

Kasey D. Fowler-Finn, Ph.D.

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BACKGROUND

POSITIONS HELD

- 2020 – pres. Associate Professor, Department of Biology, Saint Louis University. Saint Louis, MO USA.
- 2014 – 2020 Assistant Professor, Department of Biology, Saint Louis University. Saint Louis, MO USA.
- 2009 – 2014 Postdoctoral Research Associate. University of Wisconsin-Milwaukee Milwaukee, WI USA.

AFFILIATIONS

- 2020 – pres. Research Institute Fellow, Saint Louis University. Saint Louis, MO.
- 2019 – pres. Biodiversity Fellow, Living Earth Collaborative in Saint Louis, MO. Living Earth Collaborative Postdoctoral Scholar Coordinator.
- 2020 Cultural Thinker in Residence: Laumeier Sculpture Park. Saint Louis, MO.

EDUCATION

- 2009 Ph.D. University of Nebraska, Lincoln, NE USA. Advisor: EA Hebets. Biology: Ecology, Evolution, Behavior. Thesis: *Exploring the maintenance of and selection on two distinct male morphs in a Schizocosa wolf spider.*
- 2004 – 2005 Ph.D. program, University of California-Berkeley, Berkeley CA USA. Advisor: EA Hebets. Environmental Science, Policy, Management.
- 2004 B.A. Cornell University. Ithaca, NY USA. Biology: Neurobiology and Behavior (High honors, with Distinction)

SPECIAL TRAINING

- 2006 *Sensory Ecology*: Lund University, Sweden
- 2005 *Tropical Ecology*: Organization for Tropical Studies (Duke and Univ. of Costa Rica)

RESEARCH INTERESTS

Evolution of complex traits in insects and arachnids. Contributions of genetic variation, individual variation and plasticity to evolutionary diversification. Organismal responses to anthropogenically-impacted environments. Multi-trophic and predator-prey interactions. Development and application of quantitative approaches for testing evolutionary hypotheses. Organisms: treehoppers (Hemiptera) and Arachnids (Araneae). Particular interests in supporting and advancing diversity, inclusion and equity in STEM.

SCHOLARSHIP

EXTRAMURAL GRANTS AWARDED

Total awarded from the **National Science Foundation** at Saint Louis University: \$916,131

- 2021 **National Science Foundation**. Research Experience for Undergraduates supplement for NSF IOS-1656818. **PI**. Awarded \$14,000
- 2019 **National Science Foundation**. Major Research Instrumentation. Acquisition of a Scanning Laser Doppler Vibrometer. **Co-PI**. Awarded \$275,850

- 2019 **National Science Foundation**. Research Experience for Undergraduates supplement for NSF IOS-1656818. **PI**. Awarded \$12,000
- 2018 **National Science Foundation**. Research Experience for Undergraduates supplement for NSF IOS-1656818. **PI**. Awarded \$13,400
- 2018 – pres. **National Science Foundation**, Research Opportunity Award Supplement for NSF IOS-1656818 (collab. w/ A. Runck, Winona State U). **PI**. Awarded \$25,000
- 2017 – pres. **National Science Foundation**, NSF IOS-1656818: Genetic change and genetic accommodation allow singing insects to adapt to temperature change. **PI**. Awarded \$575,881
- 2011 – 2016 **National Science Foundation**, NSF IOS-1120790, **Co-PI** with RL Rodriguez. Awarded \$530,000
- 2013 **National Science Foundation**. Research Experience for Undergraduates supplement. **Co-PI** with RL Rodriguez. \$8,500
- 2008 – 2009 **National Science Foundation**. Doctoral Dissertation Improvement Grant. **Co-PI**, with EA Hebets. ~\$12,000
- 2008 **Animal Behavior Society** Student Research Award, **PI**. \$800 (declined by KD Fowler-Finn due to conflict with NSF DDIG)
- 2007 **Sigma Xi**, Grant-in-aid-of, **PI**. \$1,000
- 2014 Experiment.com, Crowd-sourced funding, **PI**. \$600

INTRAMURAL GRANTS AWARDED

Total intramural funding awarded at Saint Louis University: \$120,814

- 2021 Spark microgrant with J Gorlewicz. Saint Louis University. **PI**. Awarded \$1,500
- 2019 – pres. Research Growth Fund. Saint Louis University. **PI**. Awarded \$100,000
- 2018 Presidential Research Fund, Saint Louis University, **PI**. \$17,000
- 2015 Summer Research Award, Saint Louis University, **PI**. \$2,314
- 2008 Blair Paxton Udale Grant, University of Nebraska, **PI**. \$2,000
- 2007 GANN research award, University of Nebraska School of Biological Sciences. **PI**. \$2,500
- 2007 Blair Paxton Udale grant. University of Nebraska School of Biological Sciences, University of Nebraska, **PI**. \$1,500
- 2006 Initiative for Ecological and Evolutionary Analysis Research, Grant-In-Aid University of Nebraska School of Biological Sciences. **PI**. \$1,000

FELLOWSHIPS AND AWARDS (National agencies bolded)

