

Dowen Mae I. Jocson

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Current position

- August 2018-Present: PhD candidate, Washington State University, Pullman, WA 99163

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

Publications and Presentations

Publications

- 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. *In Review* (PNAS)
- **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

- Oral Presentation | April 2021: 10-minute Student paper competition. Pacific Branch Entomological Society of America, Virtual
- Virtual Poster | March 22-25, 2021; Washington State University Academic Showcase and Graduate and Professional Student Association Research Expo
- Invited Speaker | October 26th, 2020: ARCS Seattle Luncheon. Virtual
- Invited Speaker | January 28th, 2020: North Central Washington Pear Day. Wenatchee, WA
- Oral Presentation | November 2019: 10-minute Student paper competition. Entomological Society of America, St. Louis, MO
- Panel | August 2019: Women in Agriculture panel for Washington legislative staff, Pullman, WA
- Presentation | August 2019: Tree Fruit Research Extension Center Sunrise Field Day, Wenatchee, WA

- Poster Presentation | March 2019: Pacific Branch Entomological Society of America, San Diego, CA
- Guest Speaker | July 2017: Academy of Science St. Louis, St. Louis Public Library, St. Louis, MO
- Poster Presentation | June 2017: Animal Behavior Society Conference at the University of Toronto-Scarborough, Toronto, Canada
- Poster Presentation | September 2016: SLEEC, Principia College, Elsah, IL
- Oral Presentation | August 2016: Animal Behavior Society Conference at University of Missouri, Columbia, MO
- Poster Presentation | March 2016: Graduate Student Association Symposium, Saint Louis University, St. Louis, MO
- Poster Presentation | September 2015: SLEEC (Saint Louis Ecology, Evolution, and Conservation) Retreat, Saint Louis Zoo, St. Louis, MO

Research Experience

- 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
- 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

Teaching Experience

- August 2018-December 2018: Graduate Teaching Assistant, Entomology for Non-Science Majors, Washington State University
- January 2018-May 2018: Substitute Teacher, Ritenour School District, St. Louis, MO
- August 2016-December 2016: Graduate Teaching Assistant, Plants and Fungi lab, Saint Louis University
- August 2015-May 2016: Graduate teaching assistant, Principles of Biology Lab, Saint Louis University
- Fall 2014: Undergraduate Teaching Assistant, Principles of Genetics, Saint Louis University

Professional Collaborations, Leadership, and Outreach

- September 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
- August 2020-Present: Student Lead for Entomology Journal Club
- August 2020-Present: President of the Entomology Graduate Student Association in Washington State University.

- August 2020-August 2021: Faculty Liaison for Graduate students in the Department of Entomology
- April 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)
- March 2020: Featured in a centerfold article called "Psexy Psylla Psongs", Good Fruit Grower magazine
- July 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.
- August 2016: Presenter at the Animal Behavior Society Outreach Fair. University of Missouri, Columbia, MO
- September 2015: Saint Louis Public Radio coverage of thesis research: <https://news.stlpublicradio.org/post/good-vibrations-these-bugs-do-their-sexting-plant-stem>
- June 2015-June 2017: Volunteer at Annual Bioblitz, St. Louis, MO
- July 2015: Helped record sounds on plants for sound artist Stephen Vitiello (<http://www.stephenvitiello.com/>) for a sound installation at Virginia Tech's Moss Center for the Arts (Exhibit opened from September 3-13, 2015)

Awards and Grants

- 2021: USDA NIFA Predoctoral Fellowship, "Using Vibrational Communication for Mating Disruption and Pest Management" (awarded \$180,000)
- 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 \$)
- 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)
- 2021: Entomology Graduate Student Association Mini Grant (awarded \$250)
- 2020: Washington State Commission on Pesticide Registration 2021 Funding (awarded \$24,768)
- 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 Theses for the Department of Entomology in Washington State University (awarded \$200)
- 2019: Pacific Branch Entomological Society of America Travel Grant (awarded \$200)
- 2019: Department of Entomology Travel Grant (awarded \$150)
- 2019: Entomology Graduate Student Association Mini Grant (awarded \$100)
- 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)

Professional Societies

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