouri S&T, Rolla, MO.

Russell, A.L. 2022. Biological Sciences Departmental Seminar, University of Memphis, Memphis, TN.

Russell, A.L. 2022. Biological Sciences Departmental Seminar, California State University, Long Beach, CA.

Russell, A.L. 2021. Biological Sciences Departmental Seminar, Northern Arizona University, Flagstaff, AZ.

Russell, A.L. 2021. Biology Seminar Series, University of Missouri, St. Louis, MO.

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.[UG], 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., Ashman, T.L., Campbell, P.[G], Burrow, J. K. [UG]. 2023. Animal Behavior Society, Portland, OR.

Russell, A.L., Ashman, T.L., Campbell, P.[G] 2022. Society for Integrative and Comparative Biology, Austin, TX.

Russell, A.L. 2022. Animal Behavior Society, San José, CR.

Russell, A.L. 2022. Society for Integrative and Comparative Biology, Phoenix, AZ.

Russell, A.L., Sanders, S.R.[UG], Wilson, L.A.[UG], Papaj, D.R. 2021. Animal Behavior Society, virtual conf.

Russell, A.L., Rebolleda-Gómez, M., Fetters, A., Shaible, T., James, E. Ashman, T.L. 2019. *Animal Behavior Society*, Chicago, IL.

Russell, A.L., Rebolleda-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.

2020

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. 2017. 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. [UG], 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. [UG], Leonard, A.S., Papaj, D.R. 2016. Society for Integrative and Comparative Biology, Portland, OR.

Russell, A.L., Golden, R.E. [UG], Papaj, D.R. 2015. *Graduate Interdisciplinary Program Student Research Showcase*, Tucson, AZ. (Poster)

Russell, A.L., Golden, R.E. [UG], 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. 25<sup>th</sup> 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 57 presentations: including 36 by undergraduates, 13 by graduate students, 1 by a research technician, 2 by postdocs.

#### TEACHING EXPERIENCE **Instructor of Record, Biology Seminar (BIO 302)** Spring 2022-Designed and taught a career orientation seminar for undergraduates. Associated with BIO 23 492, and thus responsible for coordinating the Major Field Test with students in the Spring semester. Missouri State University, MO. Cap: 100 students. Instructor of Record, Introduction to Entomology (BIO 371) Spring 2020, Designed and taught an entomology class for undergraduates. Missouri State University, Fall 2020-22 MO. Cap: 24 students. Instructor of Record, Evolution (BIO 515/616) Fall 2019, Designed and taught an evolution class for graduate students and advanced undergraduates. Spring &Fall Additionally involves coordinating with a PASS (Peer Assisted Study Session Program) 2020-2023 mentor to help improve student outcomes in the course Missouri State University, MO. Max Cap: 48 students/semester. **Instructor of Record, Plant-Animal Interactions (BIO 504/604)** Fall 2019, Designed and taught a student-centered plant-animal interactions course for graduate Spring 2023 students and advanced undergraduates. Missouri State University, MO. Cap: 24 students. **Instructor of Record, Plant-Animal Interactions Graduate Course (Biosc 2540)** Designed and taught a student-centered advanced plant-animal interactions course. Spring 2019 University Pittsburgh, PA. 12 students. Guest lecturer, Biology Seminar (BIO 301/302) Fall 2019, Gave two mini-lectures / semester to the $\sim$ 150 undergraduate students in the course. 2021, Spring

Total: 32[UG], 4[G], 1[T]

Guest lecturer,	Por	nulation	Biology	(Biosc	1320)
Guest recturer,	10	Juintivii	DIVIVE	(DIOSC	1020,

Designed and taught a paper discussion for an undergraduate population biology course.

Spring 2018
University Pittsburgh, PA. 40 students.

# Instructor of Record, Behavioral Ecology Graduate Course (Biosc 2540)

Designed and taught a student-centered advanced behavioral ecology course. Fall 2017 University Pittsburgh, PA. 5 students.

