

# Dr. Engil Isadora Pujol Pereira

The University of Texas Rio Grande Valley  
School of Earth, Environmental, and Marine Sciences  
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## EDUCATION

PhD, University of California, Davis, 2014  
Major: Horticulture and Agronomy  
Dissertation Title: Can Biochar Mitigate Nitrogen Losses in Organic farming Systems?

MS, University of California, Davis, 2010  
Major: Horticulture and Agronomy  
Dissertation Title: Soil Nitrogen Transformations Under Elevated CO<sub>2</sub> and O<sub>3</sub> Concentrations During the Growing Season of Soybean

BS, Federal University of Santa Maria, 2007  
Major: Agronomic Engineering

## EMPLOYMENT

Assistant Professor , The University of Texas Rio Grande Valley ( 2018)

Post-doctoral researcher, Swiss Federal Institute of Technology - ETH Zürich (2014 - 2017)

Teaching Assistant, University of California, Davis (2012 - 2012)

## PUBLICATIONS

### Book Chapters

Engil Pereira and Marcelo Teixeira Filho. "Detection and quantification of nitrifying bacteria using real-time PCR." *Plant Nitrogen Metabolism: Methods and Protocols. Methods in Molecular Biology series (Springer protocols)*. Gupta K. (Ed.) Springer , 2020: vol. 2057, 145-153.

### Journal Articles

Nora Gallarotti, Matti Barthel, Elizabeth Verhoeven, Engil Pereira, Marijn Bauters, Simon Baumgartner, Travis Drake, Pascal Boeckx, Joachim Mohn, Manon Longepierre, In-depth analysis of N<sub>2</sub>O fluxes in tropical forest soils of the Congo Basin combining isotope and functional gene analysis. *The ISME Journal*. (2021): 1--18.

Rafaela Conz, Johan Six, Maria Andrade, and Engil Pereira. Soil fertility maintenance with organic amendments to orange fleshed sweetpotato. *Nutrient Cycling in Agroecosystems*. 119, no. 2 (March 2021): 213-229. <http://dx.doi.org/10.1007/s10705-020-10111-8>

Josabeth Navarro, Jahdiel Salazar, Jihoon Kang, Jason Parsons, Chu-Lin Cheng, Alexandria Castillo, and Engil Pereira. Compost and Biochar to Promote Soil Biological Activities under Sweet Potatoes Cultivation in a Subtropical Semiarid Region. *APPLIED AND ENVIRONMENTAL SOIL SCIENCE*. 2020, (2020)

Josabeth Navarro, Jahd Salazar, Alexandrina Castillo, Jihoon Kang, Jason Parsons , Chu-Lin Cheng, and Engil Pereira. Compost and biochar to promote soil biological activities under sweet potatoes cultivation in a subtropical semi-arid region. . *Applied and Environmental Soil Science* . 2020,

(November 2020): 11.

Engil Pujol Pereira, Jérôme Lechot, Rafaela Feola Conz, Abmael da Silva Cardoso, and Johan Six. Biochar Enhances Nitrous Oxide Reduction in Acidic but Not in Near-Neutral pH Soil. *Soil Systems*. 3, no. 4 (2019): 69.

Viviana Loaiza-Puerta, Raphaël Wittwer, Marcel Van Der Heijden, Johan Six, and Engil Pereira. Comparable bacterial-mediated nitrogen supply and losses under organic reduced tillage and conventional intensive tillage. *European Journal of Soil Biology*. 95, (2019): 103121. <https://doi.org/10.1016/j.ejsobi.2019.103121>

Steffen Seitz, Philipp Goebes, Viviana Loaiza-Puerta, Engil Pereira, Raphaël Wittwer, Johan Six, Marcel Van Der Heijden, and Thomas Scholten. Conservation tillage and organic farming reduce soil erosion. *Agronomy for Sustainable Development*. 39, no. 1 (2019): 4. <https://doi.org/10.1007/s13593-018-0545-z>