- 2021 Donald G. Brennan Award for Excellence in Graduate Mentoring College of Arts and Sciences, Saint Louis University
- 2020 Finalist: Excellence in Graduate Mentoring Award, College of Arts and Sciences, Saint Louis University
- 2019 Finalist: Excellence in Undergraduate Teaching Award, College of Arts and Sciences, Saint Louis University
- 2018 Finalist: Excellence in Undergraduate Mentorship Award, College of Arts and Sciences, Saint Louis University
- 2004-2008 **National Science Foundation**, Graduate Research Fellowship Program
- 2014 **Early Career Fellowship**, Mountain Lake Biological Station, Univ. of Virginia
- 2007 **Student poster award**, 2nd place, American Arachnological Society
- 2009 **Animal Behavior Society**, student travel award (declined by Fowler-Finn)

PUBLICATIONS (*Graduate student author; **Undergraduate student author)

Published:

33. Moore, M.P., **Hersch, K., **Sricharoen, C., **Lee, S., **Reice, C., **Rice, P., **Kronick, S., Medley, K.A., & **Fowler-Finn, K.D.** Sex-specific ornament evolution is a consistent feature of

climatic adaptation across space and time in dragonflies. *Proceedings of the National Academy of Sciences*. 118(28): e2101458118. *Featured article: <https://www.pnas.org/content/118/28/eiti2821118>

32. *Classen Rodríguez, L., Tinghitella, R., & **Fowler-Finn, K.D.** 2021. Anthropogenic noise affects insect and arachnid behavior, thus changing interactions within and between species. *Current Opinion in Insect Science*. 10(47):142-153.
31. *Leith, N.T., *Macchiano, A., Moore, M. & **Fowler-Finn, K.D.** 2021. Temperature impacts all behavioral interactions during insect and arachnid reproduction. *Current Opinion in Insect Science*. 45: 106-114.
30. **Leith, N.T., *Jocson, D. & **Fowler-Finn, K.D.** 2020. Temperature-related breakdowns in the coordination of mating in *Enchenopa binotata* treehoppers (Hemiptera: Membracidae). DOI: 10.1111/eth/13033.
29. Sasson, D.A., **Johnson, T., **Scott, E. & **Fowler-Finn, K.D.** 2020. Short-term water deprivation affects mating behavior in the harvestman *Leiobunum vittatum*. *Animal Behaviour*. 165: 97-106.
28. Gilman, R.T., **Fowler-Finn, K.D.** & Hebets, E.A. 2020. Demonstrating mate choice copying in spiders requires further research. *Advanced Access: Current Zoology*. 66(2): 215-216.
27. *Macchiano, A., Sasson, D.A., **Leith, N.T. & **Fowler-Finn, K.D.** 2019. Patterns of thermal sensitivity and sex-specificity of courtship behavior differs between two sympatric species of *Enchenopa* treehopper. *Frontiers in Ecology and Evolution*. 7: 361.
26. *Jocson, D., **Smeester, M., *Macchiano, A., **Leith, N. & **Fowler-Finn, K.D.** 2019. Temperature coupling of mate attraction signals and female mate preferences in four populations of *Enchenopa* treehopper (Hemiptera: Membracidae). *Journal of Evolutionary Biology*. 32: 1046-1056.
25. **Fowler-Finn, K.D.**, Boyer, S., **Ikagawa, R., **Jeffries, T., **Kahn, P., **Larsen, E., **Lee, D., Sasson, D. & **Smeester, M. 2019. Qualitative and quantitative comparisons of mating behavior across multiple populations and six species of leiobunine harvestmen (Arachnida: Opiliones). *Behaviour*. 156(3-4): 363-390.
24. **Fowler-Finn, K.D.** & Boutwell, B. 2019. Using variation in heritability estimates as a test of G×E in behavioral research: A brief research note. *Behavior Genetics*. 49(3):340-346.
23. *dos Santos Silva, N.F.S., **Fowler-Finn, K.D.**, *Mortara, S.R. & Willemart, R.H. 2018. A Neotropical armored harvestman (Arachnida, Opiliones) uses proprioception and vision for homing. *Behaviour*. 155(10-12): 793-815.
22. Gilman, R. T., **Fowler-Finn, K.D.** & Hebets, E.A. 2018. A probable case of incipient speciation in *Schizocosa* wolf spiders driven by allochrony, habitat use and female mate choice. *The American Naturalist*. 192(3): 332-346.
21. **Fowler-Finn, K.D.**, Boyer, S., **Ikagawa, R., **Jeffries, T., **Kahn, P., **Larsen, E., **Lee, D. & **Smeester, M. 2018. Variation in mating dynamics across five species of leiobunine harvestmen (Arachnida: Opiliones). *Biology: Special Issue on the Evolution of Mate Choice*. 7(2): 36.
20. **Fowler-Finn, K.D.**, *Kilmer, J.T., **Cruz, D.C. & Rodríguez, R.L. 2018. Female mate choice of male signals is unlikely to promote ecological adaptation in *Enchenopa* treehoppers (Hemiptera: Membracidae). *Ecology and Evolution*. 8(4): 2146-2159. DOI: 10.1002/ece3.3817.
19. *Kilmer, J.T., **Fowler-Finn, K.D.**, Gray, D.A., Höbel, G., Rebar, D., Reichert, M.S. & Rodríguez, R.L. 2017. Describing mate preference functions and other function-valued traits. *Journal of Evolutionary Biology*. 30:1658-1673.
18. **Fowler-Finn, K.D.**, **Cruz, D., & Rodríguez, R.L. 2017. Local population density and group composition influence signal-preference relationships in *Enchenopa* treehoppers (Hemiptera: Membracidae). *Journal of Evolutionary Biology*. 30(1): 13-25. **(Editor's choice article)**.
17. **Fowler-Finn, K.D.** & Rodríguez, R.L. 2016. The causes of variation in the presence of genetic covariance between sexual traits and preferences. *Biological Reviews*. 91(2): 511-533.
16. **Fowler-Finn, K.D.**, Sullivan-Beckers, L., Runck, A. & Hebets, E.A. 2015. The complexities of female mate choice and male polymorphisms: Elucidating the roles of genetics, age and mate

choice copying. Special Issue, Current Zoology: Learning and sexual selection. 61(6): 1015-1035.