# 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

# 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

### 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 2015

### **Undergraduate Assistant, Insect Biology Lab (Entom 2120)**

Assisted in arthropod collecting trips, taught proper insect handling, identification, and preservation, and exam grading. 20 students.

Cornell University, NY

### **MENTORING**

**Research Mentoring** - mentee statements on my efficacy available upon request [UG]Undergraduate, [G]Graduate, [T]lab technician

Lab Mentees Charlotte Davis [UG] Carter Stoelzel [UG]	Notable Achievements with the Lab  2023 Honors College Distinction Project; 2023 led 8 outreach classroom visits (203 6/7 <sup>th</sup> graders) at Jarrett Middle School and Nixa John Thomas Magnet School	Role Faculty mentor Faculty mentor	<b>Time Mentored</b> F2022 - present F2022 - S2023
Moth Castagna [G]	2023 SICB Research Grant; 2023 SICB Mangum Travel Grant; 2023 SICB (poster); 2023 MSU Thesis Funding Grant; 2023 MO Acad. of Sciences (poster); 2023 ABS Graduate Student Travel Award; 2023 ABS (talk);	Faculty mentor	SU2022 - present
Rita Afagwu [G]	2022 MSU Summer Fellowship; 2023 SICB Grants (Mangum & Broadening Participation); 2023 SICB (poster); 2023 MSU Thesis Funding Grant; 2023 3 Min. Thesis Comp.; 2023 Missouri Botanical Symposium (poster)	Faculty mentor	SU2022 - present
Annaliese Novinger [UG]	2023 SICB Mangum Travel Grant; 2023 SICB (DAB best student presentation talk); CNAS Undergrad Research Symposium (poster); 2023 Honors College Distinction Project and Thesis; 2023 ABS (talk); 2023 Interdisciplinary Biomedical Research Symposium (poster)	Faculty mentor	S2022 - SU2023
Ciara Stewart [UG]	2023 SICB Broadening Participation Grant; 2023 MO Acad. of Sciences (poster);	Faculty mentor	S2022 - present
Haley Muse [UG]	<u>.</u> ,	Faculty mentor	F2021 - SU2022
Katie Naumer [UG]	2022 MSU Outstanding Senior Award	Faculty mentor	F2021 - SU2022
Rachel Wilkins [T]	2022 SICB (poster); 2022 co-authored paper	Faculty mentor	SU2021-SU2022

