CURRICULUM VITAE

LORENA ISABEL RANGEL

CONTACT:
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EDUCATION

2012 – 2018	Ph.D. Plant Pathology – University of California, Davis, CA Advisor: Dr. Johan Leveau Ph.D. candidacy attained June 8, 2015	(GPA: 3.87)
2010 – 2012	M.S. Plant Pathology – Oregon State University, Corvallis, OR Advisor: Dr. Joyce Loper	(GPA: 3.93)
2007 – 2010	B.S. Microbiology minor in chemistry *magna cum laude* – Texas State University San Marcos, TX	(GPA: 3.69)
2006 – 2007	Austin Community College, Austin, TX	(GPA: 4.0)
2005 – 2006	Minnesota State University Moorhead, MN	(GPA: 4.0)
2004 – 2005	Concordia College, Moorhead, MN	(GPA: 4.0)
2005	Moorhead Senior High School, Moorhead, MN	

ACADEMIC/PROFESSIONAL APPOINTMENTS

2012 – 2016	Graduate Research Assistant Leveau Lab, University of California Davis
2011	Teaching Assistant Bot350/550 Plant Pathology, Oregon State University
2010 – 2012	Graduate Research Assistant Loper Lab, Oregon State University/USDA
2010	Member, Microbiology Society of Texas State University
2010	Teaching Assistant Bio4441 Cell Physiology, Texas State University
2009 – 2010	Teaching Assistant Ag3306 Floral Design, Texas State University
2009 – 2010	Supplemental Instruction Bio1431 Organismal Biology, Texas State University
2009 – 2010	Undergraduate Research Assistant Gabor Lab, Texas State University
2009 – 2010	Member, Golden Key International Honors Society
2009	Teaching Assistant Ag3304 Herbaceous Plants, Texas State University
2008	Teaching Assistant Ag3308 Organic Gardening, Texas State University

CAMPUS/COMMUNITY ACTIVITIES AND OUTREACH

2013 – 2014	Volunteer for Plant Pathology department Picnic Day booth displaying plant pathogens under microscopes and answering questions about pathogens in garden settings
2012	Interviewed July 24 on KVBR 88.7FM Inspiration Dissemination discussing the use of soil bacteria as a biocontrol for agricultural insect pests, Corvallis, OR
2012	Recruitment officer for Producing for the Future at College Hill High School, Corvallis, OR and Boys and Girls Club, Corvallis, OR
2011	Volunteer for Discovery Days, a bi-annual science outreach program allowing kids to explore interactive exhibits and hands-on activities organized by Oregon State University
2011 – 2012	Participant of Producing for the Future: a community garden collaboration between low-income youth, congregations, and researchers under Dr. Leslie Richards of Oregon State University

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2010	Conducted initial draft of Texas State University application for Tree Campus USA (Arbor Day Foundation) in conjunction with Dr. Tina Cade, Department of Agriculture – Officially approved Nov 30, 2011
2009 – 2010	Grew exotic peppers on a large scale for a grant given to Dr. Tina Cade, Department of Agriculture, Texas State University
2009 – 2010	San Marcos Nature Center volunteer – teaching floral designs around holiday events
2009	Texas State University San Marcos Department of Agriculture Career Development Event Invitational volunteer
2007	ALS Walk to D'Feet ALS volunteer, Austin, TX
2004 – 2006	Food service volunteer Carriage House Senior Apartments through Key Club (Kiwanis), Moorhead, MN

PROFESSIONAL EXPERIENCE

Coordinator, Plant Pathology Seminar series — Fall 2015

Planned and organized graduate seminar series. Invited ten researchers from around the world to speak about their research regarding plant pathology or microbial ecology. Create itineraries for each speaker to interact with graduate students, including individual meetings for those interested and a graduate student lunch.