15. **Fowler-Finn, K.D.**, *Kilmer, K.T., **Hallet, A., Rodríguez, R. L. 2015. Variation in signal-preference genetic correlations in *Enchenopa* treehoppers (Hemiptera: Membracidae). *Ecology & Evolution*. 5(14): 2774-2786.
14. **Fowler-Finn, K.D.**, **Triana, E., & **Miller, O.G. 2014. Mating in the harvestman *Leiobunum vittatum* (Arachnida: Opionides): from premating struggles to solicitous tactile engagement. *Behaviour*. 151: 1663-1686.
13. **Fowler-Finn, K.D.** **Al-Wathiqui, N, **Cruz, D., **Al-Wathiqui, M, Rodríguez, R.L. 2014. Male *Enchenopa* treehoppers (Hemiptera: Membracidae) vary mate-searching behaviour but not signaling behaviour in response to spider silk. *Naturwissenschaften*. 101: 211-220.
12. **Fowler-Finn, K.D.** & Rodríguez, R.L. 2013. Repeatability of mate preference functions in *Enchenopa* treehoppers (Hemiptera: Membracidae). *Animal Behaviour*. 85: 493-499.
11. R.L. Rodríguez, *Rebar, D.W. & **Fowler-Finn, K.D.** The evolution and evolutionary consequences of social plasticity in mate preferences. *Animal Behaviour*. 85(5): 1041-1047.
10. **Fowler-Finn, K.D.**, *Rosenthal, M. & Hebets, E.A. Locomotor performance varies with adult phenotype in ornamented/non-ornamented wolf spiders. *Ethology*. 119(7): 570-580.
9. Rodríguez, R.L., **Hallet, A.C., *Kilmer, J.T, **Fowler-Finn, K.D.** 2013. Curves as traits: genetic and environmental variation in mate preference functions. *Journal of Evolutionary Biology*. 26: 434-442.
8. Bailey, N.W., **Fowler-Finn, K.D.**, *Rebar, D. and Rodríguez, R.L. 2013. *Commentary: Green Symphonies or wind in the willows? Testing acoustic communication in plants. Behavioral Ecology*. 24(4): 797-798.
7. **Pesek, M., Hebets, E.A., Sullivan-Beckers, L., & **Fowler-Finn, K.D.** Foreleg ornaments do not hinder foraging success in brush-legged wolf spiders. *Journal of Insect Biology*. 26(6): 837-849.
6. **Fowler-Finn, K.D.** & Rodríguez, R.L. 2012. Experience-mediated plasticity in mate preferences: mating assurance in a variable environment. *Evolution*. 66(2): 459-468.
5. **Fowler-Finn, K.D.** & Rodríguez, R.L. 2012. The evolution of experience-mediated plasticity in mate preferences. *Journal of Evolutionary Biology*. 25(9): 1855-1863.
4. Rodríguez, R.L., Cocroft, R.B., **Haen, C. & **Fowler-Finn, K.D.** 2012. Males adjust signaling effort based on cues arising from the expression of female mate preferences. *Behavioral Ecology*. 23(6): 1218-1225.
3. **Fowler-Finn, K.D.** & Hebets, E.A. 2011. The degree of response to increased predation risk corresponds to male secondary sexual traits. *Behavioral Ecology*. 22(2): 268-275
—Featured in IFLScience guest blog: <http://www.iflscience.com/guest-blog-nature-sex0>.
2. **Fowler-Finn, K.D.** & Hebets, E.A. 2011. More ornamented males exhibit increased predation risk and antipredatory escapes, but not greater mortality. *Ethology*. 117(2): 102-114.
1. **Fowler-Finn, K.D.** & Hebets, E.A. 2006. An examination of agonistic interactions in the whip spider *Phrynus marginemaculatus* (Arachnida; Amblypygi). *Journal of Arachnology* 34(1): 62-76. (Selected as a BioOne feature article).

Published Book Review:

Fowler-Finn, K.D. 2018. Book review of 'Voice Leading: the science of musical art.' *The Quarterly Review of Biology*. 93(1): 42-43.

INVITED PRESENTATIONS

2021 Scientific Queeries. Via Zoom.

2020 European Congress of Arachnology Conference. **Plenary Speaker**. Greifswald, Germany. August 2020 – delayed to September 2022.