Jenny Burrow [UG]	2022 SICB Mangum Travel Grant; 2023 SICB (poster); 2023 CNAS Undergrad Research Symposium (poster); 2023 ABS	Faculty mentor	SU2021 - present
Kate Trebing [UG]	(talk); 2021 CNAS Sarah Elsea Research Scholarship; 2021 Ozark Middle School outreach; 2022 Missouri State Foundation Scholarship	Faculty mentor	SU2021 - S2022
Dalton McCart [UG] Evelyn VanDenBerg [UG] Faith Dall [UG] Randie Rogers [UG]	2021 Ozark Middle School outreach	Faculty mentor Faculty mentor Faculty mentor Faculty mentor	SU2021 - F2021 SU2021 F2020 - SU2021 F2020
Vanessa Morales [UG]	2020 INBRE (talk) honorable mention; 2021 CFM Minority Scholarship; 2021 MoLSAMP Undergraduate Research Symposium (poster) honorable mention; 2021 MAS (talk); 2021 MSU Outstanding Senior Award; 2021 accepted into Animal Behavior Society's Turner Program, Dartmouth's EEES Scholars Program, and Cornell's Diversity Preview Weekend; 2021 SACNAS (talk) Student Presentation Award	Faculty mentor	F2020 - S2021
Maggie Mayberry [G][UG]	2020 Ozark Middle School outreach; 2021 Sigma Xi Grant; 2021 Ozark Middle School outreach; 2021 Beekeepers Association of the Ozarks outreach; 2021 MSU Summer Fellowship; 2021 SICB Travel Grant; 2022 SICB (talk); 2022 MSU Thesis Funding Grant; 2022 MSU Grad Travel Grant; 2022 Skype a Scientist outreach activity; 2022 ABS (talk); 2023 Biology Outstanding Teaching Assistant; 2023 Skype a Scientist outreach activity;	Faculty mentor	SU2020 - present
Parker Campbell [G]	2020 MSU Summer Fellowship; 2021 SICB Research Grant; 2021 MSU Thesis Funding Grant; 2021 Springfield Conservation Nature Center outreach; 2022 Frank Einhellig Graduate Interdisciplinary Forum presentation (talk)	Faculty mentor	SU2020 - SU2022
Stephanie Sanders [UG] Abilene Mosher [UG]	2020 Sigma Xi Grant; 2021 co-authored paper 2020 TriBeta Honor Society research grant; 2020 CNAS Undergrad Research Symposium (poster) 2nd place; 2021 SICB (talk); 2021 TriBeta Research Symposium; 2021 OSU Summer Research Internship; 2021 SICB Travel Grant; 2022 SICB (talk); 2022 TriBeta Honor Society research grant; 2022 ABS (talk); 2022 SICB Mangum Travel Grant; 2023 SICB (talk)	Faculty mentor Faculty mentor	S2020 - S2021 F2019 - F2022
Liam Wilson [UG]	2021 co-authored paper	Faculty mentor	F2019 - F2021
Abigail Jarrett [UG]	2018 Pennsylvania Space Grant Consortium Research Scholarship; 2018 Pennsylvania Botany Symposium (poster); 2021 co- authored paper	Postdoc mentor	SU2018 - F2018
Tierney Shaible [UG]	2018 Market Science outreach; 2018 SciTech Festival outreach; 2018 Undergraduate Research Symposium; 2018 94th Annual Meeting of the Pennsylvania Academy of Science; 2019 co-authored paper	Postdoc mentor	SU2017- S2018
	,		

Nina Ascoli [UG]		Postdoc mentor	S2018
Ellie James [UG]	2019 Phipps BioBlitz outreach; 2021 co- authored paper	Postdoc mentor	S2019
Sarah White [UG]	2014 Insect Festival outreach	Grad mentor	SU2014 - SU2015
Eleni Moschonas [UG]	2015 Stem Fest outreach; 2015 EEB Undergraduate Poster Session; 2016 Stem Fest outreach; 2017 EEB Undergraduate Poster Session; 2017 co-authored paper	Grad mentor	SU2014 - F2016
Kevin Mauerman [UG]	2014 Insect Festival outreach; 2014 Leslie N. Gooding Research Scholarship; 2015 Insect Festival outreach; 2015 Stem Fest outreach; 2015 REU RMBL CO; 2015 EEB Undergraduate Poster Session; 2016 Stem Fest outreach; 2016 EEB Undergraduate Poster Session; 2016 Honors Research Thesis; 2018 co-authored paper	Grad mentor	SU2014 - S2016
China Rae Newman [UG]	2014 EEB Undergraduate Poster Session; 2014 Leslie N. Gooding Research Scholarship; 2015 Insect Festival outreach; 2015 Honors Research Grant; 2016 Honors Spirit of Inquiry Poster Session; 2016 23 <sup>rd</sup> GPSC Student Showcase (poster); 2016 Honors Exposition (poster); 2016 EEB Undergraduate Poster Session; 2016 Outstanding Senior; 2017 co-authored paper	Grad mentor	S2014 - S2016
Tara Hall [UG]	2014 Insect Festival outreach	Grad mentor	S2014 - F2015
Rebekah Golden [UG]	2014 Insect Festival outreach; 2015 EEB Undergraduate Poster Session; 2016 co- authored paper; 2018 co-authored paper	Grad mentor	S2014 - S2015
Cynthia Trefois [UG] Daniel Rojas [UG] Mary McIntosh [UG] Anna Venot [UG] Ross Ferreter [UG]		Grad mentor Grad mentor Grad mentor Grad mentor Grad mentor	S2014 - F2014 S2014 S2014 S2014 S2014
Heather Gillette [UG]	2014 EEB Undergraduate Poster Session and 3rd prize winner; 2014 Insect Festival outreach; 2016 co-authored paper	Grad mentor	F2013 - SU2014

