

Gabriel T. LaHue, Ph.D.

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EDUCATION

University of California, Davis (Davis, CA) 2018
Ph.D. in Soils and Biogeochemistry

University of California, Davis (Davis, CA) 2015
M.S. in International Agricultural Development

Cornell University (Ithaca, NY) 2010
B.S. in Plant Sciences, Summa Cum Laude with Distinction in Research

PROFESSIONAL EXPERIENCE

Clinical/Research Assistant Professor of Soil Science Jan. 2019 – Present
Washington State University (Pullman, WA)

- Developing a research program focusing on soil-water relations, soil fertility, and water-nutrient interactions, including irrigation scheduling, soil management for improved soil hydrology, nutrient requirements of understudied crops, and the influence of soil moisture and other soil properties on nutrient availability
- Teaching in-person classes at the WSU Everett campus, synchronous online classes, and asynchronous online classes in soil science to undergraduate and graduate students

Graduate Student Researcher Jan. 2014 – Dec. 2018
University of California, Davis (Davis, CA)

Advisors: Dr. Bruce Linquist, Dr. Chris van Kessel

- Designed methodologies to directly measure subsurface water flows, collaborated with farmers to quantify these flows in eight California rice fields, and developed a complete rice field water balance
- Performed research on alternative water management strategies for California rice systems to reduce greenhouse gas emissions and rice grain arsenic without increasing crop nitrogen requirements
- Conducted research in rainfed wheat systems on nitrous oxide emissions from historical nitrogen fertilization

Associate Instructor Sep. – Dec. 2017
University of California, Davis (Davis, CA)

- Taught principles and methodologies of soil physics (a 5-unit course) to undergraduate and graduate students
- Served as the sole instructor (Instructor-of-Record) responsible for developing and meeting learning objectives, designing course structure and content, presenting material, assessing student performance, coordinating a laboratory section, and overseeing a graduate teaching assistant

Visiting Researcher Oct. 2015 – Mar. 2016
CIAT – International Center for Tropical Agriculture (Cali, Colombia)

Advisor: Dr. Ngoni Chirinda

- Developed a research project to analyze technical and socioeconomic barriers to the adoption of alternative water management strategies in Colombian rice fields

Graduate Teaching Assistant**Sept. – Dec. 2013, Jan. – Mar. 2015, Aug. – Dec. 2015***University of California, Davis (Davis, CA); University of California, Berkeley (Berkeley, CA)*

- Taught two laboratory sections of the lower-division undergraduate class “Introduction to Biology: Principles of Ecology and Evolution” as the sole instructor in a classroom
- Lectured, created reading comprehension assignments, advised on course design, and graded for the upper-division undergraduate class “Agriculture and the Environment”
- Helped teach the course “Strategic Planning and Project Management” for graduate students as part of an effort to adapt a similar course taught at UC Davis for the UC Berkeley Masters of Development Practice

Crop Extension Volunteer**Sept. 2010 – Dec. 2012***United States Peace Corps (Paraguay)*

- Led trainings on small-scale methane digesters, resulting in 80 farmers trained and 12 digesters installed
- Taught 13 farmers and 38 local school students about improved gardening practices, soil conservation, and fertility management, resulting in a school garden and 200+ agro-forestry trees planted
- Planned and organized a national library workshop to train 30 volunteers and 26 Paraguayan counterparts
- Coordinated a waste management and environmental stewardship competition between six area elementary schools that involved over 600 students and recycled over 100 kg of waste and over 2500 batteries/bulbs

PROFESSIONAL AFFILIATIONS

- American Society of Agronomy, Graduate Student Member (2014 – Present)
- Crop Science Society of America, Graduate Student Member (2014 – Present)
- Soil Science Society of America, Graduate Student Member (2014 – Present)
- California Irrigation Institute (2017 – 2018)