Student, Microbial Diversity, Marine Biological Laboratory, Woods Hole, MA — Summer 2013

Led by Dr. Daniel Buckley and Dr. Stephen Zinder of Cornell University
Course emphasis was on the isolation and cultivation of organisms that are distinguished by their physiological, biochemical, and morphological properties
Researched anoxygenic phototrophs ability to produce indole-like compounds

Graduate Research Assistant, UC Davis — 2012 – 2016

Advised by Dr. Johan Leveau, professor of plant pathology
Studying how bacterial IAA production may affect the ability of harmful human bacteria to persist, internalize and survive on leafy greens

Graduate Research Assistant, Oregon State University/USDA-ARS — 2010 – 2012

Advised by Dr. Joyce Loper, research plant pathologist and courtesy professor
Established insect toxicity by 3 *Pseudomonas fluorescens* strains and investigated various mechanisms for their lethality

Undergraduate Student Worker, Texas State University — 2008 – 2010

Supervised by Dr. Tina Cade, professor of horticulture
Care and maintenance of outside gardens and greenhouse
Designed floral arrangements and deliver Bobcat Bloom specials
Supervise students performing community service for the horticulture department
Explored the growth potential of exotic hot peppers under a grant received by Dr. Cade

Undergraduate Research Assistant, Texas State University — summer 2009

Advised by Dr. Caitlin Gabor, professor of biology

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Studied male sexual permissiveness in the unisexual-bisexual mating complex of the Amazon molly fish, *Poecilia formosa*
Performed routine fish care and fish tank maintenance

SCHOLARSHIPS AND HONORS

2014 Henry A. Jastro Research Award for graduate students in the College of Agricultural and Environmental Sciences at University of California-Davis to carry out proposal written research.
2013 Microbial Diversity course at Marine Biological Laboratories scholarships provided by American Society for Cell Biology, William Townsend Porter Scholarship and Microbial Diversity DOE grant
2013 Ford Foundation Fellowships Honorable Mention
2012 NSF Graduate Research Fellowship Program Honorable Mention
2010 Diversity Advancement Pipeline Fellowship from Oregon State University Graduate School
2010 Turner Award travel grant for undergraduates from the Animal Behavior Society Diversity Committee
2010 Francis Rose Scholarship for research opportunities for undergraduates
2009 Department of Agriculture at Texas State University Green Gala award for outstanding work ethic
2006 Moorhead Senior High School Continuing Education scholarship
2005 Moorhead Noon Kiwanis Club Designated Scholarship recipient
2005 Hispanic Scholarship Fund scholarship recipient

PRESENTATIONS

Rangel, L.I., Coaker, G.L., Suslow, T.V. & J.H.J. Leveau. Plant microbiota-driven facilitation of the persistence, growth and internalization of human pathogens on leafy greens. Poster session presented at: American Phytopathological Society Conference; 2015 Aug 1-5; Pasadena Convention and Visitors Bureau, Pasadena, CA.

Rangel, L.I., Coaker, G.L., Suslow, T.V. & J.H.J. Leveau. Plant microbiota-driven facilitation of the persistence, growth and internalization of human pathogens on leafy greens. Poster session presented at: USDA NIFA, Institute of Food Safety and Nutrition Division of Food Safety Joint Project Directors Meeting; 2015 Jul 24; Oregon Convention Center, Portland, OR.

Rangel, L.I. Genomics-enabled exploration of insect toxicity in the *Pseudomonas fluorescens* group. Oral presentation at: Department of Botany and Plant Pathology Thesis Defense Seminar; 2012 Jul 31; Oregon State University, Corvallis, OR.

Alberici da Barbiano, L., Rangel, L., Aspbury, A.S. & C.R Gabor. Permissiveness of males in a unisexual-bisexual mating complex. Poster session presented by A.S. Aspbury at: 49th Annual Meeting of the Animal Behavior Society; 2012 Jun 10-14; University of New Mexico, Albuquerque, New Mexico.

Rangel, L.I. Genomics-enabled discovery of insect toxins in the *Pseudomonas fluorescens* species complex. Oral presentation at: 4th Annual Oregon State University Student Research in

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Entomology Symposium; 2012 Mar 10; Oregon State University, Corvallis, OR.

