

Camille E. Wendlandt

Postdoctoral Researcher
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EDUCATION

Sep 2013 – Feb 2019 **Ph.D. Plant Biology, University of California, Riverside, CA**
Supervisor: Joel Sachs
Sep 2006 – Jun 2010 **B.S. Biology, Seattle Pacific University, WA**
Summa cum laude

PUBLICATIONS

Undergraduate co-authors underlined

- Wendlandt CE**, Gano-Cohen KA, Stokes PJN, Jonnala BNR, Zomorrodian AJ, Al-Moussawi K, Sachs JL. 2022. Wild legumes maintain beneficial soil rhizobia populations despite decades of nitrogen deposition. *Oecologia* IN PRESS.
- Torres-Martínez L, Porter SS, **Wendlandt CE**, Purcell J, Ortiz-Barbosa G, Rothschild J, Lampe M, Farsamin W, Le T, Weisberg AJ, Chang JH, Sachs JL. 2021. Evolution of specialization in a plant-microbial mutualism is explained by the oscillation theory of speciation. *Evolution* 75: 1070-1086.
- Wendlandt CE**, Helliwell E, Roberts M, Nguyen KT, Friesen ML, von Wettberg E, Price P, Griffiths JS, Porter SS. 2021. Decreased coevolutionary potential and increased symbiont fecundity during the biological invasion of a legume-rhizobium mutualism. *Evolution* evo.14164.
- Gano-Cohen KA, **Wendlandt CE**, Al-Moussawi K, Stokes PJ, Quides KW, Weisberg AJ, Chang JH, Sachs JL. 2020. Recurrent mutualism breakdown events in a legume rhizobia metapopulation. *Proceedings of the Royal Society of London* 287: 20192549.
- Gano-Cohen K, **Wendlandt CE**, Stokes P, Blanton M, Quides K, Zomorrodian A, Adinata E, Sachs J. 2019. Interspecific conflict and the evolution of ineffective rhizobia. *Ecology Letters* 22: 914-924.

- Wendlandt CE**, Regus JU, Gano-Cohen KA, Hollowell AC, Quides KW, Lyu JY, Adinata ES, Sachs JL. 2019. Host investment into symbiosis varies among genotypes of the legume *Acmispon strigosus*, but host sanctions are uniform. *New Phytologist* 221: 446-458.
- Sachs JL, Quides KW, and **Wendlandt CE**. 2018. Legumes versus rhizobia: a model for ongoing conflict in symbiosis. *New Phytologist* 219: 1199-1206.
- Pahua VJ, Stokes PJN, Hollowell AC, Regus JU, Gano-Cohen KA, **Wendlandt CE**, Quides KW, Lyu JY, and Sachs JL. 2018. Fitness variation among host species and the paradox of ineffective rhizobia. *Journal of Evolutionary Biology* 31: 599-610.
- Regus JU, **Wendlandt CE**, Bantay RM, Gano-Cohen KA, Gleason NJ, Hollowell AC, O'Neill MR, Shahin KK, and Sachs JL. 2017. Nitrogen deposition decreases the benefits of symbiosis in a native legume. *Plant and Soil* 414: 159-170.
- Gano-Cohen KA, Stokes P, Blanton MA, **Wendlandt CE**, Hollowell AC, Regus JU, Kim D, Patel S, Pahua VJ, and Sachs JL. 2016. Non-nodulating *Bradyrhizobium* spp. modulate the benefits of the legume-rhizobium mutualism. *Applied and Environmental Microbiology* 82: 5259-5268.
- Campbell DR and **Wendlandt C**. 2013. Altered precipitation affects plant hybrids differently than their parental species. *American Journal of Botany* 100: 1322-1331.

POSITIONS & APPOINTMENTS

- Jun 2019 – present **Postdoctoral Researcher**
Washington State University Vancouver, Vancouver, WA
Supervisor: Stephanie Porter (stephanie.porter@wsu.edu)
Investigating how biological invasions and crop domestication shape the legume-rhizobia mutualism
- Sep 2014 – Dec 2017 **Teaching Assistant**
UC Riverside, Riverside, CA
Nine academic terms / five courses; see Teaching Experience
- Oct 2011 – Aug 2013 **Research Assistant II**
Oregon Health & Sciences University, Portland, OR
Supervisor: Dr. Willscott Naugler (nauglers@ohsu.edu)
Lab: Dr. Markus Grompe
Mouse colony maintenance, DNA/RNA/protein extraction, vector-based cloning, adeno-associated virus propagation
- May 2011 – Aug 2011 **Research Assistant**
Indiana State University, Terra Haute, IN
Supervisor: Dr. Rusty Gonser (rusty.gonser@indstate.edu)