2020 Ohio University Department of Biology. Via Zoom.

2020 Indiana University Department of Biology. Via Zoom.

- 2020 University of Houston Department of Biology and Biochemistry. Houston, TX.
- 2019 Saint Louis University Department of Biology. Saint Louis, MO.
- 2019 Invited Symposium speaker, Next-Gen scientists. Talk title: **The power of diversity in generating transformative learning experiences for STEM undergraduate researchers**. Entomological Society of America. Saint Louis, MO.
- 2019 **Cultural Competency Workshop** presenter at the Animal Behavior Society meeting.
- 2019 Kansas Academy of Sciences and Kansas Entomological Society joint meeting. **Keynote speaker**. Overland Park, KS.
- 2019 Kansas Academy of Sciences and Kansas Entomological Society joint meeting. **Public Keynote address**. Overland Park, KS.
- 2019 Harris Stowe State University Biology Club. Saint Louis, MO.
- 2019 Presentation to the Board of Trustees, Saint Louis University.
- 2018 University of Miami, REU program. Oxford, OH.
- 2018 Washington University, Saint Louis, MO.
- 2018 Reed College, Portland, OR.
- 2018 Donald Danforth Plant Science Center, Saint Louis MO.
- 2018 University of Denver, Denver, CO.
- 2017 Washington University, Tyson REU program Research series, Saint Louis, MO.
- 2017 National Great River Research and Education Center, Alton, MO.
- 2016 Saint Louis University Department of Engineering
- 2016 Oklahoma State University, Stillwater, OK.
- 2016 Southern Illinois University-Carbondale. Graduate student invited speaker.
- 2016 Winter Animal Behavior Conference. Steamboat Springs, CO.
- 2015 University of Missouri-Saint Louis. Saint Louis, MO.
- 2015 Mountain Lake Biological Station, University of Virginia (with artist Stephen Vitiello).
- 2015 Southern Illinois University, Edwardsville. Edwardsville, IL.
- 2014 Saint Louis Ecology, Evolution and Conservation Retreat. Edwardsville, IL.
- 2014 University of Missouri. Columbia, MO.
- 2014 University of Wisconsin, Milwaukee. Milwaukee WI.
- 2014 Mountain Lake Biological Station, University of Virginia.
- 2014 Saint Louis University. Saint Louis, MO.
- 2013 Gettysburg College Department of Biology. Gettysburg, PA.
- 2013 Rice University. Department of Ecology and Evolution. Houston, TX.
- 2013 University of Louisiana-Lafayette. Lafayette, LA.
- 2013 Michigan State University – Kellogg Biological Station, informal talk.
- 2010 Warder Clyde Allee Program, Animal Behavior Society. Williamsburg, VA.
- 2009 Department of Biological Sciences, U of Wisconsin-Milwaukee.
- 2003 Guest Lecturer for Introductory Neurobiology, Bowdoin College, Brunswick, ME.

CONTRIBUTED PRESENTATIONS

- 2019 Study for the Society of Evolution, Providence, RI USA
- 2019 Animal Behavior Society, Chicago, IL USA
- 2018 Animal Behavior Society, Milwaukee, WI USA
- 2018 Winter Animal Behavior Conference, Steamboat, CO, USA (invite only)
- 2017 Study for the Society of Evolution, Portland, OR USA
- 2017 Winter Animal Behavior Conference, Steamboat, CO, USA (invite only)
- 2016 Winter Animal Behavior Conference, Steamboat, CO, USA (invite only)
- 2016 International Congress of Arachnology, Golden, CO USA
- 2016 Animal Behavior Society, Columbia, MO USA
- 2015 Animal Behavior Society. Anchorage, AK USA
- 2013 American Arachnological Society Conference, Johnson City, TN USA
- 2013 Animal Behavior Society Conference, Boulder, CO USA

- 2012 American Arachnological Society Conference. Greenbay, WI USA (poster)
- 2011 Invertebrate Sound and Vibration Conference, Columbia, MO USA
- 2010 Study for the Society of Evolution. Portland, OR USA
- 2009 MEEC, University of Nebraska-Lincoln, Lincoln, NE USA
- 2008 Study for the Society of Evolution. Minneapolis, MN USA
- 2008 Animal Behavior Society Conference, Snowbird, UT USA
- 2007 American Arachnological Society Conference, Selinsgrove, PA USA (poster)
- 2007 Animal Behavior Society Conference, Burlington, VT USA (poster)
- 2006 American Arachnological Society Conference. Baltimore, MD USA
- 2003 American Arachnological Society Conference. Denver, CO USA

STUDENT GRANTS AND AWARDS (* indicates extramural funding source)

