CURRICULUM VITAE

KRISHNASWAMY JAYACHANDRAN

Earth and Environment Department
Florida International University

Distinguished University Professor
Soil Microbiology/Soil Science
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EDUCATION:

Ph.D. Kansas State University, Manhattan, KS, Plant Pathology (Soil Microbiology), April 1991.

M.Sc. Tamil Nadu Agricultural University, Coimbatore, India, Agricultural Microbiology, December 1983.

B.Sc. Tamil Nadu Agricultural University, Coimbatore, India, Agriculture Sciences, May 1981.

ACADEMIC EXPERIENCE:

Dept. of Earth and Environment Florida International University, Miami	Distinguished University Professor (Soil Microbiology)	Aug 2022-present
Dept. of Earth and Environment Florida International University, Miami	Professor (Soil Microbiology)	Aug 2010-2022
Dept. of Earth and Environment Florida International University, Miami	PSM-EPM Program Director	Jan 2014-2022
STEM Transformation Institute Florida International University, Miami	Founding Fellow	Jan 2015-present
Dept. of Earth and Environment Florida International University, Miami	Co-Director, Agroecology (Founding Director)	Aug 2005-present
Dept. of Earth and Environment Florida International University, Miami	Graduate Program Director	Aug 2008-2015
Dept. of Earth and Environment Florida International University, Miami	Associate Professor (Soil Microbiology)	Aug 2002-2010
The Honors College	Fellow	Aug 2003-2009

Florida International University, Miami		
The Honors College Florida International University, Miami	Founding Director-SRAI	Aug 2003-2005
Dept. of Environmental Studies Florida International University, Miami	Graduate Program Director (Interim Director)	Aug 2003-Jan 04
Dept. of Environmental Studies Florida International University, Miami	Assistant Professor	May 1996-2002
National Laboratory for Agriculture & Environment, USDA-ARS, Ames, IA	Assistant Scientist	May 1991-1996
Dept. of Plant Pathology Kansas State University, Manhattan, KS	Grad Res Assistant	Aug 1887-1991
International Crops Research Institute for The Semi-Arid Tropics (ICRISAT) Hyderabad, India	Research Associate	Jan 1984–1987
Dept. of Agrl Microbiology Tamil Nadu Agricultural University Coimbatore, India	Grad Res Assistant	Aug 1981–1983

EMPLOYMENT RECORD AT FLORIDA INTERNATIONAL UNIVERSITY:

Distinguished University Professor	Aug 2022 – Present
Professor	Aug 2010 – 2022
Associate Professor	Aug 2002 – 2010
Assistant Professor	May 1996 – 2002

RESEARCH INTERESTS AND EXPERTISE:

- Agroecology and Sustainable Agriculture.
- Organic Agriculture Systems.
- Nutrient cycling and soil quality in wetland and upland systems.
- Wetlands soil characterization.
- Microbial diversity and activity in surface and subsurface soils.
- Physiology, biochemistry, molecular biology, and biological interactions of arbuscular -mycorrhizal (AM) fungi.
- Biological Nitrogen Fixation.
- Biofertilizers, Vermicompost.

- Pesticide degradation, transport, and potential groundwater contamination.
- Isolation and characterization of pesticide degrading microorganisms.
- Biocontrol of invasive plant species.
- Restoration ecology.
- Bioenergy and microbial hydrogen production.
- Marine and freshwater toxins and microbial degradation.
- Pathogens tracking and remediation measures.
- Antibiotic resistance in the environment.
- Bioremediation (plant - microbe based system) of organic contaminants in soil and water.
- Microbiomes – Plant and Soil.
- Industrial Hemp – Variety Screening, Agronomic Practices.

PROFESSIONAL HONORS, PRIZES, FELLOWSHIPS & SIGNIFICANT ACHIEVEMENT:

- Distinguished University Professor 2022
- TNAU Distinguished Alumnus Award 2022
- University Faculty Excellence Engagement Award 2021
- American Society of Agronomy Fellow 2020
- University Faculty Excellence Research & Creative Activities Award 2019
- Sri Chinmoy Oneness Peace Run Award 2018
- Certificate of appreciation from USDA-NIFA Director for promoting grantsmanship for USDA-NIFA programs August 2017
- University Faculty Excellence Service Award 2017
- Dean's Excellence Award for Research 2017
- Top Scholar Award – Significant Grant Funding in the Sciences 2017
- Knowledge Exchange for Undergraduate STEM Education – Invitee by The White House Office of Science and Technology, NSF, DOE, USDA 2016
- FIU-President's Excellence Award for Agroecology Program 2016
- Dean's Excellence Award for Community Engagment 2016
- University Faculty Excellence Advising and Mentoring Award 2015
- Founding Faculty – STEM Transformation Institute (2014-present)
- University's Agroecology Program Excellence Award Finalist 2013
- University Faculty Excellence Teaching Award 2012
- FIU-President's Access and Equity Award 2011
- University's Agroecology Program Excellence Award Finalist 2011
- AAAS – On Call Scientist (2015 – present)
- Chair – Miami-Dades's Agriculture & Natural Resources Council (2016 – present)
- Certificate of Appreciation from Senator Bill Nelson for promoting National Needs Fellows in Sustainable Agriculture and Natural Resource Sciences - 2011
- Certificate of Appreciation from Senator Bill Nelson for promoting multicultural undergraduate scholars' education in agriculture and environmental sciences – 2009, 2016

- Certificate of Appreciation from USDA-NIFA Program Officer for planning and organizing Project Directors Conference – 2009
- Certificate of Appreciation from the Office of American Society of Agronomy, Soil Science Society of America, and Crop Science Society of America for serving as Associate Editor for six years for the Journal of Environmental Quality – 2008.
- Certificate of Appreciation from Executive Publisher, Elsevier for the review and evaluation of more than 75 journal articles for Agriculture, Ecosystems & Environment – 2008.
- Certificate of Appreciation from Director of FIU Upward Bound Program for engaging 50 under-represented minority high school students on experiential learning at the Organic Garden.
- The Honors College Fellow (2003-2009)
- Founding Member and Director, The Honors College Student Research & Artistic Initiatives (2003-2005)
- Founding Member and Co-Director of Agroecology Program at Florida International University (http://agroecology.fiu.edu) and Agriscience Major.
- People's Garden Award by USDA (April 2010)
- Certificate of Appreciation from Agroecology and Garden Club (November 2010)
- Certificate of Appreciation from National University of Agriculture, Honduras (November 2010)
- Certificate of Appreciation for participation in Latin American biofuel conference organized by OLADE – 2010
- Established MOU between FIU and Tamil Nadu Agricultural University, Tamil Nadu, India – 2010
- Established MOU between FIU and National University of Agriculture, Honduras – 2011
- Established MOU between FIU and ISARA-Lyon Agroecology Program, France – 2014
- Established MOU between FIU and Uiversity of Almeria, Spain – 2021
- Established and Launched Industrial Hemp Pilot Project Program at FIU - 2020
- Established MOU between FIU and Modern Canna - 2023
- National Research Panels (~35) for EPA, NSF, USDA-NIFA
- FIU President's Access & Equity Recognition Award Nominee (2009, 2010)
- National Academy of Biological Sciences (India) life membership
- *Phi Kappa Phi* Honors Society, 2005

Research Equipment Resources Established in Soil-Plant-Microbiology Laboratory:

Biological Safety Cabinet, Laminar Flow Chamber, four Refrigerators, two -20 ˚C Freezers, -80 ˚C Freezer, three Biological Incubator, Growth Chamber, Benchtop Centrifuge (Thermo IEC Centra CL3R), Benchtop Centrifuge (Fisher Scintific Marathon 8K), Refrigerated High Speed Centrifuge, Autoclave (ZERBUS), three Ovens (Thermo Scientific), Muffle furnace

(Fisher Scientific Isotemp), Laboratory Dishwasher, five Balances, three Open Platform Shakers, four temperature Controlled Shakers, Colony Counter (Leica Quebec Darkfield), Fluorescence Microscope with Camera, three Stereo Microscopes, Atomic Absorption Spectrophotometer (Shimadzu AA-6200), ICP (Perkin Elmer), Total Organic Carbon Analyzer (Shimadzu), Total Nitrogen and Total Carbon Analyzer (LECO TruSpec), AQ2 Discrete Analyzer (SEAL Analytical Inc.), Synergy HT Multi-Mode 96 Well Plate Reader (Biotek Inc.), GC – triple detector 2014 (Simadzu), HPLC (Agilent 1260 Infinity), Scintillation Counter, Heavy Duty Digester, Two Rotary Evaporator (Buchi R300 & Buchi R114), Julabo Chiller for rotavap Model:FE 500, NESLAB RTE-111 chiller for rotavap, SYNGENE UV lights on transilluminators, two UV-Vis Spectrophotometers, Fluorescence Microscope with Camera (Olympus BX51) Polarizing Light Microscope, Stereo Microscopes (Olympus SZX7), Microbial ID system (Biolog), Bioreactor (New Brunswick Scientific), Freeze Drier ( ), DNA Extracting Bead Beater, microcentrifuge, Flurameter, Temperature Cycler for PCR amplifications, QPCR (Applied Biosystems), PCR Hood, and Gel Electrophoresis, Orion 3 Star Benchtop pH meter (Thermo Scientific), UltraBasic Benchtop pH/mV meter (Denver Instrument), Fieldscout Portable pH 400 meter (Spectrum), Digital Mini Vortexer (Fisher Scientific), Mini Vortexer (Fisher Scientific), Handheld Leaf Area Meter and Benchtop Attachment (CID Bio-Science), 6400XT Portable Photosynthesis System w/ Soil Respiration Chamber (LI-COR), Chlorophyll Meter (SPAD 502 Plus), Crop Sensing System(Greenseeker), Chlorophyll Meter (atLEAF CHL), HydraProbe (STEVENS).

Undergraduate Students Supervision/Mentoring: 300

Supervised/Mentored **~200 Independent Study** projects for undergraduate students (about 10 projects per year through EVR 4905 Independent Study 1996-2015)

Supervised/Mentored **~150 Internships in Agriculture** (AGG 4941) for Agroecology and AgriScience undergraduate students. **Total 350 undergraduate students.**

Topics and students' names available

Supported and Mentored **60 Multicultural Scholars** from **six USDA-NIFA-MSP projects** and **75 Hispanic Scholars** from **nine USDA-NIFA-HSI projects** with Scholarships of ~$5,000 each student per year for four years of their study from USDA-NIFA MSP and HSI grants. Supporting **40 REEU students** from USDA-NIFA-REEU grant.

Graduate Student Supervision/Mentoring:

Student List:

Graduated Students Number: 60

Major Advisor for PhD Students:

1. **Dr. Ganesh Khadka**: Characterization of endophytic microbiomes for their antimicrobial properties isolated from medicinal plants of south Florida. **Graduated in Fall 2022.**
   Received Award for best poster presentation – E&E 2022 Graduate Symposium.
   Current Position: Microbiologist, Department of Defense, VA

2. **Dr. Ariel Freidenreich:** Developing Sustainable Soil Building Strategies for Tropical Fruit Groves within the South Florida Redland. **USDA-NNF Fellow. Graduated in Spring 2021. Received numerous awards including SSSA Poster presentation, DEA and DYF Awards.**
   Current Position: Soil Scientist, USDA-ARS, Lincoln, NE.

3. **Dr. Shagufta Gaffar:** Production and Characterization of Twelve Different Biochars and Evaluating their Effects on Soil Health and Plant Growth. **Graduated in Fall 2020. Received numerous awards including Miami-Dade County Agri Council Award, SSSA Poster presentation, Department Graduate Symposium Poster presentations. CASE Best Dissertation Award.**
   Current Position: Assistant Professor at Drew University, New Jersey.

4. **Dr. Lamar Burton:** Towards In-situ Based Printed Sensor Systems for Real Time Soil-Root Nutrient Monitoring and Prediction with Polynomial Regression. **Graduated in Spring 2020. Coadvised with Dr. Shekhar Bhansali.**
   Current Position: Senior Systems Engineer at Raytheon Intelligence and Space.

5. **Dr. Pushpa Soti:** Influence of Soil Biogeochemical Properties on the Invasiveness of Old-World Climbing Fern (*Lygodium microphyllum*). **Graduated in Fall 2013.**
   Received Dissertation Evidence Award.
   Current Position: Assistant Professor at the University of Texas-RGV.

6. **Dr. Hillol Guha:** Influence of Hydrobiogeochemistry on Transport of Chromium Through Manganese – Containing Sediments: Experimental and Modeling Approaches. **Graduated in Spring 2000**. **Coadvised with Dr. Florentin Maurrass.**
   Current Position: Senior Hydrologist, Bechtel Power Corporation.

Current PhD Students:

7. **Mr. Prabhakar Pant –** Sustainable Biofuels Production from Non-Crop Plants in Nepal. PhD student in Biological Sciences. Self Supported, Two years completed, Submitted D1, Expected to graduate in 2022.

8. **Ms. Mary Tiedeman** – PhD Candidate. Developing Legacy Phosphorus in Calcarous Soils dissertation proposal. USDA-NIFA-NNF Fellow.

9. **Ms. Jazmin Locke** – PhD Candidate. An Evaluation of Market Crops on Floating Treatment Wetlands as a Phytoremediation Strategy for eutrophic Water in South

Florida. USDA-NIFA-NNF Fellow, DEA Fellow Summer 2021, CREST Fellow 2022, DYF Fellow Spring and Summer 2023. Expected to graduate in Fall 2023.

10. **Ms. Jessica Dominguez –** PhD Candidate. Utilization of Antagonistic Endophytes and their bioactive secondary metabolites to control Citrus Greening. USDA-NIFA-HSI Fellowship. Co-Advised with Dr. Shetty. Expected to graduate in Fall 2023.
    Received Award for best 3-M presentation – E&E 2022 Graduate Symposium.
    Received Award for best poster presentation – GSAW Scholarly Forum 2022.
    Received Award for best poster presentation – Regional Phytopathology Conference 2023.

11. **Ms. Daphne Sugino Souffront –** PhD Candidate. Vermicompost and vermicompost tea – Formulations and effect on turmeric production.
    Graduate Research Assistant – Vermicompost Project
    Received Best Poster Presentation – E&E Graduate Research Symposium 2023
    Received DEA Fellowship 2023

12. **Ms. Vagheeswari Venkadesh** – PhD Candidate. Developing sensors for phosphates in precision agriculture using IOT.

13. **Mr. Jordan Prats** – Industrail Hemp Cultivar Screening project.

14. **Ms. Blaire Kleiman** – Presidential Fellow
    Received Award for best oral presentation – E&E 2022 Graduate Symposium.
    Florida Vegetation Management Scholarship recipient.
    Received Award for best poster presentation – GSAW Scholarly Forum 2022.
    Received best poster presentation award from Botanical Society of America
    Received SSARE Grant – 2023-2025.

15. **Ms. Sana Awan –** Pakistan Higher Education Commision support.

Major Advisor for <u>MS Thesis</u> Track Students:

16. **Mr. Joseph Navarro –** Indigenous agriculture practices to promote sustainability.
    USDA-NIFA-HSI-GO START-NOW Fellow.
    Received SSARE Grant – 2023-2025.

