

Dowen Mae I. Jocson

dowen.jocson@wsu.edu | (314) 630-7256 | 535 Shoemaker Place, Apt D, Pullman, WA 99163

www.dowenjocson.com

Background Information

Current position

August 2018 PhD candidate, Washington State University, Pullman, WA

Education

December 2017 Master of Science in Biology, Saint Louis University, St. Louis, MO

May 2015 Bachelor of Science in Biology, Saint Louis University, St. Louis, MO

Research Experience and Previous Positions

- August 2018-Present: Dr. David Crowder and Dr. Elizabeth Beers Lab
 - o Research: Developing mating disruption for pear psyllid pest management
 - o Email: dcrowder@wsu.edu; ebeers@wsu.edu
- January 2018-May 2018: Ritenour School District, St. Louis, MO
 - o Position: Substitute Teacher for a Special Education classroom
- June 2015-December 2017: Dr. Kasey Fowler-Finn's Lab
 - o Research: Temperature effects on mating behavior of treehoppers, *Enchenopa binotata*
 - o email: fowlerfinn@slu.edu
- May 2013-May 2015: Dr. Peter Bernhardt's Lab
 - o Research: Pollination ecology of bird's foot violet, *Viola pedata*
 - o email: bernhap2@slu.edu | tel: 314-977-7152

Awards and Honors

- 2022 Outstanding PhD Student of the Year for the Department of Entomology in Washington State University (awarded \$2000)
- 2022 Finalist of 3-Minute Thesis for the Department of Entomology in Washington State University (awarded \$200)
- 2021 1st Place in the PhD 10-minute Paper competition for PI-E Field Crops, Entomological Society of America, Denver, CO
- 2021 Overall runner-up team for Student Debates, Entomological Society of America, Denver, CO
- 2021 Washington State University Department of Entomology Travel Grant (awarded \$922)
- 2021 Washington State University Entomology Graduate Student Association Mini Grant (awarded \$250)
- 2021 1st Place in the PhD 10-minute Paper competition, Pacific Branch Entomological Society of America (awarded \$200)
- 2021 3rd Place in Graduate and Professional Student Association Research Expo (awarded \$300)
- 2021 Honorable Mention in 3-Minute Thesis for the College of Agricultural, Human, and Natural Resource Sciences in Washington State University. (awarded \$100)
- 2021 Finalist of 3-Minute Thesis for the Department of Entomology in Washington State University (awarded \$200)
- 2020 Winner of 3-Minute Thesis for the College of Agricultural, Human, and Natural Resource Sciences in Washington State University. (awarded \$1000)

- 2020 Finalist of 3-Minute Thesis for the Department of Entomology in Washington State University (awarded \$200)
- 2019 Pacific Branch Entomological Society of America Travel Grant (awarded \$200)
- 2019 Washington State University Department of Entomology Travel Grant (awarded \$150)
- 2019 Washington State University Entomology Graduate Student Association Mini Grant (awarded \$100)
- 2017 Graduate Student of the Year for the Department of Biology, Saint Louis University (awarded \$150)

Professional Society Membership

- 2018-present Entomological Society of America
- 2015-2017 Animal Behaviour Society

Research

Publications

- Jocson, D.I., Gonzales, M.T., Horton, D., Beers, E., Crowder, D. Characterizing substrate-borne vibrational mating signals produced by pear psylla. *In Prep*
- Smith, O.M., Jocson, D.I., Lee, B.W., Orpet, R.J., Davis, A.G., Rieser, C.J., Clarke, A.E., Cohen, A.L., Hayes, A.M., Auth, C.A., Bergeron, P.E., Marshall, A.T., Reganold, J.P., Crowder, D.W., Northfield, T.D. Identifying farming strategies associated with achieving the UN Sustainable Development Goals. *Frontiers in Sustainable Food Systems*.
- Jocson, D. 2020. Good Vibrations: A potential IPM strategy for pear psylla (*Cacopsylla pyricola*). WSU Tree Fruit Extension Center Newsletter. <https://tinyurl.com/8e2rys92>
- Leith, N. T., Jocson, D. I., & Fowler-Finn, K. D. 2020. Temperature-related breakdowns in the coordination of mating in *Enchenopa binotata* treehoppers (Hemiptera: Membracidae). *Ethology*, 126(9), 870-882. *Published*
- Jocson, D.I., Smeester, M., Leith, N.T., Macchiano, A., 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*. *Published*
- Bernhardt, P., Edens-Meier, R., Jocson, D., Zweck, J., Ren, Z., Camilo, G.R., Arduser, M. 2016. Comparative floral ecology of bicolor and concolor morphs of *Viola pedata* (Violaceae) following controlled burning. *Journal of Pollination Ecology*. *Published*