- 2020 ***Turner Fellow Award**, Animal Behavior Society. Awarded to E Miller (undergraduate)
- 2020 ***NSF Graduate Research Fellowship Program**: Honorable Mention. N Leith
- 2019 ***Litzinger Road Ecology Grant**, L Classen Rodríguez. \$2,200.
- 2019 **University Presidential Fellowship**, N Leith. University-wide fellowship covering stipend for 4 years. Saint Louis University.
- 2019 Graduate Student Association research symposium, 2nd place for Biological Sciences oral presentations, Anthony Macchiano. Saint Louis University.
- 2019 Graduate Student Association research symposium, 3rd place for Biological Sciences oral presentations, L Classen Rodríguez. Saint Louis University.
- 2019 ***NSF Graduate Research Fellowship Program**: Honorable Mention. L Classen Rodríguez
- 2019 ***Diversity travel award**, Animal Behavior Society. Awarded to L Classen Rodríguez
- 2018 **University Diversity Fellowship**, L Classen Rodríguez. University-wide fellowship awarded to 1 graduate student/year covering stipend for 4 years. Saint Louis University.
- 2018 **Department of Biology Research Award**, D Jocson. Recognizes the top graduate research in the department. Saint Louis University.
- 2018 ***Diversity travel award**, Animal Behavior Society. Awarded to L Classen Rodríguez
- 2018 ***Turner Society Award**, Animal Behavior Society. Awarded to N Leith (undergraduate)
- 2018 *Entylia carinata* treehoppers and their relationships with host plants and ants. Reis Biological Grant. PI: W Shoenberger, \$1,000
- 2018 Predation on North American Sclerosomatidae harvestmen (Opiliones:Arachnida). Reis Biological Grant. PI: L Classen Rodríguez, \$1,000
- 2018 Thermal Sensitivity of Reproductive Behaviors in *Enchenopa binotata* treehoppers (Hemiptera: Membracidae). ILEX undergraduate research award. PI: N Leith, \$1,200
- 2017 Inter- and Intra-population variation in call type and color morphology of the *Entylia carinata* treehopper. Reis Biological Grant. PI: W Shoenberger, \$1,000
- 2016 Temperature influence on mating behavior of male and female *Enchenopa binotata* (Hemiptera: Membracidae). Reis Biological Grant. PI: D Jocson, \$600.
- 2016 The impact of social structure on behavioral plasticity. Reis Biological Grant. PI: W Shoenberger, \$600
- 2012 Stipend for Undergraduate Research Fellowship. University of Wisconsin-Milwaukee. Awarded to O Miller. \$4,000

PROFESSIONAL SOCIETIES

- 2009 – pres Society for the Study of Evolution
- 2006 – pres Animal Behavior Society
- 2006 – pres American Arachnological Society
- 2021 – pres American Association for the Advancement of Science
- 2019 Entomological Society of America
- 2006 Sigma Xi Scientific Research Society inductee

TEACHING

COURSES TAUGHT

Undergraduate courses: (i) Evolutionary Biology. Core course development and teaching for Biology Majors. Saint Louis University. Falls: 2014-2020. (ii) Sex, Evolution, and Behavior. Upper division Biology course. Saint Louis University. Springs: 2017, 2020.

Graduate courses: (i) Advanced Evolutionary Biology. Course development and teaching for graduate students in Biology. Saint Louis University. Springs: 2016, 2018, 2021. (ii) Advanced Sex, Evolution, and Behavior. Graduate course. Saint Louis University. Springs: 2017, 2020

Teaching assistant courses: Laboratory instructor: Introductory Biology, U of Nebraska. 2007
Outreach education: Extensive experience in Outreach Education targeting underrepresented and underserved groups (see Outreach section). 2003 – present

UNDERGRADUATE ACADEMIC MENTORSHIP

Academic mentor: 88 Biology Majors and Minors at Saint Louis University. 2014 – 2021

UNDERGRADUATE RESEARCH MENTORSHIP

Summary: research mentor for 66 undergraduate students, which include: 41 women (3 gender non-conforming), 2 with disabilities, 29 underrepresented minorities in STEM, 3 Latinos, 3 Filipinos, 8 first-generation college students, and a high school student. Of those for whom I have information: 9 are attending/attended graduate school, 7 medical/dental school, and 17 first- or co-authorships on peer-reviewed publications (**Represents a publication with the undergraduate as an author*).

At Saint Louis University: 53 total – 33 women & gender non-conforming, 2 with disabilities, seven 1st-generation, 25 from underrepresented minorities in STEM, 1 Libyan, 3 Filipinos, 1 Latina, 6 Black/African American, 4 engineers.

Chidera Agwu, Humza Ahmed, Shivika Ahuja, Ciarra Anders, Claire Ballman, Carli Beckett, Nivedita Biju, Rachel Brouk, Elaina Buescher, Lauren Calvin, Elizabeth Chaney, David Dainko, Aleiyah Dapog, Alex Downey, Samuel Emmite, Yichen Fang, Jacob Hercules, Matthew Hilz, **Timothy Jeffries, *Todd Johnson, Beker Karadaghy, Allison Kempf, **Daniel Lee, ***Noah Leith, Arina Martin, Em Miller, Pallavi Mhaskar, Fatma Mufti, Rebekah Nagy, Evian Perez Rivera, Sai Pidatala, Kati Prince, Ellie Redle, Lia Rubinelli, Nabeel Sait, Nandhineswari Senthilkumaran, *Emily Scott, Asad Siddiqui, ***Morgan Smeester, Rohan Tripathi, Matthew Udani, Jake Woods, Lauren Wismann, Simone Ymson.

Mentees from Harris Stowe State University (an Historically Black College or University): Uchechuwku Agali, Abisiola Ola-Ajose, Mia Tracy, Inaya Smith.