17. **Ms. Daniela Menendez** – Effects of Drought Stress on Secondary Metabolite Production and Yield in Ocimum Basilicum. **USDA-NIFA-HSI-BASE II Fellow. Graduated in Spring 2023.**
    Currently working as Research Assistant – USDA-ARS-SHRS, Miami, FL

18. **Mr. Jordan Prats:** Evaluation of Optimal Harvesting Time of Industrial Hemp (*Cannabis sativa L,*) Grown in South Florida. **USDA-NIFA-HSI-START-NOW Fellow. Graduated in Spring 2021.**

19. **Ms. Blaire Kleiman:** How do weeds affect insects in mango cultivation of Homestead, FL.? Co-Advised with Dr. Suzanne Koptur
    Sigma Xi Grants in Aid Research Scholarship receipient, 2021, $1,000
    Several Awards, 2020, $15,000
    Miami-Dade County Agri Council Award, 2020, $500
    CASE News
    https://casenews.fiu.edu/2020/05/15/hey-farmer-leave-them-weeds-alone/
    Graduated in Summer 2021.
    CASE Best Thesis Award.

20. **Ms. Leticia Ines Matos:** Impacts of legume-grass consortia on soil quality recovery and cattle's weight gain in Brazil's Savannah. Graduated in Spring 2022.

21. **Ms. Riki Bonnema:** The effects of food waste-based compost addition to coastal urban soils on local water quality in Miami Beach, FL.

22. **Ms. Anchal Singh:** To determine the effect of Antibiotic exposure on microbes in the environment and identify the presence of phase variants. Expected to graduate in Summer 2023.
    Received Award for best poster presentation – E&E 2022 Graduate Symposium.

23. **Ms. Daphne Sugino Souffront:** Influence of Vermicompost Tea on Secondary Metabolites in Solanum lycopersicum within South Florida. **Graduated Fall 2019. USDA-NIFA-HSI-BASE Fellow, *Worlds Ahead* Graduate, CASE Service Award Fall 2020.**
    FIU News
    https://news.fiu.edu/2019/when-earthworms-soil-themselves,-everyone-wins

24. **Ms. Claudia Garcia:** Inoculating rhizobium and arbuscular mycorrhizal fungi on snap beans under salinity stress to study plant growth and glomalin production effects. **Graduated Summer 2019. USDA-NIFA-HSI-START-NOW Fellow.**
    Best Thesis Award by American Association for Hispanics in Higher Education
    USDA Graduate Fellow by American Association for Hispanics in Higher Education.
    FIU News
    https://news.fiu.edu/2019/oh,-snap-bacteria,-fungus-combo-can-help-crops
    Current Position: Lab Manager II, Earth and Environment, FIU

25. **Jennifer Gil:** Sensitivity of Marine Cyanobacteria and Green Microalgae to Nano and Bulk Zinc Oxides. **Graduated in Fall 2018. USDA-NIFA-HSI-BASE Fellowship. Co-Advised with Dr. Kateel Shetty.**
    ASM Travel Grant Awardee
    AAHHE's Career Preparation Institute Awardee – USDA Graduate Fellow

FIU News
https://news.fiu.edu/2018/05/fulbright-fellows-tackle-international-concerns/122697

26. **Ms. Adel Pena –** Improvements in plant taxonomic preservations for south Florida Pine Rocklands. **Gradauted Fall 2017. Coadvised with Dr. Suzanne Koptur**

27. **Ms. Ariel Freidenreich:** Comparison of Synthetic versus Organic Herbicides/Insecticides on Arbucular Mycorhhizal Fungi in Abelmoschus esculentus. **Graduated Summer 2016. USDA-NNF Fellow.**

28. **Ms. Andrea Salas:** Effects of host-plant density on herbivores and their parasitoids: a field experiment with a native perennial legume. **Graduated Summer 2016.**
    Received Provost Excellence in Teaching Award – 2016
    CASE Best Thesis Award
    AAHHE's Career Preparation Institute Awardee – USDA Graduate Fellow
    Coadvised with Dr. Suzanne Koptur

29. **Ms. Herma Pierre:** Mangiferin as a Biomarker for Mango Anthracnose Resistance. **Graduated in Summer 2015. USDA-NNF Fellow.**

30. **Mr. Eric Betancourt:** Evaluation of Crop Seed Powders as Amendments for Purple Nutsedge (*Cyperus rotundus*) Control compared to the Traditional Herbicide, Roundup. **Graduated in Summer 2015. USDA-NNF Fellow.**

31. **Mr. Ramon Salazar:** Leaf Functional Traits and Forest Structure of Tropical Dry Forest Species along a Rainfall Gradient in Florida and Puerto Rico. **Graduated in Spring 2015. USDA-NNF Fellow. Coadvised with Dr. Mike Ross.**

32. **Ms. Yujie Hua:** Changes of Soil Biogeochemistry under Native and Exotic Plant Species. Defended her thesis, **Graduated in Spring 2015.**

33. **Mr. Miles Medina:** Effect of Aquafeed on Productivity of Red Amaranth and on Water Quality under Aquaponic Cultivation of Blue Tilapia. **USDA-NIFA-HSI Fellowship. Graduated in Spring 2014.**
    Received Outstanding Thesis Award
    Best Thesis Award by American Association for Hispanics in Higher Education
    USDA Graduate Fellow by American Association for Hispanics in Higher Education.
    Coadvised with Dr. Mahadev Bhat
    FIU News http://news.fiu.edu/2014/11/alumnus-finds-solutions-for-food-insecurity-through-aquaponics/82843

34. **Ms. Vanessa Sanchez:** Characterization of Rhizobial Diversity and Relationship of Rhizobial Partner and Legume Performance in Four South Florida Pine Rockland Soils. **USDA-NIFA-NNF Fellowship. Graduated in Spring 2014**.

35. **Ms. Klara Scharngl:** The Effects of Arbuscular Mycorrhizal Fungi on Four Legume Hosts in South Florida Pine Rockland Soils. **USDA-NIFA-NNF Fellowship. Graduated in Summer 2013**.

36. **Ms. Daria Boglaienko:** Buckwheat as a Cover Crop in Florida: Mycorrhizal Status, Soil Analysis, and Economic Assessment. **Graduated in Summer 2013**.
    Received Outstanding Graduate Student Award.

37. **Ms. Danielle Goveia:** An Anlaysis of the Potential Risk Exposure to Lead (Pb) Through Urban Community Gardens. **Graduated in Spring 2013**.
    Received Outstanding Thesis Award.
    FIU News http://news.fiu.edu/2014/01/lead-contamination-research-leads-to-safer-soil-in-liberty-city/73827

38. **Ms. Thelma Velez:** Measuring the Impact of *Melaleuca quinquenervia* Biochar Application on Soil Quality, Plant Growth, and Microbial Gas Flux. **USDA-NIFA-HSI Fellowship. Graduated in Fall 2012**.
    Received Outstanding Graduate Student Award.
    USDA Blog on Agriculture Education http://blogs.usda.gov/2013/06/18/agroecology-program-ag-research-is-more-than-farming/

39. **Mr. Andrew Jungman:** Examining the Use of *Simarouba glauca* Seed Oil as a Feedstock for the Production of Biofuels in Karnataka, India. **USDA-NIFA-HSI Fellowship. Graduated in Fall 2012**. **Co-Advised with Dr. Mahadev Bhat**

40. **Ms. Juliana Masaghaa**: Sediment yield modeling and identification of erosion hotspots in tropical watersheds. **Graduated in Summer 2012**. **Co-Advised with Dr. Assefa Melesse**

41. **Ms. Stephany Alvarez:** Factors influence on honey bee populations in different agricultural systems. **USDA-NIFA-HSI Fellowship. Graduated in Spring 2012**.
    Received Outstanding Graduate Student Award.
    Received Outstanding Thesis Award.
    Best Thesis Award by American Association for Hispanics in Higher Education
    USDA Graduate Fellow by American Association for Hispanics in Higher Education.
    FIU News http://news.fiu.edu/2012/11/alumna-finds-answers-for-food-security-with-honeybees/
    Current Position: Senior Dvelopment Officer, CASE, FIU

42. **Ms. Priyanka Narendar:** Screening and Identification of Everglades Algal Isolates for Biodiesel Production. **Graduated in Fall 2010.**
    Received Outstanding Graduate Student Award.

43. **Ms. Anusha Ramani:** Microbiological Degradation of Freshwater Algal Toxins,

Microcystin in Florida's Freshwaters. **Graduated in Fall 2009.**
Received Outstanding Graduate Student Award.

44. **Ms. Cristina Clark-Cuadrao:** Effects of a Switchgrass bufferstrip on soil microorganisms near a field applied with endosulfan. **USDA-NIFA-HSI Fellowship. Graduated in Fall 2007.**

45. **Ms. Tainya Clarke:** Biocontrol of *Lygodium microphyllum* using a native pathogenic fungi. **Graduated in Fall 2006.**
Received Outstanding Graduate Student Award.

46. **Ms. Seema Sah:** Effect of flooding on arbuscular mycorrhizal fungal colonization in bean plants. **Graduated in Summer 2006.**
Current Position: Lab Manager, Earth and Environment, FIU

47. **Mr. Ramakrishna Ruthala:** Bio-Geochemical Factors Influence on Microbial Community Structure on Tree Island Ecosystems of Florida Everglades. **Graduated in Fall 2004**.

48. **Ms. Elizabeth Struhar:** The Relationship between Soil Moisture and Nutrient Availability in Tree Islands of Shark Slough, Everglades National Park. **Graduated in Spring 2003**.
Received Outstanding Graduate Student Award.

49. **Mr. Prabhakar Pant:** Natural Attenuation of Trichloroethene in Stream Behavior Fate and Transport. **Graduated in Spring 2003.**
Received Outstanding Graduate Student Award.

50. **Ms. Susan Kemp:** The effects of vesicular-arbuscular mycorrizal colonization and phossphorus on Sawgrass (*Cladium jamaisense*) growth in marl and abandoned farmland soils. **Graduated in Spring 2003.**

51. **Mr. Robert McMullen:** Brazilian Pepper Suppression on Soil Disposal Mounds in the Hole-In-The- Donut Restoration Area, Everglades National Park. **Graduated in Spring 2002**.

52. **Mr. Kenichiro Konomi:** Fate and Transport of Herbicide Atrazine in Calcareous Soils of South Florida. **Graduated in Fall 2001.**

53. **Ms. Darcy Stockman:** Growth Response of Certain Tropical Legume Species to Arbuscular Mycorrhizal Fungal Symbiosis. **Graduated in Spring 2001**.

Major Advisor for <u>MS Non-Thesis</u> Track Students:

54. **Mr. Eudel Cepero:** Soil Erosion Model Development and Soil Conservation. **Graduated in Spring 2007.**

55. **Ms. Allison Stone:** Periphyton and macrophytes as a bioindicator in the tarland burn of the river Dee. **Graduated in Spring 2005**.

56. **Ms. Laura Coronel:** Fate and Transport of PAH's in Florida's Groundwater. **Graduated in Spring 2004.**

57. **Mr. Valantine Walker:** A Shift towards Biocontrol Away from Harmful Chemical Pesticides in Florida's Citrus Industry. **Graduated in Summer 2002.**

58. **Ms. Kristina Serbesoff-King:** Biology, Invasion, and Control Methods on the Invasive Category I Plant Species Melaleuca – A Monograph. **Graduated in Summer 2002.**

59. **Ms. Angelique Lawrence:** Brownfield Redevelopmentin Miami-Dade County. **Graduated in Fall 2001.**

Current MS Students:

60. **Mr. Erich Deutel** – Developing Apps to study soil conditions in response to sea level rise. USDA National Needs Fellow – RA support.

61. **Ms. Meghan Lenahan –** Effects of Pesticides on the Use of Extrafloral Nectaries for Pest Management in Snap Beans. USDA National Needs Fellow – RA support.

62. **Ms. Clara Riquelme**

63. **Ms. Kiara Taibi-Briz**

Supported and mentored **20 MS and 7 PhD Scholars** from **four USDA-NIFA-NNF projects** and **seven USDA-NIFA-HSI projects** with full RAships with tuition waivers from $60,000 to $100,000 each student.

Professional Science Master's in Environmental Policy & Management Students Advised/Advising: (2014 – 2022) 80

As a Member on <u>Thesis & Dissertation</u> Committees:

Total Number: 55

1. **Ms. Gaelle Glickfield:** An aquatic risk assessment of ethion and bromacil inputs to the C-25 Canal and Indian River Lagoon. Advisor: Dr. Rand, Graduated in 1999.

2. **Mr. Mike Byrne:** Groundwater nutrient loading in Biscayne Bay, Biscayne National Park, Florida. Advisor: Dr. Meeder, Graduated in 1999.

3. **Ms. Elizabeth Mayo:** Reforestation of Pinus Elliottii var. densa on the Miami Rock Ridge: field experiment and economic analysis of two alternative methods. Advisor Dr. Clarke, Graduated in 2000.

4. **Ms. Shivanna Mahabir:** The effects of methyl tertiary butyl ether (MTBE) on soil organisms. Advisor: Dr. Rand, Graduated in 2002.

5. **Mr. Giddy Bobeche:** Ecological, economic, and organizational dimensions of organic farming in Miami-Dade County. Advisor Dr. Bray, Graduated in 2006.

6. **Mr. David Reed:** Effects of hydrology and light on seedling establishment and growth of four wetland tree species in tree islands of northern Shark Slough, Everglades National Park. Advisor: Dr. Ross, Graduated in 2007.

7. **Ms. Maria Marasigan:** Social and Ecological Dimensions of a Small Farmer Organic Cooperative in El Salvador. Advisor Dr. Bray, Graduated in 2008.

8. **Ms. Erin Hanan:** Multi-scaled patterning of plant-soil-water interactions across tree islands and marshes within the prairie and slough landscapes of everglades national park. Advisor Dr. Ross, Graduated in 2008.

9. **Mr. Rich Soto:** Accessible community gardening in South Florida. Advisor Dr. Bhat, Graduated in 2010.

10. **Mr. Fukrudhin Maalim:** Modeling potential erosion and sediment contribution from upland agricultural areas: a case study of Le Sueur river watershed, Minnesota. Advisor Dr. Melesse, Graduated in 2010.

11. **Mr. Jason Downing:** Impact of recently naturalized specialist bee Centris nitida on Brysonima lucida. Advisor Dr. Liu, Graduated in December 2010.

12. **Ms. Cara Cooper**: Dr. Liu (Advisor), Graduated in Summer 2012.

13. **Mr. Amour Seleman:** Dr. Bhat (Advisor), Graduated in summer 2012.

14. **Ms. Carolina Berget**: Dr. Bray (Advisor), Graduated in December 2012.

15. **Mr. Robert Schroder**: Dr. Scinto (Advisor), Graduated in December 2012.

16. **Ms. Leigh Ammon**: Dr. Melesse (Advisor), Graduated in April 2013.

17. **Mr. Andres Rodriguez:** Dr. Scinto (Advisor), Graduated in December 2013.

18. **Ms. Nina DeLa Rosa:** Dr. Shetty (Advisor), Graduated in Fall 2014. (Supported USDA-NNF RAship)
    Current Position: Program Coordinator, ICTB, FIU

19. **Mr. David Berthold:** Dr. Shetty (Advisor), Graduated in Summer 2016.

20. **Ms. Jessica Dominguez:** Dr. Shetty (Advisor), Graduated in Summer 2019.

21. **Mr. Andrew Mullin:** Dr. Khoddamzadeh (Advisor), Graduated in Fall 2021

22. **Ms. Milagros Munoz Salas:** Dr. Khoddamzadeh (Advisor)

As a Member on <u>Master's Thesis</u> Committees in various programs:

23. **Mr. Dustin Mizell:** Ecologically sound golf course development. Advisor Dr. Chmielenska (Landscape Archtecture), Graduated in 1999.