- Nest-searching and field measurements of white-throated sparrows*
- Oct 2010 – Mar 2011 **Research Assistant**
Stratos Genomics, Seattle, WA
Supervisor: Mark Kokoris
DNA purification and conjugation reactions for testing a nanopore sequencing platform
- Jan 2010 – Aug 2010 **Teaching Assistant**
Seattle Pacific University, Seattle, WA
Three academic terms / two courses; see Teaching Experience
- Jun 2009 – Aug 2009 **Advanced Undergraduate Research Program**
Rocky Mountain Biological Laboratory, Gothic, CO
Supervisor: Dr. Diane Campbell
Ecophysiology of hybridizing wildflowers
- Oct 2007 – Nov 2008 **Undergraduate Research Assistant**
Seattle Pacific University, Seattle, WA
Supervisor: Dr. Rick Ridgway
Immunolocalization of metabolites in a marine macroalga

AWARDS & FELLOWSHIPS

Merit-based awards

- Aug 2018 **Botany & Plant Sciences Graduate Student Endowment, \$200**
Awarded annually to one Plant Biology graduate student at UC Riverside
- May 2018 **Outstanding Teaching Assistant**
Awarded annually to one Plant Biology graduate student at UC Riverside
- Jul 2017 **GAANN Fellowship, \$21,194**
Awarded annually by application to ~ 6 Plant Biology graduate students at UC Riverside; 3 terms of support
- Apr 2016 **Graduate Research Mentorship Program (GRMP), \$5,400**
Awarded by UC Riverside Graduate Division to students nominated by their graduate program; 1 term of support
- Apr 2015 **Graduate Research Mentorship Program (GRMP), \$10,500**
Awarded by UC Riverside Graduate Division to students nominated by their graduate program; 2 terms of support
- Apr 2015 **Shoemaker Award, \$1,000**
Awarded annually to graduate students of UC Riverside Dept. Biology faculty; typically ~2 students funded

- Jun 2009 **Causey Scholarship, \$548**
*Awarded annually to one student in Seattle Pacific University
Dept. Biology for excellence in upper-division biology
coursework*
- Sep 2006 **SPU Scholar Award, \$105,425**
*Full-tuition scholarship awarded annually to 5 incoming
undergraduates at Seattle Pacific University*
- Jun 2006 **Valedictorian**
School of Science & Technology, Beaverton, OR

Travel awards

- Jul 2018 UCR Graduate Student Association Conference Travel Grant, \$400
- May 2018 International Symbiosis Society Travel Award, \$225
- May 2018 Botany mini-GSA Travel Grant, \$200
- Jan 2018 American Society of Naturalists Travel Award, \$500
- May 2015 Botany mini-GSA Travel Grant, \$180
- May 2014 Botany mini-GSA Travel Grant, \$180

TEACHING

Guest lectures:

- 12 February 2020 **Mutualism and Symbiosis (BIOL 446/546)**
WSU Vancouver
Lecture: "The Genetics of Mutualism"

Teaching assistantships:

- Jun 2016 – Aug 2016 **Introduction to Cell and Molecular Biology (BIOL 005A)**
UC Riverside; 1 term
- Sep 2016 – Dec 2017 **Introductory Genetics (BIOL 102)**
UC Riverside; 4 terms
- Jul 2015 – Aug 2015 **Molecular Biology (BIOL 107A)**
UC Riverside; 1 term
- Mar 2015 – Jun 2015 **Spring Wildflowers (BPSC 031)**
UC Riverside; 1 term
- Sep 2014 – Mar 2015 **Dynamic Genome (BIOL 020)**
UC Riverside; 2 terms
- Jun 2010 – Aug 2010 **Biostatistics (BIO 4360)**
Seattle Pacific University; 1 term
- Jan 2010 – Jun 2010 **Introduction to Biology (BIO 2567)**

Seattle Pacific University; 2 terms

Student mentoring:

* *Research technician trained on an independent project*

† *Undergraduate student trainee trained in greenhouse and/or molecular methods*

Oct 2017 – May 2018	*Joseph Russo
May 2017 – May 2018	†Matthew Sung
Jun 2017 – Sep 2017	†Paola Cardenas
Jan 2017 – Jun 2017	†Julio Avelar-Barragan
Jan 2017 – Sep 2017	†Khadija Al-Moussawi
Jun 2015 – Aug 2017	†Avisa Zomorrodian
Mar 2015 – Aug 2015	†Basava Jonnala
Jun 2014 – Aug 2014	†Montserrat Alvarez
Apr 2014 – Jun 2016	†Eunice Adinata
Oct 2013 – May 2014	†Jonathan Lyu

PROFESSIONAL TALKS & POSTERS

Invited Presentations:

Wendlandt C. If you do good you shall do well: do legume hosts vary in rewards to N₂-fixing rhizobia? Oral presentation. *UCR Microbiome Initiative Symposium*. Riverside, CA. 25 Sep 2018.