# **Masters' Students Committee Member**

Master's Students Committee Member	
Madyson Neff (Bio)	Fall 2023 - on
Jade Bailey (Bio)	Spring 2023 - on
Brianne Edwards (Bio)	Fall 2022 – Spring 2023
Aleana Savage (Bio)	Fall 2022 - on
Caleb O'Neal (Bio)	Fall 2020 - Spring 2021
Kerry Kassabaum (Bio)	Fall 2019 – Summer 2021
Allison Sieja (Bio)	Fall 2019 – Summer 2021
Eric Stegmann (Bio)	Fall 2019 - Spring 2020
Sarah White (Bio)	Fall 2019 - Spring 2021

# **Other Official Mentoring**

Mentor for the ABS 2021 Virtual Meeting Mentoring Program	Summer 2021
Mentor for the ABS 2021 Turner Program	Summer 2021
Mentored graduate student to curate MSU entomology collection	Fall 2021
Mentored undergraduate student to curate MSU entomology collection	Spring 2021

# **Undergraduate Advising**

Advisor for 14 undergraduates, Missouri State University, MO	Spring 2023
Advisor for 26 undergraduates, Missouri State University, MO	Fall 2022
Advisor for 22 undergraduates, Missouri State University, MO	Spring 2022
Advisor for 16 undergraduates, Missouri State University, MO	Fall 2021
Advisor for 12 undergraduates, Missouri State University, MO	Spring 2021
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	
CNAS representative on the FCTL Advisory Council	Fall 2023-Spring 2025
Advisor for the Missouri State University Students for a Sustainability Future Club Search Committee member for Assist. Professor (Microbiology), Missouri State University	Fall 2023-present Fall 2023
Judge for the 30 <sup>th</sup> Annual Einhellig Interdisciplinary Forum (EIDF) at MSU, MO Judge for ABS 2023 Broadening Participation grants	Spring 2023 Spring 2023
Grand Award Judge for the Ozarks Science and Engineering Fair SICB Session Chair for Foraging Behavior II: Bees, Bats and Rewards, Austin, TX.	Spring 2023 Winter 2023
Member of the Animal Behavior Society Accessibility Committee Ad hoc CNAS Undergraduate Research Committee member	Fall 2022-present Fall 2022-present
Panelist for the Grad School Information Session at Animal Behavior Society 2022 ABS Session Chair for the Puzzling Animals: Learning and Cognition, San José, CR.	Summer 2022 Summer 2022
Department of Biology Diversity Award Committee member  Member of the Animal Behavior Society Turner Steering Committee	Spring 2022 Winter 2022-
SICB Session Chair for the Division of Animal Behavior Best Student Presentation	SU2022 Winter 2022-2023
(Marlene Zuk Award), Phoenix, AZ. SICB Session Chair for Integrating Ecology and Biomechanics to Investigate Patterns of Phenotypic Diversity, Phoenix, AZ.	Winter 2022
Chair for the Division of Animal Behavior in the Society for Integrative and Comparative Biology	Winter 2022- present
Ad Hoc Graduate Assistantships Workgroup member	Fall 2021-Spring
Substitute Senator for a Missouri State University Faculty Senate meeting Associate Editor for the journal Arthropod-Plant Interactions (APIS) Handled 20 total manuscripts: 2023 [8]; 2022 [11]; 2021 [1]	Fall 2021 Fall 2021-Fall 2023
NSF Advance Grant Communication Plan representative	Fall 2021-Spring 2022
Search Committee member for Assist. Professor (Organismal Conservation Biologist), Missouri State University	Fall 2021
Co-moderator for the ABS 2021 session "Smarts In The City: Cognition" Panelist for the Grad School Information Session at Animal Behavior Society 2021	Summer 2021 Summer 2021
Co-organizer for the Animal Behavior Society 2021 Inclusive Mentoring Workshop Received \$4000 to organize a 2.5 hour (J.E.D.I.) workshop to improve inclusive mentoring. Invited speakers and panelists received honoraria	Summer 2021
Search Committee member for Visiting Assist. Professor, Missouri State University Advisor for the Missouri State University Bee Keeping Club	Spring 2021 Spring 2021-Fall 2022
Department of Biology Teaching Award Committee member Provost Diversity Council co-chair, Missouri State University	Spring 2021 Fall 2020-Spring 2022
Ad Hoc Committee of the Faculty Handbook Revision Committee on New Language on Diversity and Inclusion member, Missouri State University	Fall 2020-Fall 2021
Inclusive Admissions Committee member, Missouri State University  Advocate for diversity, equity, and inclusion in graduate admissions at MSU  Diversity Committee member, Animal Behavior Society	Fall 2020-Spring 2021
Diversity Committee member, Animai Denavior Society	Spring 2020- present