PEER-REVIEWED PUBLICATIONS

- Dahlke H.E., **LaHue G.T.**, Mautner M.R.L., Murphy N.P., Patterson N.K., Waterhouse H., Yang F., and L. Foglia. 2018. Aquifer Recharge as a tool to enhance sustainable groundwater management in California: Examples from field and modeling studies. In: J. Friesen and L. Rodriguez Sinobas (Eds.), *Advances in Chemical Pollution, Environmental Management and Protection: Advanced Tools for Integrated Water Resources Management*, Volume 3. 215 pp.
- Chirinda N., Arenas L., Katto M., Loaiza S., Correa F., Ishitani M., Loboguerrero A.M., Martinez-Baron D., Graterol E., Jaramillo S., Torres C.F., Arango M., Guzmán M., Avila I., Hube S., Kurtz D.B., Zorrilla G., Terra J., Irisarri P., Tarlera S., **LaHue G.T.**, Scivittaro W.B., Noguera A., and C. Bayer. 2018. Sustainable and low greenhouse gas emitting rice production in Latin America and the Caribbean: A review on the transition from ideality to reality. *Sustainability*. 10:671. doi: 10.3390/su10030671
- Chirinda N., Arenas L., Loaiza S., Trujillo C., Katto M., Chaparro P., Nuñez J., Arango J., Martinez-Baron D., Loboguerrero A.M., Lopez-Lavalle L.A.B., Avila I., Guzmán M., Peters M., Twyman J., García M., Serna L., Escobar D., Arora D., Tapasco J., Maazbel L., Correa F., Ishitani M., Da Silva M., Graterol E., Jaramillo S., Pinto A., Zuluaga A., Lozano N., Byrnes R., **LaHue G.T.**, Alvarez C., Rao I., and R. Barahona. 2017. Novel technological and management options for accelerating transformational changes in rice and livestock systems. *Sustainability*. 9:1891. doi:10.3390/su9111891
- **LaHue G.T.**, Chaney R.L., Adviento-Borbe M.A., and B.A. Linquist. 2016. Alternate wetting and drying in high yielding direct-seeded rice systems accomplishes multiple environmental and agronomic objectives. *Agriculture, Ecosystems and Environment*. 229:30-39.
- **LaHue G.T.**, Adviento-Borbe M.A., Linquist B.A., van Kessel C., and S.J. Fonte. 2016. Fertilizer memory effects increase nitrous oxide emissions from zero N controls: implications for estimating fertilizer-induced emission factors. *Journal of Environmental Quality*. 45:1501-1508.

TECHNICAL PUBLICATIONS

- Linquist B.A., and **G.T. LaHue**. 2018. Managing rice with limited water. Agronomy Fact Sheet. University of California Cooperative Extension, Davis, California, USA. 2 p. (In Press)
- García M.A., Katto M.C., Twyman J., **LaHue G.T.**, Chirinda N. 2016. How might the gender roles affect the implementation of a new water-saving technique for Colombian rice production? Report of gender dimensions in Colombian rice production. Working Paper. CIAT Publication No. 437. International Center for Tropical Agriculture (CIAT), Cali, Colombia. 37 p.

POSTERS AND ORAL PRESENTATIONS

- **LaHue G.T.**, and B.A. Linquist. " Subsurface water losses: Seepage and percolation in California rice fields". Oral presentation at the 2019 SSSA Annual Meeting in San Diego, California. January 8th, 2019.
- **LaHue G.T.**, and B.A. Linquist. "Subsurface water losses: Seepage and percolation in California rice fields". Poster presentation at the 2018 Rice Field Day in Biggs, California. August 29th, 2018.
- **LaHue G.T.**, and B.A. Linquist. " Subsurface water losses: Seepage and percolation in California rice fields". Oral presentation at the 2018 Rice Technical Working Group Conference in Long Beach, California. February 22nd, 2018.
- **LaHue G.T.**, and B.A. Linquist. "Subsurface water losses: Seepage and percolation in California rice fields". Poster presentation at the 2017 Rice Field Day in Biggs, California. August 30th, 2017.
- **LaHue G.T.**, Dahlke H.E., and B.A. Linquist. "Elucidating the interactions between rice cultivation and groundwater in California". Oral presentation at the 2016 ASA-CSSA-SSSA Annual Meeting in Phoenix, Arizona. November 9th, 2016.
- **LaHue G.T.**, and B.A. Linquist. "Elucidating the interactions between rice cultivation and groundwater in California". Poster presentation at the 2016 Rice Field Day in Biggs, California. August 31st, 2016.
- **LaHue G.T.**, Sandoval-Solis S., and B.A. Linquist. "The influence of the recent California drought on water table levels in the Sacramento Valley". Poster presented at the Toward Sustainable Groundwater in Agriculture conference in Burlingame, California. June 29th, 2016.
- **LaHue G.T.**, Adviento-Borbe M.A., van Kessel C., and B.A. Linquist. "Using alternative water management to reduce greenhouse gas emissions and maintain yields in California rice systems." Oral presentation at the 2014 ASA-CSSA-SSSA Annual Meeting in Long Beach, California. November 4th, 2014.
- **LaHue G.T.**, Adviento-Borbe M.A., van Kessel C., Stogsdill J., and B.A. Linquist. "Using alternative water management to reduce greenhouse gas emissions and maintain yields in California rice systems." Poster presentation at the 2014 Rice Field Day in Biggs, California. August 27th, 2014.
- **LaHue G.T.**, Anderson K., Linquist B.A., van Kessel C., and S.J. Fonte. "Do soils at Russell Ranch have a memory? – The effect of fertilization history on nitrous oxide emissions." Poster presentation at the 2014 Russell Ranch Field Day in Davis, California. May 28th, 2014.
- **LaHue, G.T.** "Identification of possible virulence factors in the broad-spectrum pathogen *Serratia marcescens*". Presented at the Cornell Hughes Scholars Research Symposium in Ithaca, NY. August 7th, 2009.