Rangel, L.I. Genomics-enabled discovery of insect toxins in the *Pseudomonas fluorescens* species complex. Oral presentation at: Department of Botany and Plant Pathology Fall 2011 Seminar Series; 2011 Nov 10; Oregon State University, Corvallis, OR.

Rangel, L.I. & C.R. Gabor. Permissiveness of males in a unisexual-bisexual mating complex. Poster session presented at: 47th Annual Meeting of the Animal Behavior Society; 2010 Jul 25-29; College of William & Mary, Williamsburg, VA.

Rangel, L.I. & C.R. Gabor. Permissiveness of males in a unisexual-bisexual mating complex. Poster session presented at: 1st Annual Women in Science and Engineering (WISE) Conference; 2010 Apr 4; Texas State University, San Marcos, TX.

Rangel, L.I. & C.R. Gabor. Permissiveness of males in a unisexual-bisexual mating complex. Poster session presented at: 15th Annual Texas State Annual Biology Student Colloquium; 2010 Apr 2; Texas State University, San Marcos, TX.

PUBLICATIONS

Rangel, L.I., Henkels, M.D., Shaffer, B.T., Walker, F.L., Davis II, E.W., Stockwell, V.O., Bruck, D., Taylor, B.J. and J.E. Loper. 2016. Characterization of toxin complex gene clusters and insect toxicity of bacteria representing four subgroups of *Pseudomonas fluorescens*. *PLoS One*, *11*(8), p.e0161120.

Loper, J.E., Henkels, M.D., Rangel, L.I., Olcott, M.H., Walker, F.L., Bond, K.L., Kidarsa, T.A., Hesse, C.N., Sneh, B., Stockwell, V.O. and B.J. Taylor. 2016. Rhizoxin analogs, orfamide A and chitinase production contribute to the toxicity of *Pseudomonas protegens* strain Pf-5 to *Drosophila melanogaster*. *Environmental Microbiology* doi: 10.1111/1462-2920.13369

Henkels, M.D., Kidarsa, T.A., Shaffer, B.T, Goebel, N.C., Burlinson, P., Mavrodi, D.V., Bentley, M.A., Rangel, L.I., Davis, E.W., Thomashow, L.S., Zabriskie, T.M., Preston, G.M. and J.E. Loper. 2014. *Pseudomonas protegens* Pf-5 causes discoloration and pitting of mushroom caps due to the production of antifungal metabolites. *Molecular Plant-Microbe Interactions* 27: 733-746.

Rangel, L.I. 2012. Genomics-enabled exploration of insect toxicity in the *Pseudomonas fluorescens* group. Masters Thesis, Oregon State University, Corvallis, 81p.

Loper, J.E., Hassan, K.A., Mavrodi, D.V., Davis, E.W., Lim, C.K., Shaffer, B.T., Elbourne, L.D.H., Hartney, S., Stockwell, V., Breakwell, K., Henkels, M.D., Tetu, S.G., Rangel, L.I., Wilson, N.L., vanMortel, J., Song, C., Blumhagen, R., Radune, D., Hostetler, J., Brinkac, L., Durkin, S., Kluepfel, D., Wechter, P., Anderson, A., Kim, Y.C., Pierson, L.S., Pierson, E.A., Lindow, S.E., Raaijmakers, J.M., Weller, D., Thomashow, L., Allen, A. and I.T. Paulsen. 2012. Comparative genomics of plant-associated *Pseudomonas* spp.: insights into diversity and inheritance of traits involved in multitrophic interactions. *PLoS Genetics* 8: e1002784.

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Alberici da Barbiano, L., Rangel, L., Aspbury, A.S. & C.R. Gabor. 2012. Male permissiveness in a unisexual-bisexual mating complex promotes maintenance of a vertebrate unisexual sperm-dependent species. *Behaviour* 149: 869–879.