Co-organizer for the Animal Behavior Society 2020 Cultural Competency Workshop Received \$2000 to organize a 1.5 hour workshop to improve cultural competency	Summer 2020
among researchers of all stages. Invited speakers had their registration waived CNAS Diversity Donuts Mixer co-host with other Diversity Committee faculty CNAS 3 Minute Thesis competition judge	Fall 2019 Fall 2019
Judged Masters' presentations for advancement to university-wide competition CNAS Majors Fair, Department of Biology, Missouri State University  Volunteer to provide information to students about biology and CNAS majors	Fall 2019, 2021, 2022
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-Fall 2022
CNAS Diversity Committee member, Missouri State University	Fall 2019-present
Advocate for diversity, equity, and inclusion in the College of Natural and Applied Sciences	run 2019 present
CNAS Greenhouse Committee member, Missouri State University	Fall 2019-present
Co-organizer for the Animal Behavior Society 2019 Cultural Competency Workshop	Animal Behavior
Received \$1000 to organize with Cameron Jones and Montrai Spikes a 1.5 hour workshop to improve cultural competency among researchers of all stages. Two	Society meeting 2019
invited speakers, 6 panelists, 8 discussion exercise leaders, and 103 participants  Guest speaker, General Biology (BIOSC 0067), University of Pittsburgh  Answered student questions about flower microbiomes and pollinators	Summer 2019
Co-interviewee with Dr. Rainee Kaczorowski for an Allderdice High School student Discussed climate change with student Sophia Connelly as part of her long term biology class project	Summer 2019
Course judge for Pittsburg Ecology and Evolution Postdoctoral fellowship applicants  Scored the proposals of fellowship applicants	Spring 2019
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 "Eco-evolutionary feedback between pollinator behaviour and floral evolution"	ESEB 2019
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	F 11 2010
Pollination outreach showcase, University of Pittsburgh retreat  Outreach activities demonstration for the Department of Biological Sciences	Fall 2018
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	Summer 1 am 2010
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  The 2017 Three Rivers Evolution Event (TREE) is a regional evolution conference,	Summer-Fall 2017
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	
Attended monthly faculty meetings where served as a liaison and took minutes	Spring 2014-Fall 2016
Pacific Branch Entomological Association of America volunteer Henry Hagedorn Speakership host & coordinator, Entomology & Insect Science, UA	Spring 2015 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	E-11 001 4 C '
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.	Fall 2014-Spring 2015
Vice President of the Entomology Graduate Student Association, UA	Fall 2013-Spring

