### CURRICULUM VITAE

### **JONATHAN Y. LIN**

phd candidate jonathanylin.com (562) 303-6954 johlin@ucdavis.edu

#### **EDUCATION**

# University of California, Davis, CA

<u>Doctor of Philosophy</u>, Microbiology 2016-Present Advisor: Dr. Jorge L.M. Rodrigues

Calvin College, Grand Rapids, MI

<u>Bachelor of Science</u>, Majors in Biology and Philosophy 2011-2015

Advisor: Dr. John T. Wertz

#### RESEARCH TRAINING

Trainee, Microbial Diversity Course, Marine Biological Laboratory, Woods Hole, MA, Summer 2017

Research Technician, Department of Biology, Calvin College, 2015-2016

Research Assistant, Department of Biology, Calvin College, 2014-2015

Research Intern, Department of Ophthalmology, Kresge Eye Institute, Wayne State University, Summer 2012

# **AWARDS AND HONORS**

NSF Graduate Research Fellowship Program - Honorable Mention, 2018

Powerhouse Science Center Science Communication Fellowship, 2017

Marine Biological Laboratory Abigail Salyers Endowed Scholarship, 2017

Calvin College O.K. Bouwsma Award for the Best Paper in Philosophy, 2015

Calvin College Dr. Paul and Mrs. Doris Dirkse Health Care Scholarship, 2014-2015

Calvin College Dean's Academic Scholarship, 2014-2015

Calvin College Faculty Honors Academic Scholarship, 2011-2014

#### COMPETITIVE RESEARCH SUPPORT

UC Davis Henry A. Jastro Research Award, 2018, "Elucidating soil microbial contributions to carbon use efficiency in agroecosystems" (\$3,000)

UC Davis Henry A. Jastro Research Award, 2017, "Identifying microbial species-area relationships in soil aggregates" (\$3,000)

Calvin College Harvey Rozema Student Research Fellowship, 2014 (\$3,700)

Wayne State University Summer Undergraduate Research Fellowship, 2012 (\$2,500)

### **PUBLICATIONS**

- Kotak M, Lin JY, Isanapong J, Rodrigues JLM. (2019). Comparative genomics of strains TAV3 and TAV4 (*Verrucomicrobia*: *Opitutaceae*) isolated from a wood-feeding termite and in silico analysis of their polysaccharide-degrading enzymes. <u>Genome Biology and</u> <u>Evolution</u>. **Under Review**.
- Bresciani L, Lemos LN, Wale N, Lin JY, Strauss AT, Duffy MA, Rodrigues JLM. (2018). Draft genome sequence of "Candidatus Spirobacillus cienkowskii," a pathogen of freshwater Daphnia species, reconstructed from hemolymph metagenomic reads. <u>Microbial Resource Announcements</u>. 7 (22): e01175-18.
- 4. **Lin JY**, Hobson WJ, Wertz JT. (2017). *Saccharedens versatilis* gen. nov., sp. nov., a sugar-degrading member of the '*Burkholderiales*' isolated from *Cephalotes rohweri* ant guts. International Journal of Systematic and Evolutionary Microbiology. **67** (2): 447-453.
- 3. **Lin JY**, Russell JA, Sanders JG, Wertz JT. (2016). *Cephaloticoccus* gen. nov., a new genus of *'Verrucomicrobia'* containing two novel species isolated from *Cephalotes* ant guts. <u>International Journal of Systematic and Evolutionary Microbiology</u>. **66** (8): 3034-3040.
- 2. **Lin JY**, Hobson WJ, Wertz JT. (2016). *Ventosimonas gracilis* gen. nov., sp. nov., a member of the *Gammaproteobacteria* isolated from *Cephalotes varians* ant guts representing a new family, *Ventosimonadaceae* fam. nov., within the order '*Pseudomonadales*'. <u>International</u> Journal of Systematic and Evolutionary Microbiology. **66** (8): 2869-2875.
- 1. Santos JM, Tewari S, **Lin JY**, Kowluru RA. (2013). Interrelationship between activation of matrix metalloproteinases and mitochondrial dysfunction in the development of diabetic retinopathy. <u>Biochemical and Biophysical Research Communications</u>. **438** (4): 760-764.