Contributed Presentations:

Wendlandt C, Roberts M, Nguyen K, Graham M, Lopez Z, Helliwell E, von Wettberg E, Friesen M, Griffiths J, Price P, Porter S. Standing genetic variation in the effect of a locus negotiating mutualism outcomes in wild rhizobia on their natural host plant. Poster presentation. *Ecological Society of America*. Virtual meeting. 5 Aug 2021.

Quides KW and **Wendlandt CE.** Phenotypic variation in legumes. Education Session poster presentation. *International Symbiosis Society Congress*. Corvallis, OR. 17 Jul 2018.

Wendlandt C and Sachs J. Host and symbiont contributions to nodule occupancy in the legume-rhizobium symbiosis. Oral presentation. *International Symbiosis Society Congress*. Corvallis, OR. 16 Jul 2018.

Wendlandt C and Sachs J. If you do good you shall do well: do legume hosts vary in rewards to N₂-fixing rhizobia? Poster presentation. *Yermanos Poster Session*. Riverside, CA. 30 May 2018.

- Wendlandt C** and Sachs J. Variation in host selection for beneficial rhizobia. Oral presentation. *Symbiosis Workshop*. Wawona, CA. 5 May 2018.
- Wendlandt C**. Host and symbiont contributions to nodule occupancy in the legume-rhizobium symbiosis. Oral presentation. *AmNat150*. Pacific Grove, CA. 6 Jan 2018.
- Wendlandt C**. Host and symbiont contributions to nodule occupancy in the legume-rhizobium interaction. Oral presentation. *UCR Microbiome Initiative Inaugural Symposium & DataBlitz*. Riverside, CA. 27 Sep 2017.
- Wendlandt C**, Gano-Cohen K, and Sachs J. Genetic variation in legume sanctions and the maintenance of ineffective rhizobia. Oral presentation. *Evolution Conference*. Portland, OR. 24 Jun 2017.
- Wendlandt C**. Spatial variation in legume host sanctions and symbiotic quality of rhizobia. Oral presentation. *UCR Botany & Plant Sciences Seminar Series*. Riverside, CA. 18 May 2016.
- Wendlandt C**, Gano-Cohen K, and Sachs J. Spatial variation in legume host sanctions and symbiotic quality of associated rhizobia. Oral presentation. *Symbiosis Workshop*. Wawona, CA. 7 May 2016.
- Wendlandt C**. Variation in legume host control traits across a nitrogen deposition gradient. Oral presentation. *Symbiosis Workshop*. Wawona, CA. 3 May 2015.
- Wendlandt C**, Campbell D, Long E, and Wall-Scheffler C. Genetic and environmental contributions to water-use efficiency and plant growth in *Ipomopsis* hybrid zones. Oral presentation. Erickson Conference. Seattle Pacific University, Seattle, WA. 14 May 2010.
- Wendlandt CE**. Genetic and environmental contributions to water-use efficiency and growth in *Ipomopsis* hybrid zones. Oral presentation. Honors Northwest Research Symposium. Seattle University, Seattle, WA. 2010.
- Wendlandt CE** and Ridgway RL. Immunolocalization of dopamine in marine alga *Ulvaria obscura* differs with use of monoclonal and polyclonal antibodies. Poster presentation. Murdock Conference for Undergraduate Research. University of Puget Sound, Tacoma, WA. 7 Nov 2008.

SERVICE & OUTREACH

Peer review:

Jan 2016 – present
Sep 2020 – present

Peer reviewer for *Oecologia* (4 manuscripts)
Peer reviewer for *Plant and Soil* (1 manuscript)

General service & outreach:

2 Aug 2021	Judge for Buell and Braun Awards at ESA virtual meeting
29 Mar 2021	Judge for WSUV SURCA (Showcase for Undergraduate Research and Creative Activities)
27 Feb 2020	Middle school outreach event; designed/supervised evolution game
21 Jan 2019	MLK Jr. Day of Service: Fairmount Park clean-up (3 hours)
22 Dec 2018	Consultant to plant-curious 8-year-old Max and mother Nertha
18 May 2018	Plant Discovery Day volunteer (chaperone)
Sep 2017	PLBL Graduate Program Student Handbook Revision Committee
12 Nov 2016	Santa Ana River Cleanup volunteer (Riverside Art Museum)
29 May 2016	Plant Discovery Day volunteer (set-up/take-down)
Mar 2016	St. Catherine of Alexandria School (science mentor; 2 students)
18 May 2015	UCR CNAS: Transfer Student Orientation (lab tour guide)
14 Mar 2015	Sycamore Canyon Wilderness Park volunteer (hike guide)
8 Jan 2015	St. Catherine of Alexandria School (science fair poster judge)
13 Dec 2014	Sycamore Canyon Wilderness Park volunteer (Environmental Health Education Day)
16 Apr 2014	Women in Math and Science: UCR Shadow Day (chaperone)
9 Apr 2014	St. Catherine of Alexandria School (science fair poster judge)