Mentees from Macalester College: **Raine Ikagawa, **Penelope Kahn, **Eva Marie Larsen. Additionally, I was a **McNair Scholar faculty mentor** for Ciarra Anders (Biomedical Engineering undergraduate) 2017-2020

U of Wisconsin-Milwaukee (postdoc): 9 total – 4 women, two 1st-generation, 4 minorities, 2 Latinos. **Allysa Cervantes-Hallet, *Owen Miller, *Christina Haen, *Emilia Triana, *Nooria Al-Wathiqi, *Misqal Al-Wathiqi, **Daniel Cruz, Keith Glenna, Owen Stefaniak

University of Nebraska (graduate student): 9 total – 5 women, two 1st-generation, 2 minorities: Morgan Campbell, Dustin Franklin, Bronson Boosalis, *Mari Pesek (*1st-author*), Daniel Wickwire, Reed Stubbendieck, Tanaya Johnson (U of Mississippi), Nicole Samuels (U of Mississippi), Techla Shoenberger

GRADUATE/POSTDOCTORAL STUDENT MENTORSHIP

Summary: M.S. advisor for one student (Filipina first-generation college), Ph.D. advisor for four students (one Latina), Postdoctoral mentor for five people (one first-generation college, one Black), and committee member for five Ph.D. students and one M.S. student at Saint Louis University.

Graduate students currently advising:

Leticia Classen Rodriguez, Ph.D. student (Fall 2017 – present)

Anthony Macchiano, Ph.D. student (Fall 2018 – present)

Noah Leith, Ph.D. student (Fall 2019 – present)

Post-doctoral scholars:

Rowan McGinley (2021 – present)

Michel Ohmer, Living Earth Collaborative Postdoctoral Fellow (co-advised with K. Medley and L. Augustine; 2020 – 2021. Currently an Assistant Professor at U of Mississippi)

Michael Moore, Living Earth Collaborative Postdoctoral Fellow (co-advised with K. Medley; 2019 – present)

Brett Seymoure, Living Earth Collaborative Postdoctoral Fellow (co-advised with A. Dell and A. Koltz; 2019 – present)

Past students and Post-doctoral scholars:

Terry Shoenberger. Ph.D. candidate (Fall 2015 – Fall 2021)

Downen Jocson, M.S. Graduated December 2017; 1st-generation college, Filipina.

Currently in a Ph.D. program at Washington State University. Downen received the 2018 Research Award from the Department of Biology at Saint Louis University

Daniel Sasson, Ph.D., Postdoctoral scholar 2017-2020. Currently an Assistant Marine Scientist at South Carolina Department of Natural Resources.

Graduate student committee member for:

Jenny Mullikin (Ph.D. student, Saint Louis University. 2019 – present)

Danelle Haake, Ph.D. (Saint Louis University. 2016 – 2020)

Brigette Williams (Ph.D. student, Saint Louis University. 2017)

Jesse Balaban-Feld, Ph.D. (Saint Louis University. 2014 – 2017)

Daniel Wheirer, M.S. (Saint Louis University. 2017 – 2019)

Laura Klein, Ph.D. (Saint Louis University. 2014 – 2017)

Elizabeth Angeli (Saint Louis University. 2014 – 2015)

Faculty Mentor, Certificate in University Teaching Skills (CUTS) at Saint Louis University

Justin Zweck (PhD student, Biology) 2016

Konnor Brennan (PhD student, Biology) 2019

PROFESSIONAL DEVELOPMENT

2018 Saint Louis University STEM Faculty Teaching Institute, two-day workshop: applying the entrepreneurial mindset to teaching.

2016 “Witnessing Whiteness,” a 16-week workshop for awareness about racism and taking action against racial biases.

2012 How can students shape their own learning? Teaching workshop. University of Wisconsin-Milwaukee.

SERVICE

PROFESSIONAL SERVICE

Animal Behavior Society Turner Program Co-Director. Organize and run the annual multi-day workshop mentoring rising undergraduates from underrepresented groups in the Animal Behavior Society. 2020 – present.

Latin American Affairs Committee. Animal Behavior Society. 2019 – present.
Diversity Committee. Animal Behavior Society. 2019 – present.
 Invited Panelist for JEDI mentorship (Justice, Equity, Diversity, Inclusion) at the Animal Behavior Society conference. 2021.
 Invited presenter at the Animal Behavior Society's **Cultural Competency workshop.** 2019.
 Mentor for Latin American researchers via the Animal Behavior Society. Advising in data analysis, presentation, and writing for researchers from Latin American countries wishing to publish in the journal *Animal Behaviour*. 2013-2016.
 Mentor for graduate students in the Society for the Study of Evolution. 2017.
 Mentor for rising undergraduates from underrepresented groups in the **Animal Behavior Society Turner Program.** 2016, 2018.
 Living Earth Collaborative Postdoctoral Scholar Coordinator. 2019 – present.
 Grant Proposal Panelist: NSF Integrative Organismal Systems. 2017, 2018.
 Grant proposal external reviewer: NSF Division of Environmental Biology, 2014 (1 proposal), NSF Integrative Organismal Systems, 2018 (2 proposals), US-Israel Binational Science Foundation, 2020 (1 proposal), NSF Integrative Organismal Systems 2021 (1 proposal)
 Grant proposal reviewer: Animal Behavior Society student grant competition 2014, 2015, 2016, 2017 (3-7 grants/year).
 Peer reviewer for 85 manuscripts in 27 journals: *Animal Behaviour* (13), *American Naturalist* (4), *Behavioral Ecology* (7), *Behavioral Ecology and Sociobiology* (3), *Behavioral Processes* (1), *Behaviour* (2), *Biological Journal of the Linnean Society* (3), *Biological Reviews* (1), *Biology* (1), *Biology Letters* (1), *Canadian Journal of Zoology* (1), *Communications Biology* (1), *Current Zoology* (4), *Ecological Entomology* (4), *Ecology and Evolution* (5), *Ecology Letters* (1), *Ethology* (6), *Evolution* (7), *Evolution and Development* (1), *Integrative Organismal Biology* (2), *Journal of Arachnology* (5), *Journal of Insect Behavior* (3), *Journal of Zoology* (2), *PLoS ONE* (4), *Proceedings of the National Academy of Sciences* (1), *Scientific Reports* (1), *The Science of Nature* (1).