24. **Ms. Lorraine Ahlquist:** Nutrient cycling in Alaskan tundra in response to experimental manipulation of growing season length and soil temperature: a climate change scenario. Advisor Dr. Oberbauer (Biology), Graduated in 2003.

25. **Ms. Danielle Palow:** Effects of light and soil type on seedling growth and physiology of two INGA species. Advisor Dr. Oberbauer (Biology), Graduated in 2003.

26. **Mr. Robert Griffith:** Locating toxic molds using solid phase microextraction/gas chromatography/mass spectrometry and canine detection of microbial volatile organic compounds. Advisor Dr. Furton (Chemistry and Biochemistry), Graduated in 2005.

27. **Ms. Saranya Krishnan:** Comparative Genomic Analysis of Pathogenic and Non-Pathogenic Raffaelea Isolates from Ambrosia Beetles. Advisor Dr. Mills (Forensic Sciences), Graduated in Summer 2019.

As a Member on <u>Dissertation</u> Committees in various Doctoral programs:

28. **Dr. Laurie McHargue:** Factors affecting the nodulation and growth of tropical woody legume seedlings. Advisor Dr. Oberbauer (Biology), Graduated in 1999.

29. **Dr. Susan Daily:** Phosphorus enrichment effects on interactions among the ecosystem components in a long-hydroperiod oligotrophic marsh in Everglades

National Park. Advisor Dr. Childers (Biology), Graduated in 2000.

30. **Dr. Gregory Starr:** A multi-scale assessment of physiological processes in arctic tundra plants under natural and simulated climate change scenarios. Advisor: Dr. Oberbauer (Biology), Graduated in 2000.

31. **Dr. Joseph O'Brien:** The effects of climate on the growth and physiology of tropical rainforest trees. Advisor Dr. Oberbauer (Biology), Graduated in 2001.

32. **Dr. Flavio Moreno:** Soil carbon dynamics in primary and secondary tropical forests in Colombia. Advisor Dr. Oberbauer (Biology), Graduated in 2004.

33. **Dr. Zhangrong Chen:** Natural organic matter and colloid-facilitated arsenic transport and transformation in porous soil media. Advisor Dr. Cai (Chemistry and Biochemistry), Graduated in 2006.

34. **Dr. Ronald Mossman:** Seed dispersal and reproduction patterns among Everglades plants. Advisor Dr. Koptur (Biology), Graduated in 2009.

35. **Dr. Monica Joshi:** Drop-on Demand Inkjet technology for the development of calibration standards for use with Ion Mobility Spectrometers. Advisor Dr. Almirall (Chemistry and Bichemistry), Graduated in 2010.

36. **Dr. Sen Chen:** Reduced organic sulfur: Speciation and interaction with mercury in aquatic environment. Advisor Dr. Cai (Chemistry and Biochemistry), Graduated in Fall 2011.

37. **Dr. Paulo Olivas:** The synergetic response of Arctic ecosystems carbon exchange to manipulation of temperature and water table. Advisor Dr. Oberbauer (Biology), Graduated in Fall 2011.

38. **Dr. Ravi Godavalli:** Effect of pH and temperature on the carbonate promoted dissolutions of uranyl phosphate minerals. Advisor Dr. Tansel (Civil and Environmental Engineering), Graduated in Summer 2013.

39. **Dr. Sushant Kumar**: Energy Production through Different Mineral Oxides. Mechanical Engineering Doctoral Program, Advisor: Dr. Saxena, Graduated Fall 2013.

40. **Dr. Miguel Cruz:** Environmental and Occupational Health. Graduated in Fall 2014

41. **Ms. Zoe Pratte:** Biology Dr. Richardson – Advisor, Graduated

42. **Mr. Jason Downing:** Biology Dr. Liu – Advisor, Graduated

43. **Ms. Sharon Surita:** Civil and Environmental Engineering Dr. Berrin Tansel - Advisor

44. **Dr. Yemeserach Mekonnen:** Edge IOT Driven Framework for Experimental Investigation and Computational Modeling of Integrated Food, Energy, & Water System. Advisor Dr. Arif Sarwat (Electrical Engineering), Graduated in Fall 2019.

45. **Dr. A.M. Abdullah:** Advanced Oxidation Processes for the Remediation of Problematic Organophosphorus Compounds and Perfluoroalkyl Substance. Advisor: Dr. Kevin O'Shea (Chemistry and Biochemistry). Graduated in Spring 2020.

46. **Dr. Luis Garbinski:** Bacterial Mechanisms of Toxicity and Resistance to Organoarsenicals. Advisor Dr. Barry Rosen (Cellular Biology and Pharmacology, College of Medicine). Graduated in Fall 2020.

47. **Mr. Clement Olenrewaju:** Oil fingerprinting analysis using GC-APLI-TIMS-TOFMS. Advisor Dr. Francisco Lima (Chemistry and Biochemistry), Graduated

48. **Ms. Janet Crespo Cajigas:** Improving Canine Detection Specificity via Instrumental and Sensing Tools. Advisor Dr. Kenneth Furton (Chemistry and Biochemistry).

49. **Ms. Emma Calabrese:** Advisor Dr. Kenneth Furton (Chemistry and Biochemistry).

50. **Mr. Ivan Oyege:** Advisor Dr. Maruthi Sridhar Balaji Bhaskar

51. **Ms. Shanna Stingu:** Advisor Dr. Tiffany Troxler

52. **Ms. Priyanka Belbase:** Advisor Dr. Maruthi Sridhar Balaji Bhaskar

53. **Ms. Nicole Norve:** Advisor Dr. Anna Simonsen

54. **Mr. Carlos Tapia:** Advisor Dr. Mahadev Bhat

Post-Doctoral Research Associates Supervion: 7

1. Dr. Meera Nair – 1997-1998
2. Dr. Kateel Shetty – 2000-2012
3. Dr. Pushpa Soti – Jan 2014 – July 2015
4. Dr. Saoli Chanda – Jan 2018 – 2023
5. Dr. Sanku Dattamudi – July 2018 – December 2022
6. Dr. Divya Yuvaraj – Jan 2019 – Dec 2021
7. Dr. Shagufta Gaffar – Jan 2021 – Nov 2021

International Scholars Hosted in my Laboratory: 20

Dr. C. Udayasooriyan, 2000 – TNAU, Tamil Nadu, India
Dr. R. Natesan, 2009 – TNAU, Tamil Nadu, India
Dr. Murugesa Boopathi, 2010 – TNAU, Tamil Nadu, India

Drs. Sundaram, Pandiyarajan, Marimuthu, 2010 – TNAU, Tamil Nadu, India
Dr. Balagurunathan, 2010 – TNAU, Tamil Nadu, India
Mr. German Adan Orellana, Summer 2011 – National University of Agriculture, Catacamas, Honduras
Ms. Paola Marticorena, 2011 - Universidad de Antofagasta, Chile
Mr. Kenta Watanabe, 2012 - The University of Ryukyus, Japan
Dr. Alexander Wezel and Dr. Christophe David, 2013 and 2014 – ISARA-Lyon, France
Dr. Bulent Toprak, 2013 - Duzce University, Duzce, Turkey
Mr. Eduardo Peres, 2015 – Brazilian Science Mobility Program, Brazil
Ms. Marianne Vouters, 2016 – Agroecology, ISARA-Lyon, France
Dr. N. Umashankar, 2016 – UAS, Karnataka, India
Ms. Mariana Santos-Reis, Summer 2016 – Brazilian Science Mobility Program, Federal University in ABC Paulista, SP-Brazil
Dr. Maimona Saeed, 2019 – PMAS-Arid Agriculture University, Rawalpindi, Pakistan
Dr. Jude Odhiambo, 2023 – Fulbright South African Research Scholars Program

PROFESSIONAL SERVICE:

National Research Review Panels:

Panelist	National Council for Science and Environment (2002)
Panelist	Environmental Protection Agency (2002 and 2003) (Super Fund Sites Research Panels)
Panelist	EPA-STAR Fellowships (2004, 2005, 2006, 2007, 2010, 2012, 2014, 2015) Soil, Plant, Terrestrial Ecology, Bioenergy, and Pesticides Panels
EPA Site Reviewer	SouthEastern Louisiana University Research Site (2006)
Panelist	EPA – Ecosystem Services Research Panel (2009)
Panelist	USDA-CSREES-NRI- Soil Processes Panels (2007, 2008)
Ad-hoc Panelist	USDA-CSREES-MSP (2007)
Panelist	USDA-NIFA-HSI (2010), USDA-NIFA-HBCU (2011, 2015, 2016, 2021), USDA-NIFA-WAMS (2014, 2020) USDA-NIFA-ANNH (2016) USDA-NIFA-HEC (2020) USDA-NIFA-EGP (2021) USDA-NIFA-UIE (2022)
Panelist	NSF-Microbiome (2020)
Panelist	USDA NP 212 Soil Health, Microbiomes, Soil Processes, Rotations (2021)
Panel Manager	USDA-SPECA and PD-STEP (2016) USDA-NIFA-PreDoc Plants, Animals (2021, 2023)

COMMUNITY ENGAGEMENT AND OUTREACH ACTIVITIES:

As the Co-Director of the Agroecology Program, I have been involved in various community outreach activities, to promote sustainable urban agriculture and community gardening in South Florid, by providing expert advice, recruiting student volunteere for organizations, conducting FIU garden tours, USDA Research Station and local organic farms tours, training vetrans and socially disadvantaged farmers, etc.

- Site identification for FIU Organic Garden, laying out first garden plots for teaching, experiential learning at the garden, establishing the shade-house facilities, high tunnel installation etc.
- Founding author and editor of Agroecology Biannual Newsletter – Cultivator.
- Urban League of Greater Miami: Site identification and planning a new community garden in Miami Downtown.
- Roots in the City Urban Farm in Miami Overtown: Student engagement, expert advise on vegetable production, and assistance with grant proposal development.
- Glaser Organic Farm and Paradise Organic Farm: Placement of student interns to learn organic farming techniques and community engagements.
- TERRA Environmental Institute: Advise on setting up a new campus garden, student mentoring etc.
- Miami-Dade Senior High Schools: Network with selected seven high schools in Miami Dade; summer internships to high school students, student mentoring on their school yard project and science fair competition and the school curriculum development; engaging students in annual symposia, student recruitement to FIU and high school teachers summer workshop etc.
- Established Agriculture and Environmental Immersion Day for several High School Students to create interest in agriculture and environmental education.
- Made in Miami-Dade Farmer's Market: Participation and community engagement in Sunday Farmers market lead by Commisioner Joe Martinez, Miami-Dade County.
- Miami-Dade's Agriscience and Natural Resources Education Advisory Committee: Advise on curriculum development, agriscience facilities at schools etc (2008-present). Currently serving as the Chair of the committee.
- Miami-Dade Tropical Fruits Advisory Committee Member – 2019 to present.
- Member of Small Farmers Stakeholders Conference Organizing Committee in Florida.
- Advisory Board Member for ARN Foundation that helps Haiti Agriculture and Environmental issues.
- Judge: Fairchild Challenge Program for Miami-Dade Schools competition on environmental science education – for the past 20 years.
- Miami-Dade Science and Engineering Fair – Organized a community workshop on Agroecology Program, judged science competition, awarded four best science projects in Agroecology. 2010 - present
- Organized Agroecology Team for FAA judging 2012 –present
- Miami-Dade Public Schools STEM Advisory Board Member

- National Academy of Foundation (NAF) member, Miami-Dade Public Schools AgriScience Academy Board Member.
- Training Veterans and Socially Disadavnatged Farmers in farming systems and nursery management. Laying out the significance of working with plant and soil that promotes healthy living by relieving stress from the veterans.
- Providing expertise on Climate Control Agriculture Systems for Redland Ahead, Inc., Homestead, Miami, FL.
- Developed industrial hemp research and education project, approval from BOT to establish industrial hemp pilot project at FIU.
- Developed extensive network of small farmers and nurseries – The Lion Fruit Farms, The Little Farm, Marc Ellebe Organic Farm, Galcier Organic Farm, Paradise Organic Farm, Pine Island nursery etc.

Development of Agricultural and Environment Science Research Center in Homestead: Assisted CASE and SEAS by providing teaching, research, and outreach ideas for establishing an Agroecology Center (CASA) in Redland. Key role in preparation for acquiring several pieces of property in Homestead and developing them into an agricultural research center.

- Attended several meetings including several strategic planning meetings last 12 years with local farm Possom Trot, Dumond Conservatory, CASE Deans, SEAS Director, CASE development officer Paul Landrum and Mr. John Mills, the member of the CASE Advisory Board.
- Primary contact for Possum Trot Farm, and developmental activities towards agriculture education, research, and outreach. Possum Trot (30 acres) farm is official under FIU administration – approved in October 2020.
- Contributing author for development of a Business Plan (Proposal for new Research Centers) for the Agroecology Center at Possum Trot farm.
- Attending biweekly meetings on Tuesdays 9.30 – 10.30 with Paul Landrum (Development Officer) to discuss various activities on food and agriculture.
- Established special programs teaching facilities and VeSFO office facilities at a 5-acre site – The Girls Home owned by John Mills.
- Developed and executed series of non-credit workshops (special programs). Professional Horticulture Workshop, Beekeeping Workshop, Orchids Workshop, and series of related workshops.
- International workshop on Agroecology and Sustainable Agriculture (IWASA) executed summer of 2015 followed by several other workshops.
- Serving as a primary coordinator for several activities related to food and agriculture initiatives.
- Prepared documents for the Dean to appear at Congress sub-committee on Agriculture and Biotechnology.
- Helping to relocate the fair grounds to Homestead area.
- Attended several fund-raising events.

Local, Regional, National, International Netwroking (2005-Present): I have developed strong collaborations to promote education and research training with high schools, middle schools,

Fairchild Tropical Botanical Garden, USDA-ARS Sub-Tropical Horticulture Research Station, the DuMond Conservancy– Monkey Jungle/Possum Trot, Vizcaya Museum & Gardens, Miami-Dade Agriculture Extension Office, local farms, nurseries, University of Florida – Tropical Research and Education Center, Fruit and Spice Park, Miami-Dade College, St. Thomas University, McArthur Agroecology Research Center (Highland County), ECHO farms (Ft. Myers), Florida Nursery Growers and Landscape Association (Orlando), Inter-American University (Puerto Rico), University of Texas-RGV, Texas A&M University-Kingsville, New Mexico State University, Florida Atlantic University, Florida A&M University, University of California – Santa Cruz, National Laboratory for Agriculture and Environment (Iowa), National University for Agriculture (Honduras), Tamil Nadu Agricultural University (India), Agroecology Research Center (ISARA-Lyon, France), University of Almeria (Spain), and Modern Canna. I have hosted students from Brazil, Chile, France, Honduras, Japan, Pakistan, and Turkey in my research laboratory. In 2018 October, I have hosted participant from Belize through Young Leaders of Americas Initiative (YLAI) from the State Department.

Non-Academic Community Service:
Board of Directors for South Florida Tamil Sangam 2010-2012 (http://www.sfts.org)
Fund Raising for National MS Society by participating MS Bike Ride–85 miles from 2012.
Fund Raising through Sukeebhava organization to provide educational and medical help in souther part of India. Last 12 years.