Assisted in organization and advertising. Wrote public entomological blog posts

2014

### Reviewer for peer-reviewed journals and grant agencies

American Journal of Botany (2x), Animal Behaviour (4x), Annals of Botany (4x)(\*Andrea Fetters), Apidologie (1x), Arthropod-Plant Interactions (2x), Behavioral Ecology (2x), Biological Invasions (1x), Biology Letters (with Daniel Papaj) (1x), BMC Biology (1x), Current Biology (1x), Ecological Entomology (1x), Evolutionary Ecology (1x), FEMS Microbiology & Ecology (\*Maria Rebolleda-Gomez) (1x), Frontiers in Ecology and Evolution (1x), Insectes Sociaux (1x), ISME (1x), Journal of Evolutionary Biology (1x), Journal of Pollination Ecology (1x), Journal of the Royal Society Interface (1x), JoVE (1x), Methods in Ecology & Evolution (1x). Naturwissenschaften (2x), New Phytologist (\*Zach Portman) (1x), New Phytologist (with Daniel Papaj) (1x), Oecologia (with Daniel Papaj) (1x), PeerJ (4x), Philosophical Transactions B (1x), Plant Biology (1x), PLoS One (2x), Scientific Reports (1x), The American Naturalist (1x), The Canadian Entomologist (1x), Journal of Ecology (1x), Austrian Science Fund 2021 proposal, NSF-DEB 2017 proposal, NSF-DDIGs 2015; Publons.com peer review profile identifier

Reviewer for 49 manuscripts or proposals

\*Invited these co-reviewers

### **COMMUNITY ENGAGEMENT**

# POSITIONS HELD

### Insect Discovery Graduate Associate, University of Arizona, AZ

Led 50 Tucson classrooms in hands-on entomological activities. Reached 1200+ students, k-8th grade.

Fall 2013

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

Part of the organizing committee for the Insect Festival. Chaired an Insect Festival presentation room.

Fall 2013

# **Naturalist Outreach Speakers Bureau member**

Led ten Ithaca classrooms in hands-on entomological activities. Reached 200+ students, k-8th grade.

2010

### **OUTREACH EVENTS & PUBLIC TALKS**

#### Bees Across Borders: A (Virtual) Fire Side Chat with Bumble Bee Researchers from U.S. and Summer 2023 **Iceland** for National Pollinator Week

1 hour interview and presentation hosted by Meghan Orman (University of Pittsburgh), alongside Dr. Kristján Kristjánsson (Reykjavík University): 19 adult attendees (nonscientist self-identified bee enthusiasts)

# Bee sociobiology and biodiversity talk to the Missouri State University Wildlife Society ~30 undergraduate attendees

Spring 2023 Spring 2022

# Bee sociobiology and biodiversity talk to the Missouri State University Wildlife Society ~15 undergraduate attendees

#### **Entomology outreach at Ozark Middle School** Summer 2020-2021

In 2021, co-led by lab members Maggie Mayberry and Faith Dall: 6th-8th grade students in two 80 minute entomology activities. 16 attendees. In 2020, co-led with lab member Maggie Mayberry: 6<sup>th</sup>-8<sup>th</sup> grade students in two 60 minute entomology activities. ~40 attendees.

# **Beekeepers Association of the Ozarks**

Spring 2021

Gave bee and buzz pollination talk (with lab member Maggie Mayberry) to ~30 beekeepers

### **Springfield Conservation Nature Center**

Summer 2020

Gave two plant-pollinator-microbe talks (with lab member Parker Campbell) to 26 Nature Center volunteers