UNIVERSITY SERVICE

University-level – Saint Louis University:

2019 – 2020	Task Force: future configuration of the college of arts and sciences (estimated total hours of service: 120)
2019	Presentation to the Board of Trustees
2017	Panel member: Research at a Jesuit Institution
2017	Sigma Xi invited Panel member: Advancing Interdisciplinary Research and Teaching at SLU
2015, 2017, 2018	Sigma Xi Research Symposium, Judge

College-level – Saint Louis University College of Arts & Sciences:

2017 – 2018	Executive Committee member
2017 – 2018	Nominations Committee, Chair
2016 – 2017	Nominations Committee, Natural Sciences Representative
2016	Graduate Student Association Symposium Judge

Department-level – Saint Louis University, Department of Biology:

2020 – 2021	Organismal Biologist & Diversity Search Committee
2018 – present	Biology Diversity and Inclusion Committee
2016 – present	Chair, Greenhouse Committee
2014 – 2016	Building Safety Committee
2014 – 2015	Neuroscience Search Committee member

SCIENTIFIC CONSULTING

2017 KQED's Deep Look, consultation on daddy longlegs leg loss

- 2016 Army Corps of Engineers, consultation on acoustic bat monitoring program
- 2016 Consultation and identification of arachnids for David Bruns

PROFESSIONAL COLLABORATIONS

- 2014 – pres. Collaboration with sound artist Stephen Vitiello to create sound installations based on vibrational insects sounds from my research. This has resulted in three products and two public talks (see below). The current project in development is a sound art installation demonstrating how temperature influences the vibrational sounds of insects that will display September 2019 – May 2020 at the Saint Louis University Museum of Art. The installation will be paired with a didactic exhibit to educate about the use of vibrations in nature and engineering, as well as the effects of global warming.

SCI-ART INSTALLATIONS AND TALKS

- 2020 ‘Too hot to sing’ by Kasey Fowler-Finn, Stephen Vitiello, and Impact Media Lab. Opening February 6, 2020 at Saint Louis University Museum of Art. Sound installation with accompanying materials on climate change and insect communication.
Permanent Exhibit online: www.toohottosing.com
- 2019 ‘Singing amongst the weeds’ by Stephen Vitiello and Kasey Fowler-Finn. Hosted at Sediment, Richmond, VA. March 8 – April 7 2019. Sound installation with accompanying infographics demonstrating the effects of global warming on vibrational insect song. Paired with public talk about the research behind the exhibit.
- 2016 ‘A Scuttering Across the Leaves (Hoppers Mix)’ presented at the first Beijing Media Art Biennial, China, September 2016.
- 2015 ‘A Scuttering Across the Leaves’ by Stephen Vitiello and Kasey Fowler-Finn. Sept 3-13, 2015 at Virginia Tech’s Moss Center for the Arts. Attracted >500 people over 10 days. Paired with 2 public talks about my research that attracted ~150 people.
- 2015 Delivered two talks to a lay audience (~150 people) about my research at the opening of a collaborative art exhibit (A Scuttering Across the Leaves, Virginia Tech).

OUTREACH EDUCATION

- 2021 Good Vibrations: the little known world of insect vibrational communication. Presented to the Oak Openings Region (Ohio) Chapter of Wild Ones via Zoom.
- 2021 Good Vibrations: the little known world of insect vibrational communication. Presented to the Saint Louis Chapter of Wild Ones via Zoom.
- 2019 Webster school district STEAM night presentation at Bristol Elementary School on research in the Fowler-Finn Lab.
- 2019 Bioblitz leader for Insects and Arachnids at Shaw Nature Reserve, Villa Ridge, MO. 20 people of all ages collected and identified for iNaturalist records.
- 2018 Webster school district STEAM night presentation at Bristol Elementary School on research in the Fowler-Finn Lab.
- 2018 Bioblitz leader for Insects and Arachnids at Forest Park, Saint Louis, MO. 20 people of all ages collected and identified for iNaturalist records.
- 2018 Animal Behavior Society Outreach Fair. Milwaukee, WI.
- 2017 Webster Groves Nature Society presenter: Vibrational signaling in insects.
- 2017 Bioblitz leader for Insects and Arachnids at Shaw Nature Reserve, Villa Ridge, MO. 20 people of all ages collected and identified for iNaturalist records.
- 2017 Science in Saint Louis Series speaker at Cliff Cave County Library. “Tales of the Unheard and Unseen” was a 1.5 hour presentation to 110+ people, ages 2-92.
- 2016 Presenter at the USA Science and Engineering Festival, Washington D.C. ~300,000+ people attended the three-day Festival, with an estimated 30,000+ visited the exhibit (Eight-Legged Encounters)