FUNDED RESEARCH ACTIVITIES (Competitive Funding): ~$22 million. For Agroecology Program: $16 million

Agency	Research Project Title	Participation	Amount
USDA-BFRDP	Veterans as New Farmers in south Florida: Resources, Training, Crop Production, and Marketing (2023-2026)	PI	$300,000
SSARE	Heat stress and its influence on subtropical annual crops and their pollinators: Implications for agriculture in an era of climate change (2023-2025) (Awarded to Gradauet Student Balire Kleiman)	Mentor PI	$18,000
SSARE	The Taino: Can the indigenous agricultural methods of Puerto Rico feed the island and potentially mitigate climate change (2023-2025) (Awarded to Graduate Student Joseph Navarro)	Mentor PI	$18,000
USDA-HSI	Building capacity in microbiome innovation for plant health, Soil fertility, and environmental sustainability at Hispanic Serving Institution (2023-2027) FAU Lead Institution –	FIU-PI	$1,000,000
USDA-CIG	Demonstration of Crop Rotation and Cover Crop Influence on Urban Agriculture (UA) Farms through Sensor and Geospatial Technologies (2023-2026)	Co-PI	$800,000

USDA-NLGCA	Exploring the Nexus of Agricultural Productivity and Sustainability Using Data Science and Deploying Climate Smart Agriculture (2023-2026)	Co-PI	$150,000
USDA-HSI	Comprehensive Agriculture Research Experiential (CARE) Learning Through 'Precision Agriculture And Conservation Science (PACS) (2023-2027)	Co-PI	$400,000
NASA	Florida Space Grant Consortium: Crop Production Training and Experience (2022)	PI	$825.00
USDA-SCRI	Endophytes as sources of antimicrobials to control Hunaglongbing (HLB) (2022-2024)	Co-PI	$500,000
USDA-HSI	Building Research, Education, And Leadership for Agriculture and Related Career (bREAL - ARC) (2022-2026)	Co-PI	$1,000,000
USDA-REEU	Experiential and Experimental Training for Multicultural Undergraduate Scholars in Agroecology and Natural Resource Sciences at Florida International University (2022-2026)	PI	$600,000
USDA-CIG	Integration of resource conservation practices and spatial informatics for improving soil health (2022-2024)	Co-PI	$150,000
USDA-HSI	Broadening Agriculture Science Education (BASE II) for Hispanic Students through Florida – Texas – New Mexico Consortium (2021-2025)	PI	$1,000,000
USDA-HSI	GOSTART NOW "Student Training in Agricultural Research Techniques by Novel Occupational Workshops" (2021-2025) (TAMUK – Lead Institution) FIU - PI	PI	$1,000,000
Lion Fruit Farm	Vermicompost – Turemeric and Ginger Production (2021-2024)	PI	$100,000
USDA-MSP	Empowering students in the emerging big data field through multicultural scholar program (2021-2026)	Co-PI	$200,000
SSARE	The Use of Cyanobacteria Biofertilizer to Increase Crop Productivity, Improve Soil Health, and Agricultural Sustainability in Florida (2021-2024)	PI	$252,000
USDA-NNF	Urban Sustainable Agriculture Education for Doctoral (USA-ED) Fellows at Florida International University (2021-2026)	PI	$238,000
Green Point	Industrial Hemp Pilot Project: Variety Selection, Cropping	PI	$75,050

Research	System Development (2020 – 2022)		
Spl. Crops Blk. Grant	Nitrogen Management and Plant Quality Monitoring Using Optical Sensor Technology in Native and Non-Native Specialty Crops (2021-2022)	Co-PI	$82,677
USDA OPPE	Building the Agricultural Entrepreneurial Capacity of Socially Disadvantaged Farmers through Experiential Training and Progressive Mentorship (2020-2023)	Co-PI	$400,000
Walmart Foundation	Food System Supply Chain – Tomatoes and Strawberries demand and supply from Florida (2018-2021)	Co-PI	$450,000
USDA-OAO	Veteran Farmers Development Program (2018-2020)	Co-PI	$180,000
USDA-OAO	Veterans in Miami—Dade Agriculture (2017-2018)	Co-PI	$178,000
USDA BFRDP	A Foundation for New Farmers in South Florida: Training and Transitioning Farmworkers and Veterans into Farmers and Nursery Growers. Sep 2017 – Aug 2021	PI	$300,000
USDA	Cochran Fellowship Program – Moldova March 2017	Co-PI	$60,000
USDA-HSI	Broadening Agriculture Science Education (BASE) for Hispanic Students through Florida – Texas – New Mexico Consortium September 2015-August 2020	PI	$1,000,000
USDA-HSI	START NOW "Student Training in Agricultural Research Techniques by Novel Occupational Workshops" Consortium TAMUK-FIU-UTEP-UPRM September 2016-August 2021 (TAMUK Lead Institution) FIU-PI	PI	$2,000,000
USDA-HSI	Innovative Curriculum for Agriculture Training and Career for Hispanics (iCATCH) September 2016-August 2021	Co-PI	$2,000,000

USDA-MSP	Multicultural Scholars Program for Agri-Science Majors at Florida International University June 2016-June 2021	PI	$200,000
JC Tropicals	Dragon Fruits Research: Nutritional Qualities 2016 – 2017	Co-PI	$30,000
USDA-OAO	Veterans and Socially Disadvantaged Farmers Training (Two one-year grants) 2014-2016	Co-PI	$350,000
JP Morgan Chase Foundation	The Education Effect: Garden and Aquaponics Systems	Co-PI	$350,000
USDA-NNF	Doctoral Education in Interdisciplinary Agriculture and Natural Resources Sciences August 2015 – July 2020	PI	$238,500
USDA-MSP	Training Multicultural Undergraduate Scholars in Agriculture and Environmental Sciences at Florida International University, January 2013 – December 2019	PI	$200,000
FIU-Tech Fee	Acquisition of LICOR Instrument for training students in agroecology	PI	$75,000
USDA-NNF	Infusing Food Security, Food Safety, and Bioenergy into the Environmental Studies Graduate Program at Florida International Universit. January 2013 – July 2018	PI	$246,000
USDA HSI	Florida-Caribean Consortium for Agriculture Science Education at Florida International University FIU Lead	CoPI	$3.4 million
USDA MSP	Multicultural Scholars in Agriculture and Resource Science at FIU 2011-2016	PI	$180,000
USDA NNF	National Needs Fellow in Sust. Agriculture and Natural Resource Sciences at Florida International University: An Interdisciplinary Approach. January 2011-July 2014	PI	$246,000
USDA HSI	Biofuel Science Education for Under-Represented Students at Florida International University. August 2010 – July 2013	PI	$290,000
Peace Corps	Establishment of Peace Corps Scholarship at Florida International Universirty. 2008-09 and 2009-10	PI	$21,900
FIU-CASE	Environmental Studies Colloquium Enhancement Award. 2008-09, 2009-10, 2010-11	PI	$9,000

USDA MSP	Training Multicultural Undergraduate Scholars in Agroecology at Florida International University: An Interdisciplinary Approach. January 2009 – December 2014	PI	$150,000
USDA HIS	Curriculum Enrichment, Instrumentation and Experiential Learning in Agroecology. August 2008 - July 2011	Co-PI	$292,000
USDA	Internationalization of Environmental Studies Curriculum through Teaching and Research in Bio-fuel Production and Technology. August 2008 - July 2010	Co-PI	$100,000
SFWMD	Discovery, Development and Evaluation of Native Microbial Biological Control Agents for Managing Old World Climbing Fern in South Florida. May 2008 – March 2010	PI	$99,000
USDA MSP	Multicultural Undergraduate Scholars in Agroecology at Florida International University. August 2007 – July 2012	PI	$150,000
ENP	Biological control of invasive plant species in South Florida October 2002 – December 2008	PI	$380,000
NIEH	Microbial Degradation of Brevetoxin – Isolation of Novel Bacteria. September 2006 – August 2009	PI	$187,500
USDA	Curriculum Development and Capacity Building in Agroecology Sciences. August 2005-August 2008	Co-PI	$240,000
USDA	Understanding Limits to Growth in International Agriculture and Opportunities for Sustainable Farming Systems. May 2006- April 2009	Co-PI	$100,000
ILZRO	Silver Chemicals for Wood Preservation: Effect on Soil Biology. August 2003- December 2008	PI	$45,000
ABS	Arbuscular-Mycorrhizal Colonization and Interaction with Endangered Plant Species, *Ziziphus celata* (Rhamnaceae). March 2003 – Dec. 2006.	PI	$3,500
DOE	Natural Attenuation of Trichloro-Ethylene from contaminated soils and water from Savannah River Site and Oak Ridge – Support for the Mercury Center of Excellence (Microbial Structural and Functional Diversity). Feb. 2003 – Nov. 2005. (DOE Project through HCET {ARC}).	PI	$90,000

ENP	Brazilian Pepper Suppression in the Soil Disposal Mounds in the Hole-in-the-Donut Pilot Restoration Program, Everglades National Park. October 2000 – September 2002.	PI	$180,000
SDSWCD	Microbial Degradation of Pesticides in South Florida Soils. April 2000-March 2001.	PI	$15,000
USDA	Determination of the movement of Agrochemicals in soils with Compost Amendments. April 2001 – June 2006	PI	$132,000
FAO/WB	Bioremediation of Pesticides Contaminated Soils.	PI	$6,000
ENP	Everglades National Park Tree Islands: Interactions of Vegetation, Hydrology, and Soils. August 2000-July 2003.	Co-PI	$330,000
DOE	Bioremediation of TCE from contaminated soils and water from Savannah River Site. April 2002-March 2003. (DOE Project through HCET {ARC}).	PI	$14,050
OSRA	Search for novel soil microorganisms from preserved sites of Florida. May 2001.	PI	$4,000
ENP/SFWMD FDEP	Numerical Interpretation of Class III Narrative Nutrient Water Quality Criteria for the Everglades Wetlands. January 1996-2002.	Co-PI	$5 million
ENP	Assessment of Marsh Vegetation Responses to Hydrological Restoration in Shark Slough. ENP. 1996-1999.	Collaborator	
BNP	Water Flow through Coastal Wetlands. 2001-2003	Collaborator	
USFW	Restoration of *Jacquemontia reclinata* to the South Florida Ecosystem. 1999-2001.	Collaborator	
USDA	Multistate Project to investigate Microbial Role in Land Management. (Consortium of 20 Soil Microbiologists from different regions in US). 2001-2005.	Investigator	
EPA	Development of Strategies for Biological Remediation of Pesticide Contaminated Sites 1994-96	Co-PI	$835,139

LCSA	Interactions of arbuscular mycorrhizal fungi in pesticides degradation. 1992-94	Co-PI	$40,000
EPA	Assimilative Capacity of Soil Microorganisms.1992-1995.	Co-PI	$750,000
USDA	Fate and Significance of Major Degradation Products of Atrazine	Co-PI`	$120,000
USDA	Management System Evaluation Area (MSEA) for water Quality in Midwestern States: President's Initiative on Water Quality. 1991-1995	Res. Sci	$5million
NSF	A Mechanisms Regulating Phosphorus Cycling in Tallgrass Prairie. Konza Prairie LTER 1987-1991.	GRA	

Additional Revenue Generated through various Academic Activities: ~$2.7 million.

Deep South Garden Club (Blaire Klein's RAship)	2020-2021	$3500
Torry Botanical Scoiety (Blaire Klein's RAship)	2020-2021	$2500
National Garden Club (Blaire Klein's RAship)	2020-2021	$4000
Florida Federation Garden Society (Blaire Klein's RAship)	2020-2021	$3000
Higher Education Commission – Pakistan	2019	$3500
Agroecology Workshops (IWASA, PHCP)	2015-2020	$45,000
Professional MS-Environmental Policy & Management	2015-2021	$2.64 mil

PUBLICATIONS IN DISCIPLINE:

*Denotes publications/presentations with students.
**Denotes corresponding author.

Books:

Dissertation and Thesis

Jayachandran, K. Role of Vesicular-Arbuscular Mycorrhizae in Phosphorus Acquisition from Unavailable Phosphorus Sources. 1991., Ph.D. Thesis, 74 pp, Department of Plant Pathology, Kansas State University, Manhattan, KS

Jayachandran K. Studies on the Survey, Spore Germination and Inoculation of VA-Mycorrhizal Fungus on the Growth of Certain Crop Plants. 1983, M.Sc. Thesis, 123 pp, Department of Agricultural Microbiology, Tamil Nadu Agricultural University, Coimbatore, India

Refereed Articles Published:

Total number of peer-reviewed publications: 108

92. Ganesh Khadka*, Thirunavukkarasu Annamalai, Kateel G. Shetty, Yuk-ChingTse-Dinh, and **Krish Jayachandran**. 2023. Isolation and Characterization of Fungal Endophytes from *Petiveria alliacea* and Their Antimicrobial Activities in South Florida. *In Press:* **Microbiology Research**.

91. Jazmin Locke*, Tiffany Troxler, Michael C. Sukop, Leonard Scinto, and **Krish Jayachandran**. 2023. Floating Flowers: Screening Cut-Flower Species for Production and Phytoremediation on Floating Treatment Wetlands in South Florida. **Environmental Advances:** 13, 100405, https://doi.org/10.1016/j.envadv.2023.100405

90. Jessica Dominguez*, **Krishnaswamy Jayachandran,** Ed Stover, Joseph Krystel, and Kateel G. Shetty. 2023. Endophytes and Plant Extracts as Potential Antimicrobial Agents against Candidatus Liberibacter Asiaticus, Causal Agent of Huanglongbing. **Microorganisms:** 11, 1529, https://doi.org/10.3390/microorganisms11061529

89. Maimona Saeed*, Noshin Ilyas, Fatima Bibi, Sumera Shabir, **Krish Jayachandran**, R. Z. Sayyed, Ali A. Shati, Mohammad Y Alfaifi, Pau Loke, and Zarrin Fatima Rizvi. 2023. Development of novel kinetic model based on microbiome and biochar for in-situ remediation of total petroleum hydrocarbons (TPHs) contaminated soil. **Chemosphere:** 324, https:/ /doi.org/10.1016/j.chemosphere.2023.138311

88. Kiara Taibi-Briz*, **Krish Jayachandran,** Raphael Raptis, and Kateel Shetty. 2023. In vitro effifficacy of fungal endophytes and silver pyrazolate against Raffaelea lauricola, causal agent of laurel wilt of avocado. **FIU Undergraduate Research Journal:** Vol. 1: Iss. 1, Article 4. DOI: 10.25148/URJ.010323

87. Jordan William Prats*, Daphne Kyoko Sugino Souffront*, Diego Salazar Amoretti, **Krishnaswamy Jayachandran**. 2022. Evaluation of the Effect of Harvesting Time on Three Varieties of Industrial Hemp (*Cannabis Sativa L*) **Journal of Horticulture,** Vol. 9 Iss. 4 No: 308, DOI: 10.35248/2376-0354.22.9.1000308

86. Ariel Freidenreich*, Sanku Dattamudi, Yuncong Li, and **Krish Jayachandran.** 2022. Influence of Leguminous Cover Crops on Soil Chemical and Biological Properties in a No-Till Tropical Fruit Orchard. **Land, 11, 932**, https://doi.org/10.3390/land11060932

85. Ariel Freidenreich*, Saoli Chanda, Sanku Dattamudi, and **Krish Jayachandran.** 2022. Effect of glyphosate and carbaryl applications on okra (Abelmoschus esculentus) biomass and arbuscular mycorrhizal fungi (AMF) root colonization in organic soil. **Horticulturae, 8, 415, https://doi.org/10.3390/horticulturae8050415**

84. Daphne K. Sugino Souffront*, Diego Salazar, and **Krishnaswamy Jayachandran.** 2022. Influence of vermicompost tea on secondary metabolite production in tomato crop. **Scientia Horticulturae, 301, 111135, https://doi.org/10.1016/j.scienta.2022.111135**

83. Maimona Saeed*, Noshin Ilyas, **Krish Jayachandran**, Sumera Shabir, Nosheen Akhtar, Asim Shahzad, R. Z. Sayyed, and Asghari Bano. 2022. Advances in Biochar and PGPR engineering system for hydrocarbon degradation: A promising strategy for environmental remediation. **Environmental Pollution, https://doi.org/10.1016/j.envpol.2022.119282**

82. Divya Yuvaraj, **Krish Jayachandran**, and Lavanya Ashokkumar. 2022. Performance of spectral indices for soil properties: A case study from Redland farm, South Florida. **Modeling Earth Systems & Environment,** https://doi.org/10.1007/s40808-022-01371-0

81. A. Freidenreich*, M. Bhat, and **K. Jayachandran**. 2021. Adoption and perception of cover crop implementation for tropical fruit growers. **Journal of Soil and Water Conservation**, 1-14, doi:10.2489/jswc.2022.00084

80. Ariel Freidenreich*, Sanku Dattamudi, Yuncong C. Li, and **Krishnaswamy Jayachandran**. 2021. Soil respiration and carbon balance under cover crop in a no-till tropical fruit orchard. **Frontiers in Environmental Science**, Vol 9, 1-8, doi:10.3389/fenvs.2021.766638

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Alvarez-Ventura, S., M. G. Bhat, **K. Jayachandran**, P. Maul, A. Toro, and Adoghe, L. Florida-Caribbean Consortium for Agriculture Education and Hispanic Workforce Development (FCCAgE). Progress Report for the Period ending August 2015. Submitted to the Department of Agriculture under the Cooperative Agreement 2011-38422-30804, Department of Earth and Environment, Florida International University, Miami, November 2015.