Eliah Munda, Petrus Pieterse, Maria Andrade, Godwill Makunde, and Engil Pereira. Improving productivity of orange-fleshed sweetpotato (*Ipomoea batatas*) through intercropping with legumes and moderate phosphorus application. *South African Journal of Plant and Soil*. 36, (2019): 221-228. <https://doi.org/10.1080/02571862.2018.1548659>

Viviana Loaiza-Puerta, Engil Pereira, Ping Huang, Raphaël Wittwer, and Johan Six. Soil microhabitats mediate microbial response in organic reduced tillage cropping. *Applied Soil Ecology*. 137, (2019): 39-48. <http://www.sciencedirect.com/science/article/pii/S0929139318306346>

Viviana Loaiza-Puerta, Engil Pereira, Raphaël Wittwer, Marcel van der Heijden, and Johan Six. Improvement of soil structure through organic crop management, conservation tillage and grass-clover ley. *Soil and Tillage Research*. 180, (2018): 1-9. <https://www.sciencedirect.com/science/article/pii/S0167198718300850>

Ping Huang, Jiabao Zhang, Anning Zhu, Xiaopeng Li, Donghao Ma, Xiuli Xin, Congzhi Zhang, Shengjun Wu, Gina Garland, and Engil Pereira. Nitrate accumulation and leaching potential reduced by coupled water and nitrogen management in the Huang-Huai-Hai Plain. *Science of The Total Environment*. 610, (2018): 1020-1028. <https://www.sciencedirect.com/science/article/pii/S0048969717321253>

Elizabeth Verhoeven, Engil Pereira, Charlotte Decock, Gina Garland, Taryn Kennedy, Emma Suddick, William Horwath, and Johan Six. N<sub>2</sub>O emissions from California farmlands: A review. *California Agriculture*. 71, no. 3 (2017): 148-159. [calag.ucanr.edu/Archive/?article=ca.2017a0026](http://calag.ucanr.edu/Archive/?article=ca.2017a0026)

Engil Pereira, Rafaela Conz, and Johan Six. Nitrogen utilization and environmental losses in organic greenhouse lettuce amended with two distinct biochars. *Science of the Total Environment*. 598, (2017): 1169-1176. [www.sciencedirect.com/science/article/pii/S0048969717308975](http://www.sciencedirect.com/science/article/pii/S0048969717308975)

Ping Huang, Jiabao Zhang, Donghao Ma, Zhaofei Wen, Shengjun Wu, Gina Garland, Engil Pereira, Anning Zhu, Xiuli Xin, and Congzhi Zhang. Response to discussion of “Atmospheric deposition as an important nitrogen load to a typical agro-ecosystem in the Huang-Huai-Hai Plain” by Huang et al.(2016). *Atmospheric Environment*. 153, (2017): 236-239. <https://www.sciencedirect.com/science/article/pii/S1352231017300171>

Elizabeth Verhoeven, Engil Pereira, Charlotte Decock, Emma Suddick, Teri Angst, and Johan Six. Toward a Better Assessment of Biochar–Nitrous Oxide Mitigation Potential at the Field Scale. *Journal of Environmental Quality*. 46, no. 2 (2017): 237-246. <https://dl.sciencesocieties.org/publications/jeq/pdfs/46/2/237>

Ping Huang, Jiabao Zhang, Donghao Ma, Zhaofei Wen, Shengjun Wu, Gina Garland, Engil Pereira, Anning Zhu, Xiuli Xin, and Congzhi Zhang. Atmospheric deposition as an important nitrogen load to a typical agro-ecosystem in the Huang-Huai-Hai Plain. 2. Seasonal and inter-annual variations and their implications (2008–2012). *Atmospheric Environment*. 129, (2016): 1-8. <https://www.sciencedirect.com/science/article/pii/S1352231016300231>

Engil Pereira, Emma Suddick, and Johan Six. Carbon abatement and emissions associated with the gasification of walnut shells for bioenergy and biochar production. *PloS one*. 11, no. 3 (2016): e0150837. <http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0150837>

Engil Pereira, Emma Suddick, Fungai Mukome, Sanjai Parikh, Kate Scow, and Johan Six. Biochar alters nitrogen transformations but has minimal effects on nitrous oxide emissions in an organically

managed lettuce mesocosm. *Biology and fertility of soils*. 51, no. 5 (2015): 573-582.  
<https://link.springer.com/article/10.1007/s00374-015-1004-5>