- 2016 Bioblitz leader for Insects and Arachnids at Forest Park, Saint Louis. 50 people of all ages attended my sessions.
- 2016 Animal Behavior Society Outreach Fair. University of Missouri, Columbia, MO
- 2014 Designed and ran a station geared towards teaching the public about research during Mountain Lake Biological Station's "Open House 2014."
- 2014 Featured in UWM's Letters & Sciences IN-FOCUS article titled "New greenhouse enhances research and teaching."
- 2013 Two listener-contributed stories to Technophiles Podcast (10,000+ subscribers): crowdfunding in biological research (<http://www.technophilespodcast.com/> Episode #139, Sept 3, 2013; Episode #140, Sept 11, 2013).
- 2012 Organized and led Milwaukee River Advocates Mini Bio Series, bringing community members into the field to study arthropods. Skills learned included collection, identification, and sound equipment to listen to insect signals. Participation of 3 graduate students.
- 2012 Organized and led two casual Neighborhood Biology Night Walks. Citizens learned basic biology, identification, and collection of moths, frogs, and spiders inhabiting the Milwaukee River Greenway. Participation of 3 graduate students.
- 2011 Provided insect sounds from research recordings to Victoria Bond (conductor and recorder, www.victoriabond.com) for musical composition. Participation of 1 undergrad.
- 2011 Girl Scout Camp, visiting scientist: spider and insect exploration.
- 2008 Established Spider Outreach education program (2nd-8th grade) with Lincoln Learning Centers, Lincoln NE. Involved: curriculum development, interactive presentations and inquiry-driven field trips. Participation of 4 graduate students and 1 post-doctoral fellow. We visited 8 classrooms.
- 2008 Big Red Summer Academic Camps: mentor for 2 high school students (2008, 2009) in the Spider Camp.
- 2006 4-H National Science and Technology Conference spider walk.
- 2004 Oxford, MS Girl Scout troop spider walk.
- 2003 Spider outreach education presenter for local elementary school classes. Program organized by Dr. Linda Rayor, Cornell University. Ithaca, NY. (2003-2004)

IN THE NEWS

- 2021 Extensive coverage for article in the Proceedings of the National Academy of Sciences, Including: Nature Climate Change (<https://rdcu.be/cvMaF>), Press coverage by CNN, The Guardian, The Hill, Environment and Energy News, Smithsonian Magazine, St. Louis Post-Dispatch, The Times of India, Natural History Magazine, New Scientist, Science News and other outlets.
- 2020 Interviewed for and quoted in an article in the Trilobite section of The New York Times: <https://www.nytimes.com/2020/10/31/science/daddy-longlegs-fuzz.html>
- 2020 Saint Louis Public Radio coverage of my Saint Louis University Museum of Art exhibit that communicates the science discovered through my NSF grant: <https://news.stlpublicradio.org/health-science-environment/2020-02-06/songs-from-a-tiny-bug-tell-a-story-about-climate-change-at-slu-museum-of-art>
- 2019 Saint Louis Public Radio coverage of student publication in Journal of Evolutionary Biology: <https://news.stlpublicradio.org/post/warmer-temperatures-remix-these-insects-love-songs-females-still-find-them-sexy#stream/0>
- 2019 Front page of Saint Louis Post Dispatch covering student publication in Journal of Evolutionary Biology: https://www.stltoday.com/news/local/metro/little-miniature-whales-offer-a-glimmer-of-hope-in-a/article_8eb82d75-df06-57a0-b745-f0a3749fa7dc.html
- 2019 Radio coverage of SciArt collaboration for installation communicating results from grant-related research: <https://www.wvtf.org/post/insect-symphony-richmond-gallery#stream/0>

- 2017 Saint Louis Public Radio coverage of grant-related research:
<http://news.stlpublicradio.org/post/can-climate-change-affect-how-insects-serenade-each-other#stream/0>
- 2016 Science News covered my research on daddy longlegs presented at the Animal Behavior Conference in Wild Things: *The weird mating habits of daddy longlegs*.
<http://www.sciencenews.org/blog/wild-thing/weird-mating-habits-of-daddy-longlegs>
- 2016 Live ~5 minute interview on nationally broadcasted Irish Radio station on the Peter Moncrieff show about my work on daddy longlegs.
- 2016 Quoted in Distractify about work on daddy longlegs mating:
<http://distractify.com/animals/2016/09/07/daddy-long-legs-invasion-coming-soon>
- 2015 National Radio coverage of my research, and personal interview on several shows (NPR)
 - WBUR Here & Now (10/19/15) <http://hereandnow.wbur.org/2015/10/19/insect-communication>
 - Philadelphia's The Pulse's Newsworks show (10/2/2015) <http://www.newsworks.org/index.php/local/the-pulse/86465-good-vibrations-these-bugs-do-their-sexting-via-plant-stem>
 - Saint Louis Public Radio – (9/15) <http://news.stlpublicradio.org/post/good-vibrations-these-bugs-do-their-sexting-plant-stem>.
- 2015 My research on wolf spider mating and anti-predator behavior was featured in a guest blog article in IFLScience! <http://www.iflscience.com/guest-blog-nature-sex0>
- 2013 Article in Ethology on wolf spiders covered by Dutch science magazine Bioneiuiws
- 2010 Omaha News highlighted the development of Mari Pesek's career in Biology, and my role as her mentor. Mari received her Master's degree from the University of Kansas in 2013 (<http://www.omaha.com/article/20100314/NEWS01/703149910>)