Submitted progress report on second USDA-National Needs Fellows, Third and Fourth USDA-Multicultural Scholars Program. 2015.

Submitted progress report on second National Needs Fellows, Third and Fourth Multicultural Scholars Program. 2015.

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Bhat, M. G., **K. Jayachandran**, A. Melesse, J. Onsted, and S. Koptur. "Curriculum Enrichment, Instrumentation, Experiential Learning in Agroecology." Final Report Submitted to the External Evaluator, for the grant under the Cooperative Agreement 2008-38422-19209, Department of Earth and Environment, Florida International University, Miami, September 2014.

Jayachandran, K. and M. Bhat. 2013. "Multicultural Undergraduate Scholars in Agroecology and Urban Landscape at Florida International University: An Interdisciplinary Approach." Final Reports submitted to the Department of Agriculture under the cooperative agreement, 2007-38413-17816, Florida International University, 2013.

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Bhat, M. G., K. **Jayachandran**, A. Melesse, J. Onsted, and S. Koptur. "Curriculum Enrichment, Instrumentation, Experiential Learning in Agroecology." Fourth Progress Reports Submitted to the External Evaluator, for the grant under the Cooperative Agreement 2008-38422-19209, Department of Earth and Environment, Florida International University, Miami, September 2013.

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Bhat, M. G., G. Philippidis, **K. Jayachandran**, A. Melesse. "Internationalization of Biofuel Research, Curriculum and Business Promotion." Progress Reports Submitted to the Department of Agriculture under the Cooperative Agreement 2008- 51160-04356, Department of Earth and Environment, Florida International University, Miami, October, 2012.

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Jayachandran, K., M. Bhat. 2010. Two Progress Reports for Multicultural Undergraduate Scholars Program USDA-NIFA Agreement Numbers 2007-38413-17816 and 2009-38413-05236 – 10 pages.

Jayachandran, K. and K.G. Shetty. 2010. Final Report to South Florida Water Management District on "Discovery, Development and Evaluation of Native Microbial Biological Control Agents for Managing Invasive Old World Climbing Fern (*Lygodium microphyllum*) in the South Florida Natural Areas" – 150 pages.

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Jayachandran, K., and K.G. Shatty. 2009. Final Report to Everglades National Park on "Discovery of Biocontrol Agent in the Hole-in-the Donut Pilot Restoration Program" – 120 pages.

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Bhat, M. G., **K. Jayachandran,** A. Melesse, and S. Koptur. 2006. "Curriculum Development, Curricular Development and Capacity Building in Agroecology Sciences." Annual Progress Report Sumitted to the US Department of Agriculture under the Cooperative Agreement 2005-38422-15940, Department of Environmental Studies, Florida International University, Miami, FL

Jayachandran, K., and K.G. Shetty. 2006. Discovery and Development of Potential Microbial Bio-Control Agents for Brazilian Pepper Suppression in the Everglades National Park. Annual Report. 35 Pages.

Jayachandran, K. 2006. Investigation of Silver Chemicals for Wood Preservation: Effect on soil Biota. International Lead and Zinc Organization, Raleigh, NC. Annual Report. 25 pages.

Jayachandran, K 2005. Brazilian Pepper Suppression in the Soil Disposal Mounds in the Hole-In-The-Donut Pilot Restoration Program, Everglades National Park. Annual Report. 15 pages.

Jayachandran, K., and K.G. Shetty. 2005. Discovery and Development of Potential Microbial Bio-Control Agents for Brazilian Pepper Suppression in the Everglades National Park. Annual Report. 42 pages.

Jayachandran, K. 2006. Arbuscular-Mycorrhizal Colonization and Interactions with an Endangered Plant Species, *Ziziphus celata* (Rhamnaceae). Project Manager, Carl Weekly, Archbold Biological Station, Lake Placid, FL. Final Report. 17 pages.

Jayachandran, K. 2005. Investigation of Silver Chemicals for Wood Preservation: Effect on soil Biota. International Lead and Zinc Organization, Raleigh, NC. Annual Report. 20 pages.

Ebadian, M.A., P. Pant, Y. Katsenovich, Z. Oztruck, **K. Jayachandran,** and Y. Cai. 2003. Determination of natural attenuation mechanisms and kinetics. Year end technical report for the fiscal year 2003. DOE – Office of Environmental Management, Office of Science and Technology, Grant No. DF-FG26-00NT40806.

Jayachandran, K., and R. McMullan. 2003. Brazilian Pepper Suppression in the Soil Disposal Mounds in the Hole-In-The-Donut Pilot Restoration Program, Everglades National Park. Annual Report. 48 pages.

Jayachandran, K., and K.G. Shetty. 2003. Discovery and Development of Potential Microbial Bio-Control Agents for Brazilian Pepper Suppression in the Everglades National

Park. Annual Report. 18 pages.

Allen. M, J. Ealy, S. Hewins, Y. Cai, and **K. Jayachandran.** 2003. Oak Ridge – Support for the Mercury Center of Excellence. Technical Progress Report November 2002-November 2003. U.S.DOE, Office of Environmental Management, Office of Science and Technology. 66 pages.

Allen. M, L. Moos, Y. Katsonovich, Z. Osturk, P. Pant, **K. Jayachandran,** and Y. Cai. 2003. Determination of Natural Attenuation Mechanisms and Kinetics. Technical Progress Report November 2002-November 2003. U.S.DOE, Office of Environmental Management, Office of Science and Technology. 58 pages.

Gaiser, E.E., J.H. Richards, J.C. Trexler, D. Lee, A. Edwards, G. Noe, D.L. Childers, R.D. Jones L.J. Scinto, and **K. Jayachandran**. 2003. Numerical Interpretation of Class III Narrative Criteria for Everglades Wetlands. Compendium Report. 336 pages.

Ross, M., **K. Jayachandran**, P. Stone, B. Huang, J. Walters, P. Ruiz, D. Reed, D. Stockman, S. Sah, D. Nolan, J. Sah, D. Jones, and S. Oberbauer. 2002. Everglades National Park Tree Islands: Interactions of vegetation, hydrology, and soils. Annual Report. 97 pp.

Jayachandran, K, and R. McMullan. 2001. Brazilian Pepper Suppression in the Soil Disposal Mounds in the Hole-In-The-Donut Pilot Restoration Program, Everglades National Park. Annual Report. 40 pp.

Ross, M., **K. Jayachandran**, P. Ruiz, D. Reed, E. Mickler, D. Stockman, S. Oberbauer, and P. Stone. 2001. Everglades National Park Tree Islands: Interactions of vegetation, hydrology, and soils. Annual Report. 27 pp.

Ross, M., P.L. Ruiz, D.L Reed, **K. Jayachandran**, C.L. Coultas, J.P. Sah, and M.T. Lewin. 2001. Assessment of marsh vegetation responses to hydrological restoration in Shark Slough, Everglades National Park. Final Report 2000-2001. 99 pp.

Jayachandran et al., 2001. Numerical Interpretation of Class III Narrative Criteria for Everglades Wetlands. Soils and Microbiology section. Annual Report.

Jayachandran et al., 2000. Numerical Interpretation of Class III Narrative Nutrient Criteria for Everglades Wetlands. Soils and Microbiology section –Annual Report.

Ross, M., P.L. Ruiz, D.L Reed, **K. Jayachandran**, J.P. Sah, and M.T. Lewin. 2000. Assessment of marsh vegetation responses to hydrological restoration in Shark Slough, Everglades National Park. Annual Report 1999-2000. 42 pp.

Jayachandran et al., 1999. Numerical Interpretation of Class III Narrative Nutrient Criteria for Everglades Wetlands. Soils and Microbiology section –Annual Report.

Jayachandran, K. 1998. Pollution Detectives. *In:* Research News, SERP, FIU, Vol.1, Issue

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Jayachandran et al., 1998. Numerical Interpretation of Class III Narrative Nutrient Criteria for Everglades Wetlands. Soils and Microbiology section –Annual Report.

Book Reviews

Book review of Ecology: Concepts and Applications by Manual C. Molles Jr. Third Edition. 2005. 622 pp. McGraw Hill Higher Education.

PRESENTED PAPERS AND LECTURES

Refereed Conference Presentations:

Accepted abstracts for conference paper presentations

*Denotes Person presented paper.

Locke, J*., Troxler, T., Sukop, M., Scinto, L., **Jayachandran K**. 2023. Phytoremediation with Cut-Flowers on Floating Treatment Wetlands (FTW) in South Florida. Oral and Poster presentation for CREST All Hands Meeting at Fairchild Gardens, Miami, FL. April 12-13th, 2023.

Locke, J*., Troxler, T., Sukop, M., Scinto, L., **Jayachandran K.** 2023. The Power of Flowers on Floating Treatment Wetlands. Invited lecture provided for The Nature Conservancy as a part of their Winter Lecture Series. Blowing Rocks Preserve, Jupiter, FL. March, 22nd, 2023.

Locke, J*., Troxler, T., Sukop, M., Scinto, L., **Jayachandran, K.** 2023. Cultivating Cut-Flowers on Floating Treatment Wetlands to Maximize Nutrient Remediation on Eutrophic Water in South Florida. Oral Presentation at the FIU Annual Agroecology Symposium. FIU. Miami, FL. March, 16th 2023.

Locke, J*., Troxler, T., Sukop, M., Scinto, L., **Jayachandran, K.** 2023. Phytoremediation with Cut-Flowers on Floating Treatment Wetlands in S. FL. Oral Presentation at the FIU Department of Earth and Environment Graduate Symposium. FIU. Miami, FL. Feb, 17th 2023.

Locke, J*., **Jayachandran, K**. 2022. Phytoremediation with Cut-Flowers on Floating Treatment Wetlands in S. FL. Invited talk for Agroecology high school immersion day. FIU Miami, FL Nov 14th, 2022.

Locke, J*., Troxler, T., Sukop, M., Scinto, L., **Jayachandran, K.** 2022. Phytoremediation with Cut-Flowers on Floating Treatment Wetlands in S. FL. Invited Seminar for Curtis and Rogers Landscape Architecture Firm. Miami, FL June 9th, 2022.

Blaire Kleiman*, Suzanne Koptur, and **Krishnaswamy Jayachandran.** 2022. Weeds Enhance Pollinator Diversity and Fruit Yield in Mango. Botanical Society of America Annual Conference, Alaska.

Blaire Kleiman*, Suzanne Koptur, and **Krishnaswamy Jayachandran.** 2022. Weeds Enhance Pollinator Diversity and Fruit Yield in Mango. Entomological Society of America Annual Conference.

Locke, J*., Troxler, T., Sukop, M., Scinto, L., **Jayachandran, K.** 2022. Mesocosm Trials of Cut-flowers on Floating Treatment Wetlands as a Phytoremediation Strategy for Eutrophic Water in South Florida. Joint Aquatic Science Meeting. Grand Rapids May 16, 2022.

Locke, J*., and **Jayachandran K.** 2021. Phytoremediation Capacity of Cut-Flowers on Floating Treatment Wetlands in South Florida. International Conference on Environment and Society: Watershed Processes in the Face of Dynamic Landscapes and Climate Change. Virtual conference hosted by FIU's Institute of Environment, November 22, 2021

Locke, J*., and **Jayachandran K.** 2021. Mesocosm Trials of Cut-flowers on Floating Treatment Wetlands as a Phytoremediation Strategy for Eutrophic Water in South Florida. Coastal and Estuarine Research Federation (CERF). Biannual Virtual Conference. Nov. 11th, 2021

Locke, J*., and **Jayachandran K.** 2021. Cut-flowers on Floating Treatment Wetlands as a Phytoremediation Strategy for Eutrophic Water in South Florida. Greater Everglades Ecosystem Restoration (GEER) Conference. Miami, Florida. April 2021

Blaire Kleiman*, Suzanne Koptur, and **Krishnaswamy Jayachandran.** 2020. Weeds, Pollinators, and Parasitoids - Using Weeds for Insect Manipulation in Agriculture. Botany 2020 Annual Meeting.

Blaire Kleiman*, Suzanne Koptur, and **Krishnaswamy Jayachandran.** 2020. Weeds, Pollinators, and Parasitoids - Using Weeds for Insect Manipulation in Agriculture. Entomological Society of America Annual Meeting.

Sugino, D*. Khoddamzadeh, A. Salazar-Amoretti, D. and **Jayachandran, K**. 2019. Influence of Vermicompost Extracts on Secondary Metabolites in *Solanum lycopersicum* within South Florida. Florida International University's 2019 Agroecology Symposium. April 4th, 2019

Lamar Burton*, **Krishnaswamy Jayachandran**, and Shekhar Bhansali. 2019. Sensors in Agriculture: Achieving novel Plant-Soil-On-A-Chip sensing framework for fertilizer screening and crop phenotyping. FEF McKnight Doctoral Progress Meeting, February 2019, FIU, Miami, FL

David Berthold*, Miroslav Gantar, Kateel Shetty, **Krishnaswamy Jayachandran**, and Dail Laughinghouse. 2019. Isolation, cultivation, and characterization of a new alakaliphilic diatom Fistulifera alcalina. February 2019, Environmental Science Program Lecture, Broward College, Davie, FL

Lamar Burton*, Yameserach Mekonnen, Arif Sarwat, Shekhar Bhansali, and **Krishnaswamy Jayachandran.** 2018. Exploring wireless sensor network technology in sustainable okra garden: A comparative analysis of okra grown in different fertilizer treatment. International Conference on Precision Agriculture, June 2018, Montreal, Quebec, Canada

Krish Jayachandran*, Mahadev Bhat, Kateel Shetty, Amir Khoddamzadeh, and Eric Betancourt. 2018. An Innovative Agricultural Science Education at a Non-Land Grant University. North American Colleges and Teachers of Agriculture Annual Coference, June 12-15, 2018, Ames, IA

Ganesh Khadka*, Jessica Dominguez, **Krishnaswamy Jayachandran**, and Kateel Shetty. 2018. Synergistic activity potential of Stevia rebaudiana whole extract against environmental bacteria. American Society for Microbiology Annual Conference, July 2018, Atlanta, GA

Jennifer Gil*, **Krishnaswamy Jayachandran**, Miroslav Gantar, and Kateel Shetty. 2018. Sensitivity of marine cyanibacteria and gree microalgae to nano and bulk zinc oxides. American Society for Microbiology Annual Conference, July 2018, Atlanta, GA

David Berthold*, Miroslav Gantar, Nicholas Engene, Kateel Shetty, **Krishnaswamy Jayachandran.** 2018. Omega-7 producing alkaliphilic diatom Fistulifera alcalina sp. Nov. from Lake Okeechobee, Florida. PSA/ISOP Annual Conference, August 2018, Vancouver, BC, Canada

Ariel Freidenreich*, Mary Tiedeman, **Krishnaswamy Jayachandran,** and Pushpa Soti. 2017. Cover Crop Termination Times for Building Soil Carbon in South Florida Soils. ASA-CSSA-SSSA Annual Conference, October 20-25, 2017, Tampa, FL

Riera, D*., Khoddamzadeh, A.A., Lewis, C., and **Jayachandran, K**. 2017. Florida Cowhorn Orchid: an Alternative *Ex-situ* Conservation Method for the Endangered *Cyrtopodium punctatum*. Florida Rare Task Force Conference. Naples, Florida.