L. Silva, T.A. Doane, R.S. Corrêa, V. Valverde, E.I.P. Pereira, and W.R. Horwath. Iron-mediated stabilization of soil carbon amplifies the benefits of ecological restoration in degraded lands. *Ecological Applications*. 25, no. 5 (2015): 1226-1234.  
<https://esajournals.onlinelibrary.wiley.com/doi/full/10.1890/14-2151.1>

C Decock, J Lee, M Necpalova, EIP Pereira, DM Tendall, and J Six. Mitigating N<sub>2</sub>O emissions from soil: from patching leaks to transformative action. *Soil*. 1, no. 2 (2015): 687-694.  
<https://www.soil-journal.net/1/687/2015/soil-1-687-2015.pdf>

Engil Pujol Pereira, Haegeun Chung, Kate Scow, and Johan Six. Microbial communities and soil structure are affected by reduced precipitation, but not by elevated carbon dioxide. *Soil Science Society of America Journal*. 77, no. 2 (2013): 482-488.  
<https://dl.sciencesocieties.org/publications/sssai/abstracts/77/2/482>

Lucas Silva, R. Corrêa, T.A. Doane, E.I.P. Pereira, and W.R. Horwath. Unprecedented carbon accumulation in mined soils: the synergistic effect of resource input and plant species invasion. *Ecological Applications*. 23, no. 6 (2013): 1345-1356.  
<https://esajournals.onlinelibrary.wiley.com/doi/abs/10.1890/12-1957.1>

César Plaza, José Fernández, Engil Pereira, and Alfredo Polo. A comprehensive method for fractionating soil organic matter not protected and protected from decomposition by physical and chemical mechanisms. *CLEAN–Soil, Air, Water*. 40, no. 2 (2012): 134-139.  
<https://onlinelibrary.wiley.com/doi/abs/10.1002/clen.201100338>

Sergio de Freitas, Engil Pereira, Ana Gomez, Auri Brackmann, Fernando Nicoloso, and Dilson Bisognin. Processing quality of potato tubers produced during autumn and spring and stored at different temperatures. *Horticultura Brasileira*. 30, no. 1 (2012): 91-98.  
[http://www.scielo.br/scielo.php?script=sci\\_arttext&pid=S0102-05362012000100016](http://www.scielo.br/scielo.php?script=sci_arttext&pid=S0102-05362012000100016)

Engil Pereira, Haegeun Chung, Kate Scow, Michael Sadowsky, Chris van Kessel, and Johan Six. Soil nitrogen transformations under elevated atmospheric CO<sub>2</sub> and O<sub>3</sub> during the soybean growing season. *Environmental pollution*. 159, no. 2 (2011): 401-407.  
<https://www.sciencedirect.com/science/article/pii/S0269749110005026>

Engil Pereira, Tatiana Emanuelli, Dilson Bisognin, and Sérgio Freitas. Optimization and validation of an enzymatic method to quantify glucose in potato tubers. *Ciência Rural*. 38, no. 5 (2008): 1227-1232.  
[http://www.scielo.br/scielo.php?script=sci\\_arttext&pid=S0103-84782008000500004&lng=en&nrm=iso](http://www.scielo.br/scielo.php?script=sci_arttext&pid=S0103-84782008000500004&lng=en&nrm=iso)

Dilson Bisognin, Sergio Freitas, Auri Brackmann, Jerônimo Andriolo, Engil Pereira, Douglas Muller, and Maurício Bandinelli. Physiological aging of potato tubers produced during fall and spring growing seasons and stored under different temperatures. *Bragantia*. 67, no. 1 (2008): 59-65.  
[http://www.scielo.br/scielo.php?script=sci\\_arttext&pid=S0006-87052008000100007&lng=en&nrm=iso](http://www.scielo.br/scielo.php?script=sci_arttext&pid=S0006-87052008000100007&lng=en&nrm=iso)