# Discovery Center Springfield, Springfield, MO

Spring 2020

Led 21 3rd-8<sup>th</sup> 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

Spring 2020

Coordinator, Sierra Club. Church of Unity, Springfield	
Panelist (1 of 6) giving expertise on pollination ecology. ~100 attendees.	G 2010
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
Co-coordinator, volunteer, and pollinator booth designer. Biannual. ~200 attendees/event.	2017 & 2018
Market Science at the Bloomfield Saturday Market, Pittsburgh, PA.	2017 & 2010
Coordinator, volunteer, and "Pollinators and Polli-nation" booth designer. ~100 attendees.	Summer 2017
Bee Thinking "Happ-bee Hour" public talk, Portland, OR.	
Invited public talk: "Getting buzzed: bee-havior and floral rewards". 26 attendees.	Spring 2017
Avonworth Community Park, PA.	
Co-coordinator and volunteer. The event introduced the public to local pollinators and	Spring 2017
plant ecology. ~25 attendees.  Public talk at the Tucson Insect Festival, Tucson, AZ	
Public talk: "How bees forage on flowers".	Fall 2016
Arnold Arboretum Tree Mob – Pollinators Present, Harvard University, MA	1 an 2010
Co-led tour at the Leventritt Garden and concurrent discussion of local pollinators. ~15	Summer 2016
attendees.	
Rincon Heights Community Garden Outreach, Tucson, AZ	
Led 45 elementary student sin hands-on pollinator activities.	Spring 2016
Presentation to the Tohono Chul Park docents, Tucson, AZ.	G : 2016
Invited public talk: "Rewarding bee-havior". ~30 attendees.	Spring 2016
Tucson Hebrew Academy annual STEM Festival, Tucson, AZ Founder, coordinator, volunteer, and "Pollinator Booth" designer. ~500 attendees/yr.	2015-2016
"After Dark" event at the Oregon Museum of Science and Industry	March 2016
Featured videos of our work on buzz pollination (NSF-funded)	111aren 2010
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.	2015
Exhibit at the Oakland Museum of California - Bees: Tiny Insect, Big Impact.  The exhibit features videos of our work on buzz pollination (NSF-funded)	2015
"Arachnophobia booth" booth at Flandrau Science Center's Spooktacular Science	Fall 2014
Coordinator, volunteer and booth designer. ~50 attendees.	Tall 2014
"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 – interviewed by Olivia Prost	April 27, 2023
URL: https://blogs.missouristate.edu/cnas-newswatch/2023/04/27/a-guide-to-bee-ing-	1
friends/	
CNAS NewsWatch – lab researchers interviewed by Olivia Prost	Feb 2, 2023
URL: https://blogs.missouristate.edu/cnas-newswatch/2023/02/biology-department-	
brings-buzz-to-austin/	Dag 9 2022
CNAS NewsWatch – lab researchers interviewed by Olivia Prost URL: https://blogs.missouristate.edu/cnas-newswatch/2022/12/08/naming-new-species-	Dec 8, 2022
and-saving-the-bees/?utm_source=feed&utm_medium=feed&utm_campaign=feed	
Stand Out Early Career Professional – interview with Tim Vandervoet for the Entomology	May 25, 2021
	-