Rodriguez A*., Khoddamzadeh, A.A., Vendrame, W., **Jayachandran K**. and Freidenreich, A. 2017. Poinsettia Fertilizer Management: Application of Optical Sensor Technology. Agroecology Symposium. Miami, Florida.

Riera, D*., Khoddamzadeh, A.A., Lewis, C., and **Jayachandran, K**. 2016. *Ex-situ* Conservation Strategy: Cryopreservation of Threatened Floridian Orchids by Encapsulation-Dehydration. International Tropical Botany and Pine Rockland Conference at Fairchild. Miami, Florida.

Duarte, E*., Vandenberg, K., Khoddamzadeh, A.A., Supurna, D., Mathee, K. and **Jayachandran, K**. 2016. Panax Ginseng Extracts as a Novel Antibiotic. ASHS Annual Conference. Atlanta, Georgia.

Font, A*., Khoddamzadeh, A.A., Supurna, D., Mathee, K. and **Jayachandran, K**. 2016. Anti-Bacterial Properties of the Annona Montana. ASHS Annual Conference. Atlanta, Georgia.

Barraza, G.A*., Khoddamzadeh, A.A., Riera, D. and **Jayachandran, K**, Shetty, K. Handheld Sensors Application for Fertilizer Management in Landscaping Ornamental *Justifia Brandegeana.* 2016. ASHS Annual Conference. Atlanta, Georgia.

Riera, D*., Khoddamzadeh, A.A., Lewis, C., Vendrame, W. and **Jayachandran, K**. 2016 Commercial Orchid Production: Artificial/Synthetic Seed Approach. ASHS Annual Conference. Atlanta, Georgia.

Riera, D*., Khoddamzadeh, A.A., Lewis, C., Vendrame, W. and **Jayachandran,** K. 2016 Orchids on Ice: Protecting Imperiled Floridian Orchids through Cryopreservation. ASHS Annual Conference. Atlanta, Georgia.

David Berthold*, Nina De la Rosa, **Krish Jayachandran**, Miroslav Gantar, Kateel G. Shetty. 2016. Omega-7 Producing Alkaliphilic Diatom Fistulifera sp. 154-3 from Lake Okeechobee, Florida Algae Biomass Summit, Phoenix, AZ, October 23 to 26, 2016.

Ariel Friedenreich*, Pushpa Soti, Brittany Harris, Eric Betancourt, Mariana Santos Reis, Shagufta Gafar, and **Krish Jayachandran**. 2016. Effect of prescribed burn on pine rocklands soil health and plant communities within FIU's nature preserve. ASA, CSSA, SSSA International Annual Conference, Nov 6-9, Phoenix, AZ

Ariel Friedenreich* and **Krish Jayachandran**. 2016. Comparison of Synthetic versus Organic Heribiceds/Insecticides on Arbuscular Mycorrhizal Fungi. ASA, CSSA, SSSA International Annual Conference, Nov 6-9, Phoenix, AZ – **Ariel Won an Award in national competition.**

James Dautel* and **Krish Jayachandran**. 2016. Developing remote sensing tools to identify flooding stress rise in Avocado trees. ASA, CSSA, SSSA International Annual Conference, Nov 6-9, Phoenix, AZ

Krish Jayachandran*. 2017. Environmental Policy and Management through Education at Florida International University. NCSE Annual Conferrence, Jan 24-26, Washington, DC.

Betancourt, E., M. G. Bhat*, **K. Jayachandran**, K. Shetty and A. Khoddamzadeh. Innovative Curriculum for Agriculture Training and Career for Hispanics. Poster Presented at the USDA HSI National Project Directors Meeting, Albuquerque, New Mexico, February 2017.

Bhat, M. G*., **K. Jayachandran**, N. de La Rosa, and J. Mills. "Role of Veterans in Agriculture and Food Security: Factors Influencing their Long-Term Success in Farming." Presented at the International Society of Ecological Economics Conference, Washington, DC, June,2016

Krish Jayachandran*, Eduardo Peres, and Pushpa Soti. 2015. Mycorrhizal Fungi: A Biological Control Agent of Plant Parasitic Nematodes. ASA, CSSA, SSSA International Annual Conference, Nov 15-18, Minneapolis, MN

Krish Jayachandran*, Joshua Munoz-Jimenez, and Pushpa Soti. 2015. Using Summer Cover Crops for Nematode Control in a Low Input Agriculture Systems. ASA, CSSA, SSSA International Annual Conference, Nov 15-18, Minneapolis, MN

Andrea Salas*, Suzanne Koptur, and **Krish Jayachandran**. 2015. Effect of Host Plant Density on Herbivores and their Parasitoids: A Field Experiment with a Native Perennial Legume. ASA, CSSA, SSSA International Annual Conference, Nov 15-18, Minneapolis, MN

Krish Jayachandran*, Len Scinto, and Mike Ross. 2015. Phosphatases Enzymes Activity in Phosphorus Rich Everglades Tree Islands Ecosystem. GEER Conference, April 21 -23, 2015, Coral Springs, FL

Pushpa Soti*, **Krish Jayachandran**, and John Volin. 2015. Influence of Soil biogeochemical Properties on Exotic Invasive Lygodium Microphyllum: A Cross Continent Comparison of Soil Characteristics to Invasion Success. GEER Conference, April 21 -23, 2015, Coral Springs, FL

Krishnaswamy Jayachandran*, Mahadev Bhat, Stephany Alvarez, and Kateel Shetty. 2014. Experiential and Experimental Learning Approaches for Undergraduate Education in Agroecology. ASA, CSSA, SSSA International Annual Conference, Nov 2-5, Long Beach, CA

Kateel G. Shetty*, **Krish Jayachandran**, and Mahadev Bhat. 2013. Models for Teaching Interdisciplinary Biofuels Science: A Multi-pronged Approach. 59th Annual North American Colleges and Teachers of Agriculture Conference. June 25-29, 2013, Blacksburg, VA

Mahadev Bhat*, **Krish Jayachandran**, and Stephany Alvarez. 2013. Mentoring undergraduate students in agroecology. 59th Annual North American Colleges and Teachers of Agriculture Conference. June 25-29, 2013, Blacksburg, VA

Krish Jayachandran*, Mahadev Bhat, and Kateel Shetty. 2013. Attended a meeting at Biofuels Center, University of Tennessee, Knoxville, TN, July 2013. To develop collaboration between FIU and UT

Priyanka Narendar*, Miroslav Gantar, and **Krishnaswamy Jayachandran**. 2010. Screening and Identification of Everglades algal isolates for Biodiesel production. Florida Energy Systems Consortium, September 28-29, 2010. Orlando, FL

Krish Jayachandran*, Kateel G. Shetty, Tainya C. Clarke, Shili Miao, LeRoy Rodgers, and Robert Johnson. 2010. Potential for use of native phytopathogens as biocontrol agents for invasive plant species. Greater Everglades Ecosystem Restoration, The Greater Everglades: A Living Laboratory Change – Planning, Policy, and Science Meeting, July 12-16, 2010, Naples, FL

Mahadev Bhat* and **Krish Jayachandran**, 2010. Agriculture science education in minority serving, urban Universities: Service learning, collaboration, and community engagement. National Colleges and Teachers of Agriculture Conference, June 22-25, 2010, Pennsylvania State University, State College, PA

Krish Jayachandran*, Kateel G. Shetty, LeRoy Rodgers, Shili Miao, and Robert Johnson. 2010. Potential for use of native phytopathogens as biocontrol agents for Old World Climbing fern (Lygodium microphyllum). Florida Exotic Pest Plant Council Symposium, April 5-8, 2010, Crystal River, FL

Krish Jayachandran* and Mahadev Bhat. 2009. Multicultural Undergraduate Scholars in Agroecology at Florida International University: In Interdisicplinary Approach. Joint MSP/NNF Project Directors and Beneficiaries Meeting, October 20-21, 2009, 1410 Waterfront Center, Washington DC Invited Speaker.

Krish Jayachandran*, Kateel G. Shetty, and Lynne Feiber. 2009. Microbial Biodegradation of Brevetoxins – Isolation and Screening of Potential Marine Bacteria. March 9-10, 2009, ARCH Meeting, Florida International University.

Krish Jayachandran* and Kateel G. Shetty. 2009. Native phytopathogens as biocontrol agents: Problems and potentials in the management of invasive exotic species. Weed Science Society of America National Conference February 9 – 13, 2009 Orlando, FL

Krish Jayachandran*, Mike Ross, and Steve Oberbauer. 2008. Structural and functional diversity of microbial communities in pristine wetlands of the Everglades. Soil Science Society of America, American Society for Agronomy, and Crops Science Society of America Annual Conference, October 5 – 8, 2008, Houston, TX

Krish Jayachandran*, Kateel G. Shetty, and Lynne Feiber. 2008. Microbial Biodegradation of Brevetoxins – Isolation and Screening of Potential Marine Bacteria. March 3-4, 2008, ARCH Meeting, Florida International University.

Krish Jayachandran*, Tainya C. Clarke, and Kateel G. Shetty. 2008. A Potential Biological Control Agent for Invasive Plant Species, Old World Climbing Fern (*Lygodium microphyllum*). 23rd Annual Symposium, Florida Exotic Pest Council, April 21- 24, 2008, Jacksonville, FL. Invited Speaker.

Krishnaswamy Jayachandran*, Seema Sah, and Jeffrey Ellis. 2007, Investigation of Silver Chemicals for Wood Preservation and Soil Biology. Soil. Soil Science Society of America Annual Meeting, Nov. 4-8, 2007, New Orleans, LA

Joel Trexler*, Evelyn Gaiser, Len Scinto, Daniel Childers, and **Krishnaswamy Jayachandran**. 2007. Phosphorus Load-Dependent Limitation of Aquatic Consumers in an Oligotrophic Wetlands. North American Benthological Society 55th Annual Meeting, Columbus, SC

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Sugino Daphne, Salazar Amoretti Diego, and **Jayachandran Krishnaswamy**. 2023. Effect of Compost Teas on the Physicochemical Characteristics of Turmeric (*Curcuma longa*). ASA-SSSA-CSSA Annual Conference. Oct 29 – Nov 1, 2023, St. Lois, MO.

Krish Jayachandran, Mahadev Bhat, Kateel Shetty, Pushpa Soti, Alexis Racelis, Kulbhushan Grover, and Rolston St_Hilaire. 2023. Broadening Agriculture Science Education for Hispanic Students through Experiential Learning. June 20-24, 2023, NACTA Annual Conference, NMSU, Las Cruces, NM.

Krishnaswamy Jayachandran, David Sotomayor, Maria Consuelo Donato, Randy Stanko, Shad Nelson, and Jose Espiritu. 2023. Promoting Undergraduate Students in Soil, Environmental, and Crop Sciences Careers through Special Experiential Learning Activities. June 20-24, 2023, NACTA Annual Conference, NMSU, Las Cruces, NM.

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Jessica Dominguez, **Krishnaswamy Jayachandran,** Mahadev Bhat, Ed. Stover, and Kateel G. Shetty. 2023. Potential Antimicrobial Agents Against *Candidatus liberibacter asiaticus*, Casual Agent of Huanglongbig. May 19, 2023, Regional Phytopathology Conference, Immokalee, FL

Cabrera, N., Locke, J., Shetty, K., **Jayachandran, K.** 2023. Evaluating Perennial Shrubs as Productive Vegetative Barriers to Reduce Nutrient Runoff. Poster presentation at the FIU Annual Agroecology Symposium. FIU. Miami, FL. March, 16th 2023.

Sugino Daphne, Salazar Amoretti Diego, and **Jayachandran Krishnaswamy**. 2022. Changes in Leaf Secondary Metabolite across Life stages in the Tomato crop (*Solanum lycopersicum*) ASA-SSSA-CSSA Annual Conference. November 7th, 2022, Baltimore, MD.

Vagheeswari Venkadesh, Vivek Kamat, Shekhar Bhansali, and **Krishnaswamy Jayachandran.** 2022. Bio-Degradable Sensors to Detect Nitrates and Phosphates in the Soil. ASA-SSSA-CSSA Annual Conference. November 7th, 2022, Baltimore, MD.

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Khadka, G., Shetty, K. G., Annamalai, T., Tse-Dinh, Y., and **Jayachandran, K.** 2022. Isolation and Characterization of Endophytic Fungi from Medicinal Plant Petiveria alliacea. ASM Microbe Conference Scheduled for June 9th -13th 2022, Washington, DC

Anchal Singh, **Krish Jayachandran**, and Kateel Shetty. 2022. The role of phase-variation in antibiotic resistance of soil bacteria. ASM Microbe Conference Scheduled for June 9th -13th 2022, Washington, DC

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Blaire Kleiman, Suzanne Koptur, and **Krishnaswamy Jayachandran.** 2022. How weeds affect insects in mango, *Mangifera indica*, cultivation of South Florida. Botanical Society of America Conference, Alaska.

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Blaire Kleiman, Suzanne Koptur, and **Krishnaswamy Jayachandran.** 2020. Do weeds support beneficial insects in mango farms? Entomological Society of America Annual Conference.