## AWARDS AND HONORS

Visiting Faculty Award at Sao Paulo State University/Brazil, UNESP System (June 2018)

Visiting Faculty Award at Sao Paulo State University/Brazil, UNESP System (August 2016)

## PRESENTATIONS

Engil Pereira, Lilly Elliott, and Chu-Lin Cheng. "Soil aggregation and carbon distribution across a clay gradient," ASA, CSSA and SSSA International Annual Meetings , ASA, CSSA and SSSA, (November 2020)

Thais Soto Boni, Karla Sena, Katia Maltoni, and Engil Pereira. "Soil Microbial Activity and Chemical Attributes during Restoration of a Tropical Savanna Ecoregion By Organic Amendments," ASA, CSSA and SSSA International Annual Meetings , ASA, CSSA and SSSA, (November 2020)

Isaiah Jaramillo, Jon Dale, and Engil Pereira. "Developing Sustainable Sweet Potato for South Texas: An Opportunity to Diversify Agricultural Production and Promote Soil Health. ," 74th ANNUAL MEETING of the Subtropical Agriculture and Environments Society., Subtropical Agriculture and Environments Society, (February 2020)

Isaiah Jaramillo, Jon Dale, and Engil Pereira. "Developing Sustainable Sweet Potato for South Texas: An Opportunity to Diversify Agricultural Production and Promote Soil Health," ASA, CSSA and SSSA International Annual Meetings , ASA-CSSA-SSSA, (2019)

Yvette Garcia, Jorge Da Silva, and Engil Pereira. "Improving Crop Energy Balance through Associations with N<sub>2</sub>-Fixing and N<sub>2</sub> o-Reducing Bacteria," ASA, CSSA and SSSA International Annual Meetings, ASA, CSSA and SSSA , (2019)

Engil Pereira, Jihoon Kang, and Chu-Lin Cheng. "Progress on Increasing Hispanic Workforce in Soil Science through Training, Research, and Education: A New Integrated Program at South Texas/Rio Grande Valley," ASA, CSSA and SSSA International Annual Meetings , ASA, CSSA and SSSA, San Antonio. (2019)

Denise Tijerina and Engil Pereira. "Tracing Spatial Soil Heterogeneity to Elucidate Microbiome Composition," ASA, CSSA and SSSA International Annual Meetings , ASA, CSSA and SSSA, (2019)

Aaron Garza, Michael Gonzalez, Adam Flores, Engil Pereira, and Jihoon Kang. "Effects of Inoculated Biochar on the growth of Cucumber." 2019 ASA-CSSA-SSSA International Annual Meeting, San Antonio, Texas. (November 2019)

Michael Gonzalez, Adam Flores, Aaron Garza, Citlali Zertuche, Engil Pereira, and Jihoon Kang. "Soil biological health affected by compost and tillage in a post-construction land hydroseeded with turfgrass." 2019 ASA-CSSA-SSSA International Annual Meeting, San Antonio, Texas. (November 2019)

Andrew Corder, Christopher Gabler, Jude Benavides, and Engil Pereira. "Viability of wetland crops for use in treatment wetlands: nitrogen removal from water and production of food," UTRGV Graduate Student Research Showcase, UTRGV Graduate College, Edinburg, TX. (November 7, 2019)

Lilly Elliott and Engil Pereira. "Use of Spatial Interpolation In Predicting Nutrient Availability In Agricultural Fields. ," Geographic Information Systems (GIS) Day, UTRGV, Edinburg. (October 2019)

Engil Pereira. "Soil health in the Rio Grande Valley South Texas." Women in Agriculture Workshop, (June 25, 2019)

Steffen Seitz, Philipp Goebes, Viviana Loaiza Puerta, Engil Pereira, Raphael Wittwer, Johan Six, Marcel Heijden, and Thomas Scholten. "Conservation tillage decreases soil erosion in organic farming," European Geophysical Union General Assembly 2019, European Geophysical Union General , Vienna, Austria. (April 2019)

Andrew Corder, Christopher Gabler, Jude Benavides, and Engil Pereira. "Viability of wetland crops for use in treatment wetlands: nitrogen removal from water and production of food," UTRGV Graduate Student Research Showcase, UTRGV Graduate College, Edinburg, TX. (April 29, 2019)