AWARDS, FELLOWSHIPS, AND GRANTS (Total Awarded = \$165,072)

- Plant Sciences Departmental Assistantship Award, (\$24,732 per year), 2014 – Present
- William G. and Kathleen Golden International Agricultural Fellowship (\$18,000), 2016 – 2017, 2017 – 2018
- Bert and Nell Krantz Fellowship (\$2000), 2017 – 2018
- D. Marlin Brandon Rice Research Fellowship (\$5000), 2016
- Milton D. and Mary M. Miller Plant Science Award (\$5000), 2015 – 2016
- Henry A. Jastro Graduate Research Award (\$7745), 2015, 2016
- Research and Innovation Fellows for Agriculture (\$8000), 2015 – 2016
- Grantee, Blum Center for Developing Economies (\$1850), 2015 – 2016

ACADEMIC HONORS

- Third Place, Soils and Biogeochemistry Graduate Group “Grad Slam”, 2018
- Golden Key International Honor Society, 2006 – Present
- National Society of Collegiate Scholars, 2006 – Present
- Honorable Mention, National Science Foundation Graduate Research Fellowship Program, 2014 – 2015
- College of Agriculture and Life Sciences Honor Society, Cornell University, 2006 – 2010
- Dean's List, Cornell University, 2006 – 2010
- New York State Seed Association and American Seed Trade Association Award, 2010
- Ring Memorial Award, 2010

TEACHING PROFESSIONAL DEVELOPMENT

- Office of Graduate Studies, “Diversity 102 in Graduate Education for the STEM Disciplines” (April 16th, 2018)
- AB540 and Undocumented Student Center, “Undocu-Ally Program for Educators” (January 24th, 2018)
- Center for Educational Effectiveness, Graduate Teaching Community, Quarterly Certificates
 - Each certificate requires attending 6-7 meetings per quarter, facilitating one discussion on a topic within the quarterly theme, and writing an educational blog post for a general audience
 - Quarterly Certificate Themes: “Evidence-based Strategies for Teaching and Learning” (Winter 2018), “Equitable Access to Education – Supporting Students from Diverse Backgrounds” (Fall 2017), “Teaching Beyond Graduate School” (Spring 2017), “Accessing Resources to Support Learning and Teaching” (Winter 2017), “Structuring Your Classroom” (Spring 2016)
- Teaching Assistant Consultant Workshop, Center for Educational Effectiveness, “Confronting Implicit Bias: Managing Microaggressions in the Classroom” (May 11th, 2017)
- Teaching Assistant Consultant Workshop Series, Center for Educational Effectiveness, “Thoughtful Pedagogy for Diverse Learning Environments” (Winter 2017)

LEADERSHIP AND ACADEMIC SERVICE

- Co-facilitator, Graduate Teaching Community, University of California, Davis (2017 – 2018)
- Mentor, Student and Landowner Education and Watershed Stewardship (SLEWS) Program (2016 – 2018)
- Reviewer (Agricultural Water Management, Agronomy for Sustainable Development, Agricultural and Forest Meteorology, Journal of Environmental Quality, Archives of Agronomy and Soil Science)
- International Programs Committee, College of Agriculture and Environmental Sciences (2016 – 2017)
- Graduate Student Treasurer, Soils and Biogeochemistry Graduate Group (2016 – 2018)

FOREIGN LANGUAGES

- Spanish (Advanced High LPI Rating)
- Guaraní (indigenous Paraguayan language; Superior LPI Rating)