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Ariel Freidenreich*, Gabriel Barraza, **Krishnaswamy Jayachandran,** and Amir Khoddamzadeh. 2019. Sustainable Fertilizer Management for Ornamental Production in South Florida via Optical Sensor Technology. Florida State Horticultural Society Annual Conference, June 9-11, Orlando, FL

Brandon Rodriguez, Mary Tiedeman, Saoli Chanda, **Krishnaswamy Jayachandran**, and Joelle Sasso. 2019. Effect of environmental stressors on the essential oil quality and quantity of spearmint (Mentha spicata). 2019. American Association for Hispanics in Higher Education Annual Conference, March 1-3, 2019, Costa Mesa, CA

Ariel Friedenreich* and **Krish Jayachandran**. 2019. Developing Sustainable Soil Building Strategies for Tropical Fruit Groves within the South Florida Redland. Soil Science Society of America Annual Conference, January 6-9, San Diego, CA

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Mary Tiedeman* and **Krish Jayachandran**. 2019. Do Bioprecipitating Fungi Reduce Phosphorus (P) Solubility in South Florida's Calcareous Soils. Soil Science Society of America Annual Conference, January 6-9, San Diego, CA

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Jessica Dominguez, **Krishnaswamy Jayachandran,** Mahadev Bhat, and Kateel Shetty. 2018. Discovery and Screening of Potential Antimicrobial Coumpounds against Candidatus Liberibacter asiaticus. USDA-NIFA-HSI PDs Conference, March 19-21, 2018, Washington, DC

Alana Rodriguez, Ariel Freidenreich, Amir Khoddamzadeh, and **Krishnaswamy Jayachandran.** 2017. Application of Optical Sensor Technology for Sustainable Fertilizer Management of Euphorbia pulcherrima. ASA-CSSA-SSSA Annual Conference, October 20-25, 2017, Tampa, FL

Gabriel Barraza, Ariel Freidenreich, Amir Khoddamzadeh, and **Krishnaswamy Jayachandran. 2017.** Non-Destructive Handheld Sensors for Sustainable Fertilizer Management of Justicia brandegeana. ASA-CSSA-SSSA Annual Conference, October 20-25, 2017, Tampa, FL

Daniel Calzadilla, Mary Tiedeman, ad **Krishnaswamy Jayachandran.** 2017. Occulation Vs Tillage: How Does Cover Crop Termination Method Influence Dynamic Soil Properties? ASA-CSSA-SSSA Annual Conference, October 20-25, 2017, Tampa, FL

Krish Jayachandran, Mahadev Bhat, and Kateel Shetty. 2016. Experiential and Experimental Learning Approaches in Agriculture Sciences at Florida International University. Poster presentation at NACTA Annual Conference, June, 21-24, Honolulu, Hawaii.

K. G. Shetty, **K. Jayachandran**, M. Gantar, and D. E. Berthold. Mixed Cultures of Freshwater Microalgae and Bacteria for High Lipid Productivity. ASM Microbe 2016, June 16-June 20, 2016, in Boston, Massachusetts.

L. Gibson, D. Berthold, **K. Jayachandran**, K. G. Shetty. Comparative Tolerance Assessment of Fresh And Marine Water Phototrophic Microorganisms To Nano And Bulk Zinc Oxides. ASM Microbe 2016, June 16-June 20, 2016, in Boston, Massachusetts.

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David Berthold, Kateel Shetty, **Krish Jayachandran,** and Miraslov Gantar. 2015. Using Mixed Cultures of Microalgae and Yeast for Higher Biomass and Lipid Production. 115th American Society for Microbiology Annual Conference. May 30-June 2, 2015, New Orleans, LA

Ariel Friedenreich, Pushpa Soti, and **Krish Jayachandran.** 2015. Comparison of Synthetic versus Organic Heribiceds/Insecticides on Arbuscular Mycorrhizal Fungi. ASA, CSSA, SSSA International Annual Conference, Nov 15-18, Minneapolis, MN

N. Dela Rosa, B. Toprack, N. Damaso, and **K. Jayachandran,** 2014. Comparison of Rhizospher and non-Rhizosphere Microbial Communities of Avocado Trees Between four Different Soil Conditions in Miami-Dade County, Florida. 114th American Society for Microbiology Annual Conference. May 17-20, 2014, Boston, MA

N. Dela Rosa, **K. Jayachandran,** and K.G. Shetty. 2014. Isolation and Characterization of Alkaline Tolerant Freshwater Microalgae from Lake Okeechobee for Algae-Based Biofuels. 114th American Society for Microbiology Annual Conference. May 17-20, 2014, Boston, MA

Angie Fleurissaint, Stewart Reed, and **Krish Jayachandran.** 2014. Slow Release Nutrients Study on Queen and Chinese Palms. American Society for Horticulture, Orlando, FL

Daria Boglaienko, **Kriahnaswamy Jayachandran,** Pushpa Soti, and Kateel Shetty. 2013. Buckwheat as a phosphorus scavenger: soil analysis and the role of mycorrhizal fungi in P uptake. Water, Food, Energy, and Innovation for Sustainable World. ASA, CSSA, SSSA International Annual Conference, Nov 3-6, Tampa, FL

Bhat, M.G., **Jayachandran, K.** and Alvarez-Ventura, S. "Connecting Borders through Biofuels: Collaborations between FIU and Indian Agricultural Universities and Agencies." Poster presentation at the 99th Indian Science Congress, Bhuvaneswar, India, January 2012.

Alvarez-Ventura, S., Bhat, M.G., **Jayachandran, K.** and Velez, T. "Life Cycle Analysis of Biodiesels in India." Poster presentation at the 99th Indian Science Congress, Bhuvaneswar, India, January 2012.

Priyanka Narendar and **Krish Jayachandran.** 2010. Sustainable energy production from algae – screenting for higher lipid content and biodiesel. August, FIU Energy Group Conference.

Pushpa Soti* and **Krish Jayachandran.** 2010. Role of Mycorrhizal Fungi Supporting Invasiveness of Old World Climbing Fernin South Florida Natural Areas. Greater Everglades Ecosystem Restoration, The Greater Everglades: A Living Laboratory Change – Planning, Policy, and Science Meeting, July 12-16, 2010, Naples, FL

Anusha. Ramani*, **Krish Jayachandran,** Kathleen Rein, and Kateel Shetty. 2009. Microbial Degradation of Microcystin in Florida Fresh Waters. American Society for Microbiology Annual Conference, May 17 - 21, 2009, Philadelphia, PA

Kateel G. Shetty, K.S. Rein, L. E. Fleming, and **K. Jayachandran***. 2009. Isolation of Brevetoxin Biodegrading Marine Bacteria. American Society for Microbiology Annual Conference, May 17 - 21, 2009, Philadelphia, PA

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Prevalence and potential for biocontrol agents. Weed Science Society of America National Conference February 9 – 13, 2009 Orlando, FL

Shea Dunifon*, **Krish Jayachandran,** Cinnasamy Durairaj, and Hari Sharma. 2008. An exploration into Integrated Pest Mnagement techniques in Tamil Nadu and Andhra Pradesh, India. Soil Science Society of America, American Society for Agronomy, and Crops Science Society of America Annual Conference, October 5 – 8, 2008, Houston, TX

Krish Jayachandran*, Kateel G. Shetty, Tainya C. Clarke, Craig S. Smith, Shili Miao, and LeRoy Rodgers. 2008. Development of potential biological control agents for invasive plant species using native pathogens in South Florida. Greater Everglades Ecosystem Restoration, For Everglades Restoration 2050: Advancing the Science to Achieve Success – Planning, Policy, and Science Meeting, July 28 – August 1, 2008, Naples, FL

Kateel G. Shetty, J. V. Huntzicker*, K.S. Rein, L. E. Fleming, Y. Cai, L. Fieber, and **K. Jayachandran***. 2008. Isolation of Potential Polyether Algal Toxin Biodegrading Marine Bacteria using Salinomycin. American Society for Microbiology Annual Conference, May 17 - 21, 2008, Boston, MA

Erin J. Hanan*, Michael S. Ross, and **Krishnaswamy Jayachandran**. 2008. Multi-scaled Patterning of Plant-Soil-Water Interactions across Tree Islands and Marshes within the Prairie and Slough Landscapes of Everglades National Park. All Scientists Meeting, FCELTER, March 17-18, 2008, Fairchild Tropical Botanical Garden.

Kateel G. Shetty*, **Krish Jayachandran,** Jose A. Pacheco-Soto, and Craig S. Smith. 2008. Potential for use of Natural Plant Pathogens of Brazilian Pepper (*Schinus terebinthifolius* Raddi) in the Everglades National Park.23 Annuall Symposium, Florida Exotic Pest Council, April 21- 24, 2008, Jacksonville, FL

Ricardo Joseph*, Stewart Reed, Cristina Clark-Cuadrado and **Krishnaswamy Jayachandran.** 2007 Effects of Endosulfan on Soil Respiration. Soil Science Society of America Annual Meeting, Nov. 4-8, 2007, New Orleans, LA

Min Gao*, Kateel G. Shetty, Bernd Simoneit, **Krishnaswamy Jayachandran**, and Rudolf Jaffé 2007. Preliminary Results on the Occurrence, Origin and Environmental Implication of *Ent*-Kaurenes in the Everglades Freshwater Wetlands. FCELTER All Scientists Meeting, March 19-20, Fairchild Tropical Garden, Miami, FL

Jose Pacheco*, Kateel G. Shetty, **Krish Jayachandran,** and Craig Smith. 2007. Biological Control of Invasive Plants in South Florida. Cell and Molecular Biology Symposium, St. Thomas University

Jose Pacheco*, Kateel G. Shetty, Mahadev Bhat, and **Krish Jayachandran**. 2007. Biological Control of Brazilian Pepper. Hispanic Students Leadership Conference, Washington, DC

Jackie V. Huntzicker*, K.G. Shetty, K.S. Rein, and **K. Jayachandran***. 2006. Biodegradation of Polyether Algal Toxins – Isolation of Potential Marine Bacteria. 106th American Society for Microbiology Annual Conference, May 21-25, 2006, Orlando, FL

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Jeffrey Ellis* and **Krish Jayachandran.** Future Needs for Environmental Research on Silver and Resources Available. 2006. 102nd American Wood Preservatives Association Conference, April 9-12, 2006, Austin, TX

Shea Dunifon*, EVR 3rd year student. 2006. An Inventory of Arbuscular Mycorrhizae in Agricultural Crops of South Florida. Poster presented at FIU Honors College Research Conference, March 30, MARC Building, FIU. **Krish Jayachandran** serves as a mentor.

Griffith*, Robert T., **Jayachandran, Krishnaswamy**, Shetty, Kateel, G., Whitstine, William, Furton, Kenneth G. 2005. Hazardous Indoor Molds Detection Application in Forensic Sciences. 105th American Society for Microbiology Annual Conference, June 5-9, 2005, Atlanta, GA

Seema Sah, Stewart Reed, and **Krish Jayachandran***. 2005. Effect of Flooding on Arbuscular Mycorrhizal Colonization in Snap Beans. Soil Science Society of America Annual Meeting, Nov. 6-10, 2005, Salt Lake City, UT

Krish Jayachandran*, Seema Sah*, Ximena Mesa, and Jeffrey Ellis. 2005. Investigation of Silver Chemicals for Wood Preservation. ACS South Florida Chapter Meeting, Nov 12, 2005, NOVA SE University, Fort Lauderdale, FL

Robert T. Griffith*, **Krish Jayachandran**, William Whitstine, and Kenneth G. Furton. 2005. Canine and SPME/GC/MS Detection of Microbial Volatile Organic Compounds emitted from *Stachybotrys chartarum*, *Penicillium chrysogenum*, and *Aspergillus versicolor*. American Academy of Forensic Sciences, February 21-26, 2005, New Orleans, LA

Teresita Bollar*, Biology 4th year student. 2005. Allelopathic effects of Ragweed compound Thiarubrin-A on Brazilian pepper (*Shinus terebinthifolius*). Poster presented at First Student Research and Artistic Initiatives Annual Conference, March 10, MARC Building, FIU.

Krish Jayachandran serves as REU mentor. This work is a collaborative effort between me, Dr. Shetty, and Dr. Kevin O' Shea from Chemistry and Biochemistry.

Jackie Huntizicker*, Liberal Studies, 3rd year. 2005. Studies on Okadaic Acid Biotranformation/Biodegradation – Isolation and Screening of Potential Marine Bacteria. Poster presented at First Student Research and Artistic Initiatives Annual Conference, March 10, MARC Building, FIU. **Krish Jayachandran** serves as REU mentor. This work is a collaborative effort between me, Dr. Shetty and Dr. Kelly Rein from Chemistry and Biochemistry.

Sarah Lowe*, Biomedical Engineering, 3rd year. 2005. The analysis of Oak Ridge Soil Samples to Determine the Absorption and Desorption Properties of Mercury. Poster presented at First Student Research and Artistic Initiatives Annual Conference, March 10, MARC Building, FIU. **Krish Jayachandran** serves as REU mentor. This work is a collaborative effort between me, Marshall Allen and Dr. Yong Cai from Chemistry and Biochemistry.

Robert T. Griffith*, Kenneth G. Furton, **Krish Jayachandran**, and William Whitstine. 2004. Canine and SPME/GC/MS Detection of Microbial Volatile Organic Compounds emitted from two problematic indoor molds: *Penecillium chrysogenum* and *Aspergillus versicolor* Joint Meeting of the Southern Association of Forensic Scientists (SAFS), the Mid-Atlantic Association of Forensic Scientists (MAAFS), the Mid-Western Association of Forensic Scientists (MAFS) and the Canadian Society of Forensic Science (CSFS), September 19-24, 2004, Orlando, FL

Seema Sah*, Stewart Reed, **Krish. Jayachandran**, and Susana Mendiola. 2004. Interactions of Arbuscular Mycorrhizal Fungi with Bean Plants under FloodedConditions. Soil Science Society of America Annual Meeting, Oct. 31-Nov. 4, 2004, Seattle, WA

Kateel G. Shetty, **Krish Jayachandran***, and Michael R. Norland. 2004. Natural Plant Pathogens of Brazilian Pepper (*Schinus terebinthifolius* Raddi) in the Everglades National Park: Potential for Biological Control. Soil Science Society of America Annual Meeting, Oct. 31-Nov. 4, 2004, Seattle, WA

Tainya C. Clarke*, **Krish Jayachandran**, Kateel G. Shetty, and Michael R. Norland. 2004. A Biological Control Agent for Invasive Plant Species, Old World Climbing Fern (*Lygodium microphyllum*). National Conference on Ecosystem Restoration, Dec. 05-10, 2004, Orlando, FL

Kateel G. Shetty*, **Krish Jayachandran**, and Michael R. Norland. 2004. Natural Plant Pathogens of Brazilian Pepper (*Schinus terebinthifolius* Raddi) in the Everglades National Park: Potential for Biological Control. National Conference on Ecosystem Restoration, Dec. 05-10, 2004, Orlando, FL

Elizabeth M. Struhar, **Krish Jayachandran***, Michael S. Ross, and Steven F. Oberbauer. 2004. The Relationship Between Soil Moisture and Nutrient Availability in Tree Islands of

Shark Slough, Everglades National Park. National Conference on Ecosystem Restoration, Dec. 05-10, 2004, Orlando, FL

K. Jayachandran*, S. Sah, J. Sah, and M. Ross. 2003. Phosphorus Biogeochemistry of the Everglades National Park Tree Island Soils. Ecological Society of America Annual Meeting, August 3-8, 2003, Savannah, GA

J. Entry, P. Gillevet, **K. Jayachandran**, K. Mathee, D. Mills, G. Narasimhan, Y. Wang*, and C. Yang. 2003. Ecoinformatics Tools: Unsupervised Clustering and Classification of Microbial Communities Using ALH Profile Data from 16S rRNA. American Society for Microbiology, 103rd Annual Meeting, May 18-22, 2003, Washington, DC

J. Entry, P. Gillevet, **K. Jayachandran**, K. Mathee, D. Mills, G. Narasimhan, Y. Wang, and C. Yang*. 2003. An Ecoinformatics Tools for Microbial Diversity Studies: Supervised Classification of ALH Profiles of 16S rRNA. American Society for Microbiology, 103rd Annual Meeting, May 18-22, 2003, Washington, DC

Fisher, J.B., and **K. Jayachandran***. 2003. Arbuscular mycorrhizae and their role in plant restoration in subtropical Florida. Joint Conference on the science and restoration of the Greater Everglades and Florida Bay Ecosystem, April13-18, 2003, Palm Harbor, FL

Ruttala, R., D.K. Mills, K. Mathee, and **K. Jayachandran***. 2002. Molecular and Biochemical Characterization of Microbial Communities in Everglades Tree Island Soils. American Society for Microbiology, 102nd Annual Meeting, May 19-23, 2002. Salt Lake City, UT