Lilly Elliot, Bradley Christoffersen, and Engil Pereira. "Following the chronosequence of C sequestration in sites converting from agricultural use to reforested land." COS Annual Research Conference, (March 28, 2019)

Engil Pereira. "Soil Heterogeneity Shapes Microenvironments and Microbial Habitats." COS Annual Research Conference, (March 28, 2019)

Lilly Elliot, Bradley Christoffersen, and Engil Pereira. "Following the chronosequence of C sequestration in sites converting from agricultural use to reforested land," 14th Annual Conference of the American Association of Hispanics in Higher Education , AAHHE, Costa Mesa-CA. (February 2019)

Engil Pereira. "Soil biological activity and nutrient release in organic sweet potato farming," 73rd ANNUAL MEETING of the Subtropical Agriculture and Environments Society, Subtropical Agriculture and Environments Society, (February 8, 2019)

Rafaela Feola Conz, Engil Pereira, and Johan Six. "Can Organic Management Support Food Productivity While Preventing Soil Nutrient Depletion in Rural Mozambique?," SSSA International Soils Meeting, Soil Science Society of America, San Diego, CA. (January 7, 2019)

Engil Pereira, Jihoon Kang, Chu-Lin Cheng, Mirayda Torres-Avila, Bradley Christoffersen, Christopher Gabler, Kristine Lowe, and Alexis Racelis. "Increasing Hispanic Workforce in Soil Science through Training, Research, and Education: A New Integrated Program for the Rio Grande Valley in

South Texas," SSSA International Soils Meeting, Soil Science Society of America, San Diego, California. (January 7, 2019)

Jahdiel Salazar, Josabeth Navarro, Jihoon Kang, and Engil Pereira. "Sweet potato: a potentially profitable summer crop for South Texas organic farmers to enhance soil biological activity and nutrient release.," SSSA International Soils Meeting, Soil Science Society of America, San Diego, CA. (January 7, 2019)

Josabeth Navarro, Jahdiel Salazar, Jihoon Kang, and Engil Pereira. "Sweet Summer Spud: South Texas soil fertility management strategies with organic amendments to increase nutrient availability and reduce nutrient depletion ,," SSSA International Soils Meeting, Soil Science Society of America, San Diego, CA. (January 7, 2019)

Chu-Lin Cheng, Juan Gonzalez, Jihoon Kang, Carlos Cintra-Buenrostro, Jude Benavides, Elizabeth Heise, James Hinthorne, and Engil Pereira. "Increasing Workforce Diversity through "Stimulating Hispanic Participation in the Geosciences" (SHIP-GEO) Program at Rio Grande Valley/South Texas," The Geological Society of America Annual Meeting, Geological Society of America (GSA), Indianapolis, IN. (November 5, 2018)

Rafaela Feola Conz, Engil Pereira, Andrade Maria Isabel, and Six Johan. "Towards Nutritional Security through Agroecological Practices in Orange-fleshed Sweetpotato Systems in Mozambique." Annual interdisciplinary conference on research in tropical and subtropical agriculture, natural resource management and rural development (TROPENTAG), Ghent, Belgium. (September 17, 2018)

Elijah Munda, Andrade Maria Isabel, Makunde Goodwill, Pieterse PJ, Six Johan, and Engil Pereira. "Improving Sweetpotato Production through Sweetpotato--Legume Intercropping and Use of Phosphorus Fertilisers in Mozambique." Tropical and subtropical agriculture, natural resource management and rural development (TROPENTAG), Ghent, Belgium. (September 17, 2018)

Amado Zambrano, Paola Granados, Aaron Garza, Sergio Mireles, Jongmin Kim, Engil Pereira, and Jihoon Kang. "Aqueous lead removal using biochar pyrolyzed with locally-sourced biomass," 20th LRGV Annual Water Quality Management & Planning Conference, LRGV Stormwater Taskforce/UTRGV, South Padre Island. (May 16, 2018)