Presentations

- 2022 Dr. Rachele Nieri's lab seminar, Rome, Italy. *Virtual*
- 2022 Invited Speaker | Behavioral Manipulation Symposium. Pacific Branch Entomological Society of America, Santa Rosa, CA.
- 2022 Oral Presentation | 10-minute Student paper competition. Pacific Branch Entomological Society of America, Santa Rosa, CA.
- 2021 Oral Presentation | 10-minute Student paper competition. Entomological Society of America, Denver, CO
- 2021 Oral Presentation | 10-minute Student paper competition. Pacific Branch Entomological Society of America. *Virtual*
- 2021 Poster | Washington State University Academic Showcase and Graduate and Professional Student Association Research Expo. *Virtual*
- 2020 Invited Speaker | ARCS Seattle Luncheon. *Virtual*
- 2020 Invited Speaker | North Central Washington Pear Day. Wenatchee, WA

- 2019 Oral Presentation | 10-minute Student paper competition. Entomological Society of America, St. Louis, MO
- 2019 Panel | Women in Agriculture panel for Washington legislative staff, Pullman, WA
- 2019 Invited Speaker | Tree Fruit Research Extension Center Sunrise Field Day, Wenatchee, WA
- 2019 Poster Presentation | Pacific Branch Entomological Society of America, San Diego, CA
- 2017 Guest Speaker | Academy of Science St. Louis, St. Louis Public Library, St. Louis, MO
- 2017 Poster | Animal Behavior Society Conference at the University of Toronto-Scarborough, Toronto, Canada
- 2018 Poster | SLEEC, Principia College, Elsah, IL
- 2016 Oral Presentation | Animal Behavior Society Conference at University of Missouri, Columbia, MO
- 2016 Poster | Graduate Student Association Symposium, Saint Louis University, St. Louis, MO
- 2015 Poster | SLEEC (Saint Louis Ecology, Evolution, and Conservation) Retreat, Saint Louis Zoo, St. Louis, MO

Research Support

- 2021 USDA NIFA Predoctoral Fellowship, “Using Vibrational Communication for Mating Disruption and Pest Management” (awarded \$180,000)
- 2020 Washington State Commission on Pesticide Registration 2021 Funding. PI: David Crowder (awarded \$24,768)
- 2019 USDA Innovation fund. PI: David Horton (~\$20,000)
- 2018 Achievement Rewards for College Scientists (ARCS) Foundation Fellowship, Seattle Chapter (awarded \$17,500)
- 2017 National Science Foundation, NSF IOS-1656818: Genetic change and genetic accommodation allow singing insects to adapt to temperature change. PI: Kasey Fowler-Finn; *Data contributor* (awarded ~\$500,000)
- 2017 Reis Research Award for field work at the Reis Biological Station (awarded \$600)

Extension and Outreach

Media Contact

- 2021 Capital Press coverage of my PhD research, Western Innovator: Controlling Pest with Good Vibrations - https://www.capitalpress.com/ag_sectors/research/western-innovator-controlling-pests-with-good-vibrations/article_956c34e4-f56b-11eb-96cc-6387bfe80636.html?utm_medium=social&utm_source=twitter&utm_campaign=user-share
- 2020 Featured in a centerfold article called “Psexy Psylla Psongs”, Good Fruit Grower magazine
- 2019 “Heat Changes Insect Call But It Still Works”. Scientific American. <https://www.scientificamerican.com/podcast/episode/heat-changes-insect-call-but-it-still-works/>
- 2015 Saint Louis Public Radio coverage of Master’s thesis research: <https://news.stlpublicradio.org/post/good-vibrations-these-bugs-do-their-sexting-plant-stem>

Service

Professional Societies

- 2022 Planning Committee for the Pacific Branch meeting of Entomological Society of America. *Volunteer*

- 2022 Co-organized a symposium with Dr. Jacquelyn Serrano (USDA-ARS) for the Entomological Society of America Pacific Branch: "Behavioral Manipulation". Santa Rosa, CA. *Volunteer*
- 2020 Co-organized a symposium with Dr. Rachele Nieri (Oregon State University) for the Entomological Society of America Pacific Branch: "Behavioral Manipulation". Spokane, WA (Meeting postponed). *Volunteer*

Washington State University

- 2022 Search Committee member for the Entomology Endowed Tree Fruit Chair. *Selected*
- 2022 Professional Development Officer for the College of Agricultural, Human, and Natural Resource Sciences (CAHNRS) Student Senate. *Elected*
- 2022 Vice President for the Entomology Graduate Student Association. *Elected*
- 2021 President for the Entomology Graduate Student Association. *Elected*
- 2020 President for the Entomology Graduate Student Association. *Elected*
- 2020 Student Lead for the Entomology Journal Club. *Volunteer*
- 2020 Founding member of the Department of Entomology Diversity, Equity, and Inclusion Committee. *Volunteer*
- 2020 Faculty Liaison for the Entomology Graduate Student Association. *Elected*

Pullman/Palouse Community

- 2022 Community Garden Fair. Outreach and Education table. *Volunteer*
- 2022 Insect Expo: Outreach and Education event. *Volunteer*
- 2021 Insect Expo: Outreach and Education event. *Volunteer*
- 2021 What's buzzing at Koppel? A citizen science pollinator event. Outreach presentation in collaboration with the Palouse Conservation District. *Volunteer*
- 2019 Insect Expo: Outreach and Education event. *Volunteer*