#### **PRESENTATIONS**

**Lin JY**, Wang D, Sayre JM, Fonte SJ, Rodrigues JLM, Scow KM. Compost amendment and cover cropping increase soil C storage and alter microbial communities in soil

microenvironments. Soil Science Society of America International Soils Meeting. San Diego, CA. January 7, 2019. (Oral & Poster Presentation).

**Lin JY**, Gong P, Ye R, Horwath WR, Rodrigues JLM. Nitrification by rhizosphere microbial communities in California rice varieties to support nitrogen use efficiency. California Cooperative Rice Research Foundation Field Day. Biggs, CA. Aug. 29, 2018. (Poster Presentation).

**Lin JY**, Won SJ, Rodrigues JLM. Waste not, want not: Contribution of ureolytic bacteria to nitrogen recycling in the termite gut. Joint Genome Institute 13<sup>th</sup> Genomics of Energy & Environment Meeting. San Francisco, CA. Mar. 15, 2018. (Poster Presentation).

**Lin JY**. Physiological characterization of a novel genus of *Verrucomicrobia* isolated from the guts of *Cephalotes* ants. Honors dissertation in the Calvin College Biology Department Seminar. Grand Rapids, MI. Oct. 31, 2014. (Oral Presentation).

**Lin JY**, Wertz JT. Physiological characterization of bacteria belonging to a novel genus of *Verrucomicrobia* from the guts of *Cephalotes* ants. Autumn Immunology Conference 43<sup>rd</sup> Annual Meeting. Chicago, IL. Nov. 22, 2014. (Poster Presentation)

**Lin JY**, Santos JM, Kowluru RA. Temporal relationship between activation of matrix metalloproteinase 9 and mitochondria damage in the development of diabetic retinopathy. West Michigan Undergraduate Science Research Conference. Van Andel Research Institute, Grand Rapids, MI. Nov. 17, 2012. (Poster Presentation).

# **OUTREACH, SERVICE, AND SYNERGISTIC ACTIVITIES**

Chair of Recruitment, Microbiology Graduate Student Association, UC Davis, 2017-Present

Social Media Manager, Microbiology Graduate Student Association, UC Davis, 2018-Present

Volunteer Docent, Explorit Science Center, Davis, CA, 2017-2018

Science Communication Fellow, Powerhouse Science Center, Sacramento, CA, Fall 2017

Guest Contributor, Small Things Considered Blog, American Society for Microbiology, October 2017

Mentor to High School Students, Biotechnology Academy, Sheldon and Vallejo High School, Elk Grove and Vallejo, CA, Spring 2017.

### **ACADEMIC MENTORING**

\*published as co-author; †earned award; ‡current position

Sung J. Won | B.S. 2018 | UC Davis | †UC Davis Provost's Undergraduate Research Fellowship | ‡Environmental Engineering Associate I, LA Sanitation

Matthew J. Schepers | B.S. 2017 | Calvin College | \*Ph.D. student, University of Texas, Austin

Ellen K. Rootring | B.S. 2016 | Calvin College | \*D.O. student, Ohio University Heritage College of Osteopathic Medicine

William J. Hobson\* | B.S. 2016 | Calvin College

Brianna M. Busscher | B.S. 2018 | Calvin College | †Barry M. Goldwater Scholarship Honorable Mention

Stephan A. Buiter | B.S. 2017 | Calvin College | <sup>‡</sup>Research Specialist I, University of Chicago

#### **TEACHING**

Graduate Teaching Assistant, Soil Ecology, Department of Land, Air, and Water Resources, UC Davis, Fall 2018

Graduate Teaching Assistant, Bioenergetics and Metabolism, Department of Molecular and Cellular Biology, UC Davis, Spring 2017, Spring 2018

Undergraduate Teaching Assistant, General Microbiology, Medical Microbiology, Department of Biology, Calvin College, 2013-2015

Academic Tutor, Student Academic Services, Calvin College, 2013-2015

# **MEMBERSHIP IN SCIENTIFIC SOCIETIES**

American Society for Microbiology

Soil Science Society of America

Sigma Xi