Rafaela Conz, Engil Pereira, Andrade Maria Isabel, and Six Johan. "Organic management of soil fertility for sustainable sweetpotato production," European Geophysical Union General Assembly 2018, European Geophysical Union General , Vienna, Austria. (April 2018)

Lilly Elliot, Jihoon Kang, and Engil Pereira. "Development of a field trial to promote improvements in soil conditions for crop production," UTRGV College of Sciences Annual Research Conference, UTRGV College of Sciences, Edinburg. (April 2018)

Amado Zambrano, Paola Granados, Aaron Garza, Sergio Mireles, Jongmin Kim, Engil Pereira, and Jihoon Kang. "Evaluation of locally-sourced biomass for biochar as filter media," 4th Annual Food Security Forum, UTRGV Earth Fest 2018, Edinburg. (April 19, 2018)

Paola Granados, Aaron Garza, Amado Zambrano, Sergio Mireles, Jongmin Kim, Engil Pereira, and Jihoon Kang. "Evaluation of locally-sourced biomass for biochar as filter media," UTRGV College of Sciences Annual Research Conference, UTRGV College of Sciences, Edinburg. (April 13, 2018)

## **TEACHING**

### **Courses Taught**

Envr Sci Internship  
Envr Sci Res Proj  
Fundamentals of Soil Science  
Graduate Internship  
Graduate Research  
Intro to Envr Sci I  
Intro to Envr Sci II

Lab Exp Teaching Geology  
Res Meth & Data An in Envr Sci  
Soil Ecology  
Soil Science Conservation  
Soil Science and Conservation  
Supervised Teaching  
Thesis I  
Thesis II  
UG Research Geoscience

### **Non-Credit Instruction**

- Guest Lecture, Soil Physics and Hydrology (ENVR 4323), 31. (October 8, 2019)
- Workshop, Soil Science workshop to PSJASD faculty (K-12), 8. (August 8, 2019)
- Guest Lecture, Advanced Ecology (BIOL 6303), 31. (October 5, 2018)

### **Directed Student Learning**

Undergraduate Supervised Research. Deisy Garcia, , School of Earth, Environmental, and Marine Sciences. (September 2021)

Undergraduate Supervised Research. Angel Salinas, , School of Earth, Environmental, and Marine Sciences. (April 2021)

Master's Thesis Committee Chair. Rocio Hernandez, , School of Earth, Environmental, and Marine Sciences. (March 2021)

Master's Thesis Committee Chair. Rocío Hernandez, , School of Earth, Environmental, and Marine Sciences. (March 2021)

Master's Thesis Committee Chair. Armida Rivera, , School of Earth, Environmental, and Marine Sciences. (September 2020)

Master's Thesis Committee Chair. Gladys de la Rosa, , School of Earth, Environmental, and Marine Sciences. (September 2020)

Master's Thesis Committee Chair. Isaiah Jaramillo, , School of Earth, Environmental, and Marine Sciences. (September 2020)

Master's Thesis Committee Member. Aaron Garza, , School of Earth, Environmental, and Marine Sciences. (September 2020)

Master's Thesis Committee Member. Lilly Elliott, , School of Earth, Environmental, and Marine Sciences. (September 2020)

Master's Thesis Committee Chair. Jon Dale, , School of Earth, Environmental, and Marine Sciences. (September 2018)

Undergraduate Supervised Research. Samanta Colunga, "Carbon sequestration in sandy soils of semi-arid ecosystems" , School of Earth, Environmental, and Marine Sciences. (April 2020 - December 2021)

Undergraduate Supervised Research. Ahyde Martinez, , School of Earth, Environmental, and Marine Sciences. (April 2021 - August 2021)

Undergraduate Supervised Research. Angie Rocha, , School of Earth, Environmental, and Marine Sciences. (April 2021 - August 2021)

Undergraduate Supervised Research. Diobenhi Castellanos, (April 2021 - August 2021)

Master's Thesis Committee Member. Andrew Corder, "Growing food to purify water: testing the

viability of using crop species in treatment wetlands to purify water" , School of Earth, Environmental, and Marine Sciences. (November 15, 2018 - November 15, 2020)