Conjety of Amonico	
Society of America URL: https://entomologytoday.org/2021/05/25/making-entomology-more-welcoming-	
avery-russell-standout-early-career-professional/	
CNAS NewsWatch – interview by Vanessa Morales with Ashley Lenahan	April 23, 2021
URL: https://blogs.missouristate.edu/cnas-newswatch/2021/04/22/supporting-diversity-	1 - , -
and-management-of-natural-resources/	
CNAS NewsWatch – interview by Parker Campbell with Ashley Lenahan	April 9, 2021
URL: https://blogs.missouristate.edu/cnas-newswatch/2021/04/09/linking-bees-health-	
and-behavior/	
SICB – blog post on the Russell Lab by Amanda Puitiza	Mar 23, 2021
URL: https://integrativeandcomparativebiology.wordpress.com/2021/03/23/the-latest-	
buzz-on-bees/	I 1 2021
SICB – video interview with Taylor Huerman	Jan 1, 2021
URL: https://twitter.com/ICB_journal/status/1345020680316792835  CNAS NewsWatch – interview with Ashley Lenahan	Aug 6, 2020
URL: https://blogs.missouristate.edu/cnas-newswatch/2020/08/06/bias-as-behavior-	Aug 0, 2020
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-	<b>,</b> ,
pollination-how-flowers-plant-tricks-on-bees/	
KQEDscience Deep Look Earth Day Film Fest – panelist and interview with Josh Cassidy	April 23, 2020
URL: http://www.youtube.com/watch?v=EKWjPcd2WHM	
Springfield News-Leader – interview with Gregory Holman	Jan 14 2020
URL: https://www.news-leader.com/story/news/local/ozarks/2020/01/14/coxhealth-	
ladybugs-postpone-surgeries-cox-medical-center-branson/4460000002/	1.5.0010
KSMU Stem Spots – interview with David Cornelison	Aug 15, 2019
URL: https://www.ksmu.org/post/springfield-researcher-studies-how-microbes-affect-	
pollination-0 <b>Pittwire</b> – interview with Kimberly Barlow	June 17, 2010
URL: https://www.pittwire.pitt.edu/news/bee-friendly-pitt-sets-campus-abuzz	June 17, 2019
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-	Way 15, 2015
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/zoembevruchting-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	
URL: https://uanews.arizona.edu/story/buzz-or-scrabble-foraging-bees-thats-question	June 29, 2017
URL: https://www.eurekalert.org/pub_releases/2017-06/uoa-tbo063017.php	vane 29, 2017
The RFID Journal - article and interview with Claire Swedberg	
URL: http://www.rfidjournal.com/articles/view?15748/&utm_medium%3Dnewsfeed_rss	Mar. 5th, 2017
The Daily Wildcat - article and interview with Rebekah Ulmer	
URL: http://www.wildcat.arizona.edu/article/2017/03/food-for-bees-foraging-patterns-	Mar. 3 <sup>rd</sup> , 2017
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/bumbebee-microchip/	
University of Arizona News and EurekAlert! - article and interview with Daniel Stolte URL: https://uanews.arizona.edu/story/scientists-use-bigbrother-technology-spy-	Feb. 17, 2017
bumblebees	100.17,2017
URL: https://www.eurekalert.org/pub_releases/2017-02/uoa-rub021717.php	
L	

The New York Times Science - article by Joanna Klein	
URL: http://www.nytimes.com/interactive/2016/12/02/science/bees-pollen-senses.html	Dec. 2, 2016
Alibiflora - article by Dr. Peter Zschunke	
URL: http://www.albiflora.eu/blog/?p=1616	Oct. 4, 2016
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	4 2016
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	
Good Housekeeping – interview with Emily Yeap of MSU Strategic Communication about June	May 17, 2023
Beetles for an American women's magazine	
<b>URL:</b> https://www.goodhousekeeping.com/home/a43894302/get-rid-of-june-bugs-beetles-bite/	
BioGraphic – interview with Annie Roth about cactus bees for the National Geographic	June, 2023
Magazine	
In print only	
Science – Interview with Elizabeth Pennisi about climate change effects on bumble bee	Jan 4, 2023
respiration at the annual meeting of the Society for Integrative and Comparative Biology	
URL: https://www.science.org/content/article/some-bumble-bees-may-be-	
hyperventilating-world-warms	1 0 2022
<b>BioGraphic</b> – interview with Stephanie Stone about cactus bees for the California Academy of	June 9, 2022
Sciences' BigPicture Photography Competition URL: https://www.biographic.com/the-big-picture-2022/	
The Standard – interview with Tinsley Merriman about graduate program advocacy work	Apr 5, 2022
URL: https://www.the-standard.org/campus_life/graduate-students-seek-increased-	Apr 5, 2022
benefits-across-departments/article f1ce47f4-b519-11ec-b779-7be58d3a752b.html	
The Standard – interview with Taylor Pinon	Mar 4, 2022
URL: https://www.the-standard.org/news/fun-fact-friday-when-it-comes-to-tomato-	, ,
genes-humans-just-can-t-ketchup/article 457dfb92-9b52-11ec-9a79-4fcdb82bc8c1.html	
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) International Congress for Neuroethology (ISN)	2014-present 2010-present
international Congress for redirectionery (1914)	2010 present