Undergraduate Supervised Research. Viridiana Lloyd, (August 2018 - August 2020)

Undergraduate Supervised Research. Anthony Castillo, "Nitrate Losses and Environmental Pollution" , School of Earth, Environmental, and Marine Sciences. (January 2020 - May 2020)

Undergraduate Supervised Research. Denise Tijerina, , School of Earth, Environmental, and Marine Sciences. (September 2019 - May 2020)

Undergraduate Supervised Research. Yvette Garcia, "Improving crop energy balance through associations with N<sub>2</sub>-fixing and N<sub>2</sub>O-reducing bacteria" , Department of Biology. (April 2019 - May 2020)

Undergraduate Supervised Research. Lilly Elliott, "Following the chronosequence of C sequestration in sites converting from agricultural use to reforested land" , School of Earth, Environmental, and Marine Sciences. (August 28, 2018 - December 28, 2019)

Master's Thesis Committee Member. Elizabeth Murphy, "Assessing and quantifying nitrogen transfer through a Black Mangrove (*Avicennia germinans*) community" , School of Earth, Environmental, and Marine Sciences. (March 2018 - November 2019)

Undergraduate Supervised Research. Jahdiel Salazar, "Soil microbial activity and nutrient release under organic management of sweet potatoes." , School of Earth, Environmental, and Marine Sciences. (June 4, 2018 - May 4, 2019)

Undergraduate Supervised Research. Josabeth Navarro, "Soil fertility and nutritional value of sweet potatoes under organic amendments" , School of Earth, Environmental, and Marine Sciences. (June 4, 2018 - May 4, 2019)

Undergraduate Supervised Research. Jose Gonzalez, "Isolation and Identification of Plant Growth-Promoting Rhizobacteria (PGPR) " , School of Earth, Environmental, and Marine Sciences. (August 28, 2018 - December 17, 2018)

## **SERVICE**

### **Department Service**

Committee Member, Agriculture, Environmental, and Sustainability Sciences Program Committee. ( 2020)

Committee Member, Environmental Sciences Program Committee. ( 2018)

Committee Member, Sustainable Agriculture and Food Science Program Committee. ( 2018)

Other, Highlights from ACE's report on Equity. (May 2021)

Committee Member, Cluster hire in Environmental Science and Policy (SEEMS). (October 2020 - April 2021)

Committee Member, One-Year Lecturer in SEEMS Edinburg. (July 19, 2019)

Committee Member, Three-Year Lecturer in SEEMS Edinburg. (February 2, 2019 - February 18, 2019)

Committee Member, Three-Year Lecturer in SEEMS Brownsville. (June 13, 2018 - July 1, 2018)

Committee Member, Three-Year Lecturer in SEEMS Edinburg. (February 2, 2018 - April 23, 2018)

### **College Service**

Other, Women in Science - Movie Screening & Discussion. (March 2021)

Committee Chair, Women in Science Network. (January 2021)

Other, Annual Convocation of the College of Science - Progress and updates on WISE activities . (August 2021)

Other, 2020 College of Sciences Annual Research Conference. (November 20, 2020)

Other, 2019 College of Sciences Annual Research Conference. (March 28, 2019)

Other, 2018 College of Sciences Annual Research Conference. (April 13, 2018)

### **University Service**

Guest Speaker, Keys to Research Workshop . (May 2021)

Program Organizer, Workshop: Opportunities for students and recent graduates at USDA. (October 2020)

Guest Speaker, 2021 EarthFest. (April 2021)

Guest Speaker, C-STEM - Successful UTRGV Scientists, Celebrating Women's Contributions . (March 2021)

Faculty Mentor, Vaquero Roundup for Environmental Science students. (August 21, 2019 - August 24, 2019)

Grant Proposal Reviewer, Internal, Faculty reviewer for the Engaged Scholarship Award (ESA). (June 14, 2019 - June 27, 2019)

Faculty Mentor, Vaquero Roundup for Environmental Science students. (August 23, 2018 - August 24, 2018)

Grant Proposal Reviewer, Internal, Faculty reviewer for the Engaged Scholarship Award (ESA). (June 1, 2018 - July 30, 2018)

### **Development Activities Attended**

Workshop, "COLTT - Blackboard Intermediate," Center for Online Learning and Teaching Technology. (August 2019)

Workshop, "Independent Applying the QM Rubric (APPQMR) – Quality Matters," Center for Online Learning and Teaching Technology. (July 2019)

Workshop, "Drafting Strong Teaching and Research Narratives for Annual Review ," Center for Teaching Excellence. (August 2018)

Webinar, "Juntos al Exito - Faculty mentoring at the COS, UTRGV and beyond," UTRGV College of Sciences. (May 2021)

Webinar, "Juntos al Exito - Path to R1," UTRGV College of Sciences. (March 2021)

Webinar, "Juntos al Exito - Empowering Excellence – Community Engagement," UTRGV College of Sciences. (February 2021)

Webinar, "Juntos al Exito - Understanding student success: sense of belonging and culture in an HSI university.," UTRGV College of Sciences. (January 2021)

Workshop, "Engage Students in Active Online Learning ," CTE/UTRGV. (2020 - 2020)

Workshop, "Fostering a Positive Faculty-Student Relationship in the Classroom ," CTE/UTRGV . (2020 - 2020)

Workshop, "Online Course Design ," Center for Online Learning and Teaching Technology. (2020 - 2020)

Workshop, "Preparing Your Review Dossier ," Office of Faculty Success & Diversity/UTRGV. (2020 - 2020)

Workshop, "Open Educational Resources (OER) ," Open Education Network.. (October 2020)

Workshop, "Keys to Research," Office of the EVP for Research, Grad Studies, & NDP/UTRGV. (September 2019 - May 2020)

• " 2018 Summer Writing Retreat," UTRGV ADVANCE (NSF). (May 2018 - August 2018)

Workshop, "Strong Teaching and Research Narratives for Annual Review," Center for Teaching



Excellence. (August 30, 2018)

Workshop, "Community Engaged Scholarship and Learning," UTRGV. (January 26, 2018 - April 13, 2018)

Workshop, "Peer Observation of Teaching," Center for Teaching Excellence. (January 25, 2018)

Workshop, "Creating a Learner Centered and Engaged Syllabus," Center for Teaching Excellence . (January 12, 2018)

Workshop, "Getting More Students to Read Assigned Course Materials," Center for Teaching Excellence. (January 12, 2018)

Workshop, "Structuring Your Class to Make Learning STICK," Center for Teaching Excellence. (January 12, 2018)

### **Professional Service**

Grant Proposal Reviewer, External , 2020 USDA- NIFA – Food, Agricultural, Natural Resources, and Human Sciences Grant Programs. (November 2020)

Reviewer, Book , Open Education Network (February 2021)

Reviewer, Journal Article , Journal: Nutrient Cycling in Agroecosystems (November 10, 2020)

Reviewer, Journal Article , Journal: Nature Climate Change (October 16, 2019 - October 17, 2019)

Reviewer, Journal Article , Journal: Soil Systems (October 16, 2019 - October 17, 2019)

Reviewer, Journal Article , Journal: Journal of Environmental Quality (April 22, 2019)

Reviewer, Journal Article , Journal: Ciencia Agronomica (April 16, 2019)

Judge , Soil Science Society of America - Annual Meeting , San Diego , (January 9, 2019)

Session Chair , Soil Science Society of America - Annual Meeting , San Diego , (January 9, 2019)

Reviewer, Journal Article , Journal: Soil Science (September 19, 2018)

Reviewer, Journal Article , Journal: Texas Journal of Science (August 22, 2018)

Reviewer, Journal Article , Journal: Biogeochemistry (May 21, 2018)

Reviewer, Journal Article , Journal: Biology and Fertility of Soils (April 20, 2018)

### **Professional Memberships**

Earth Science Women's Network (ESWN)

Soil Science Society of America (SSSA)

UTRGV Women's Faculty Network (WFN)

Women in Soil Ecology (WISE)

### **Public Service**

- Guest Speaker , San Benito Elementary School , San benito , (March 8, 2019)