Entry*, J.A., D.K. Mills, K. Mathee, **K. Jayachandran**, J.J. Fuhrmann, R. Ruttala, and R.E. Sojka. 2002. Influence of Irrigated Agriculture on Soil Microbial Diversity. American Society for Microbiology, 102nd Annual Meeting, May 19-23, 2002. Salt Lake City, UT

McMullen, R., **K. Jayachandran***, and M. Norland. 2002. Brazilian Pepper Suppression Factors on Soil Disposal Mounds in Everglades National Park. Soil Science Society of America Annual Meetings, Nov. 10-14, 2002, Indianapolis, IN

Jayachandran*, K., D. Stockman*, S. Kemp, and R.D. Jones. 2001. Interactions of arbuscular-mycorrhizal fungi and wetland plant species in the everglades ecosystem. P2-164, 3rd International Conference on Mycorrhizae, 8-13 July 2001, Adelaide, South Australia

Fisher*, J.B. and K. Jayachandran. 2001. Arbuscular mycorrhizae and restoration of endangered plants in subtropical Florida. P1-165. 3rd International Conference on Mycorrhizae, 8-13 July 2001, Adelaide, South Australia

Ruttala*, R.K., D. K. Mills, P. M. Gillevet, **K. Jayachandran**, K. Mathee. 2001. Monitoring Microbial Communities in Marsh Sediments by Amplicon Length Heterogeneity (ALH) and ALH-temperature Gradient Capillary Electrophoresis (ALH-TGCE) Fingerprinting. The ASM Conference on Biodegradation, Biotransformation, and Biocatalysis (B3) October 2-6, 2001. San Juan, Puerto Rico

Shetty, K.G., **K. Jayachandran***, L.J. Scinto, R.D. Jones. 2001. Determination of microbial Biomass Phosphorus in the Everglades Wetland Flocculent Detritus. Soil Science Society of America Annual Meetings, Oct. 21-25, 2001, Charlotte, NC

McMullen*, R.T., **K. Jayachandran**, and M.R. Norland. 2001. Suppression of Brazilian Pepper on Soil Disposal Mounds in Everglades National Park. Soil Science Society of America Annual Meetings, Oct. 21-25, 2001, Charlotte, NC

Jayachandran*, K., M. Ross, C.L. Coultas, P. Ruiz, and D.L. Reed. 2001. Soil survey of Shark Slough in the Everglades National Park. Soil Science Society of America Annual Meetings, Oct. 21-25, 2001, Charlotte, NC

Cabrera J., M. Georgiadis, Y. Cai*, and **K. Jayachandran**. 2001. Assesment of arsenic mobility in the golf courses of South Florida. 221 American Chemical Society National Meetings.

Jayachandran*, K., L. Scinto, K.G. Shetty, R.D. Jones, D. Childers, and J. Trexler. 2000. Changes in microbial phosphorus in response to phosphorus addition in the everglades peat soils. Soil Science Society of America Meetings, Nov. 5-9, Minneapolis, MN

Guha*, H., **K. Jayachandran**, F. Maurrasse. 2000. Microbiological reduction of chromium (VI) in presence of pyrolusite-coated sand: Laboratory column experiments and modeling approaches. Geosociety Meetings, Reno, NV

Fisher*, J.B., and **K. Jayachandran**. 2000. Mycorrhizae required for native plant growth on pine rockland soils. Greater Everglades Ecosystem Restoration Conference, Dec. 11-15, Naples, FL

Guha*, H., J.E. Saiers, S. Brooks, and **K. Jayachandran**. 1999. Transport of Chromium through Manganese-Containing Sediments. American Geophysical Union, December 13-17, 1999. San Francisco, CA

Shinde, D., M.R. Savabi*, P.N. Kizza, and **K. Jayachandran**. 1999. Atrazine Sorption and Transport in Three Soils of South Florida. Soil Science Society of America Society of Agronomy meetings, October 31-November 4, 1999. Salt Lake City, UT

Jayachandran*, K., and J. Fisher. 1999. Role of Arbuscular-Mycorrhizae in Tropical Species of South Florida. Soil Science Society of America Society of Agronomy meetings, October 31-November 4, 1999. Salt Lake City, UT

Jayachandran* K., M. Nair, and R.D. Jones. 1998. Role of arbuscular mycorrhizae on the growth of sawgrass under different soil types. American Society of Agronomy 90th National Meetings, Baltimore, MD October 18-22, 1998.

Fisher, J.B., and **K. Jayachandran***. 1997. Mycorrhizae and Restoration of Everglades

Upland Plant Communities (Pine Rockland and Hardwood Hammock). Society for Ecological Restoration 9th Annual International Conference, Ft. Lauderdale, FL November 12-15, 1997.

Moscinski*, J.K., **K. Jayachandran**, and T.B. Moorman. 1996. Mineralization of the Herbicide Atrazine by Agrobacterium radiobacter. American Society for Microbiology 96th National Meeting, New Orleans, LA May 19-23, 1996.

Moscinski, J.K., **K. Jayachandran***, and T.B. Moorman. 1995. Mineralization of the herbicide atrazine by a bacterial isolate. American Society of Agronomy 87th National Meeting, St. Louis, MO, Nov. 1995.

Nedumpara, M.J., T.B. Moorman, and **K. Jayachandran**. 1995. VA-Mycorrhizal effects on herbicide dynamics in plants. American Society of Agronomy 87th National Meeting, St. Louis, MO, Nov. 1995.

Schwab*, A.P., B.A.D. Hetrick, G.W.T. Wilson, and **K. Jayachandran.** 1994 Assessing the role of mycorrhizae in enhancing phosphorus uptake by the host plant. American Society of Agronomy 86th National Meeting, Seattle, WA, Nov. 1994.

Jayachandran*, K., T.B. Moorman, J.M. Novak, N. Stolpe, P.J. Shea, C.A. Cambardella, E.A. Douglass, and M.D. Jawson. 1994. Sorption and degradation of atrazine in soils and subsurface sediments from the American midwest. Eighth IUPAC International Congress of Pesticide Chemistry, Washington, DC, July 1994.

Nedumpara, M.J., **K. Jayachandran***, and T.B. Moorman. 1994. The interactions of pesticides, VAM fungi and crops. Eighth IUPAC International Congress of Pesticide Chemistry, Washington, DC, July 1994.

Jayachandran*, K., T.R. Steinheimer, L. Somasundaram, R.S. Kanwar, T.B. Moorman, and J.R. Coats. 1992. Atrazine and degradates in groundwater beneath continuous corn under no-till management. American Society of Agronomy 84th National Meeting, Minneapolis, MN, Nov. 1992.

Jayachandran*, K., A.P. Schwab, and B.A.D Hetrick. 1990. Separation of inorganic and organic phosphorus using acidified molybdate and isobutanol. American Society of Agronomy 82nd National Meeting, San Antonio, TX, Oct. 1990.

Jayachandran*, K., B.A.D. Hetrick, and A.P. Schwab. 1990. Role of VA-Mycorrhizae in phosphorus acquisition from unavailable phosphorus sources. Eighth North American Conference on Mycorrhizae (NACOM), Jackson Hole, WY, Sep. 1990.

Invited Conference Presentations:

Seeing Around the Corners: PSM-EPM Program at FIU. November 12, 2021. National Professional Science Master's Association Annual Conference, Tampa, FL

STEM Master's Individual Development Plans as an Essential Tool in Workforce Development. November 10, 2021, Workshop by NSF-NPSMA-CGS, Tampa, FL

Agriculture Science Education for Hispanic Students through Florida-Texas-New Mexico Consortium. USDA-NIFA-HSI PDs Conference, March 5 - 7, 2020, Costa Mesa, CA

Experiential and Experimental Learning in Agriculture Sciences for Hispanic Students at FIU, UTRGV, and NMSU. USDA-NIFA-HSI PDs Conference, February 28 – March 2, 2019, Costa Mesa, CA

Broadening Agriculture Science Education for Hispanic Students through Florida-Texas-New Mexico Consortium. USDA-NIFA-HSI PDs Conference, March 19-21, 2018, Washington, DC

Innovative Curriculum for Agriculture Training and Careers for Hispanics (Icatch). USDA-NIFA-HSI PDs Conference, March 19-21, 2018, Washington, DC

Beginning Farmers and Ranchers Program at Florida International University. USDA-NIFA-BFRDP PDs Conference, September 25-28, 2017, Nashville, TN

Interdisicplinary Training for Multicultural Undergraduate and Doctoral Education in Agroecology. USDA-NIFA-MSP-NNF PDs Conference, June 27-28, 2017, West Lafayette, IN

Agriculture Science Education at Florida International University: Student Access, Success, and Diversity. APLU-CADE: 2015 National Access, Diversity and Excellence Summit, July 30-31, 2015, Florida International University, Miami, FL

Identifying efficient algal strain from the Everglades for biodiesel production. Second World Algal Summit, May 5-6, 2011, San Dieago, CA

Current Status of Algae Use for Biofuel Production. Latin American and Caribbean Biofuel Conference. August 17-18, 2010, Santiago, Chile.

Biofuel Science Education for Agroecology students at FIU. USDA-NIFA-HSI PDs Conference, November 28-Dec 1, 2010. Washington DC

Agroecology Program at Florida International University. USAD-Hispanic Serving Institutions Priority Setting and Strategic Planning Meeting. July 26-28, 2010, Washington, DC

Multicultural Undergraduate Scholars in Agroecology at Florida International University: In Interdisicplinary Approach. Joint MSP/NNF Project Directors and Beneficiaries Conference, October 20-21, 2009, 1410 Waterfront Center, Washington DC

A Potential Biological Control Agent for Invasive Plant Species, Old World Climbing Fern (*Lygodium microphyllum*). 23rd Annual Symposium, Florida Exotic Pest Council, April 21-24, 2008, Jacksonville, FL

Establishment of Multicultural Scholars Program at Florida International University. Joint MSP/NNF Project Directors Conference, October 16-18, 2007 Washington, DC

Invited Conference Sections Moderator:

Tree Islands Ecology section of the Greater Everglades Ecological Restoration, For Everglades Restoration 2050: Advancing the Science to Achieve Success – Planning, Policy, and Science Meeting, July 28 – August 1, 2008, Naples, FL

Soil Microbial Structural and Functional Diversity section of the Soil Science Society of America National Conference, October 5 – 8, 2008, Houston, TX

Ecological Society of America Annual Conference - Presided Oral Session # 48: Mutualism-Parasitism I: Plants; Modeling Wednesday, August 6, 2003, Savannah, GA

Soil Science Society of America Annual Conference, Moderator for Soil Ecology Section, October 31 – November 4, 1999. Salt Lake City, UT

Symposia and Workshops Conducted and Organized:

From RFA to Reality: Food and Agriculture Sciences Graduate Education with NIFA National Needs Fellowship Program at Florida International University. An interactive workshop organized by Ray Ali, Krish Jayachandran, Erika Kraus, NACTA Annual Conference, June 20-24, 2023, NMSU, Las Cruces, NM

Study Abroad – Costa Rica: Every year since 2016 during summer term (2016 – present), a consortium of four universities (FIU-TAMUK-UPRM-UTEP) conducted two weeks workshop on sustainable farming practices, food systems, soil quality, and water quality at selected locations in Costa Rica. Each year ~15 students gain study abroad experience.

Professional Horticulture Cettificate Workshop – Developed and executed professional horticulture workshop for south Florida community members. (2015-present) This non-credit continuing education workshop recruited ~15 participants to every workshop. This workshop for 10 Saturdays from 9 am to 12 pm for 10 weeks.

Agroecology Annual Symposium organized every year since 2007 – present. Invite keynote speakers, organize a panel discussion, students poster presentations and oral presentations on students research projects.

Students Internships Day – Organized student internship day at the beginning of every Fall semester for the last 12 years (2010 – present) for students to present and share their summer research internship experience.

Summer High School Students Workshop – Orgnaized six-to-eight-week workshop for high school students (~10 students) every summer for the last 10 yesrs (2010 – presnt) to provide experiential and experimental learning in agroecology.

International Woekshop on Agroecology and Sustainable Agriculture (IWASA) – Developed and executed IWASA a weeklong workshop for community members. (2015 – present). ~15 particiants each workshop. Lectures, farm trips, hands-on activities in agroecology are part of the workshop.

Study Abroad – Costa Rica. We took 12 FIU agroecology students in 2013 for two weeks to Costa Rica and engaged in agroecology, sustainable agriculture, food systems in Costa Rica.

Bioenergy Scince Internship for High School Students – Eight weeks workshop on Bioenergy, Science and Technology.12 High School Students attended. June 22 – August 18, 2011.

National University of Agriculture, Honduras Junior Students Workshop at FIU every October month (2010 – 2015), a week-long workshop. Hosted 40 junior students from National University of Agriculture, Honduras on experiential learning, training, research, and education.

Study Abroad – India: In 2010 summer, we took nine FIU agroecology students to University of Agricultural Sciences, Bangalore and Tamil Nadu Agricultural University, Coimbatore, India on three-week international science education trip on biofules. Students had a wonderful opportunity to learn science, education, technology and social culture in India.

Urban Agriculture and Community Gardening. Annual Agroecology Symposium organized at FIU on February 16, 2010. A panel discussion, poster session and several oral presentation sessions were held. More than 150 people including FIU students and faculty, farmers and the area high school students attended the symposium.

Summer Agroecology Workshop for School Teachers. Conducted a five-day workshop, along with Dr. Bhat at FIU from July 6 to 10, 2010 for schoolteachers as part of the USDA Hispanic Serving Institutes Education Grant Program. Organized two days of classroom lectures followed by field trips to USDA research station, local farms.

Conducted workshop on biofertilizers, plant growth promoting rhizobacteria, biological control of weeds, soil microbial diversity for three visiting scientists from Tamil Nadu Agricultural University, Coimbatore, Tamil Nadu, India Jan – Feb. 2010

Sustainable Agriculture: Challenges and Opportunities. Annual Agroecology Symposium organized at FIU on February 24, 2009. A panel discussion, poster session and several oral presentation sessions were held. More than 150 people including FIU students and faculty, farmers and the area high school students attended the symposium.

Summer Agroecology Workshop for HighSchool Teachers. Conducted a six-day workshop, along with Dr. Bhat at FIU July 15-20, 2008, for high school teachers as part of the USDA Hispanic Serving Institutes Education Grant Program. Organized two-day classroom lectures followed by field trips to USDA research station, South Florida Water Management District water treatment area, USDA Sugarcane Research Station, Archbold Biological Station, and

MacArthur Agroecology Research Center.

Agroecology and Sustainable Agriculture: Challenges and Opportunities. Annual Agroecology Symposium organized at FIU on January 15, 2008. A panel discussion, poster session and two student presentation sessions were held. More than 100 people including FIU students and faculty, farmers and the area high school students attended the symposium.

Summer Agroecology Workshop for HighSchool Teachers. Conducted a six-day workshop, along with Dr. Bhat at FIU July 15-20, 2006, for high school teachers as part of the USDA Hispanic Serving Institutes Education Grant Program. Organized two-day classroom lectures followed by field trips to USDA research station, USDA Sugarcane Research Station, Archbold Biological Station, and MacArthur Agroecology Research Center.

Agroecology Symposium. First Annual Agroecology Symposium organized at FIU October 23, 2006. A panel discussion, poster session and two student presentation sessions were held. More than 50 people including FIU students and area high school students attended the symposium.

NSF-FIU Research Workshop Organizer on January 27, 2006. Invited NSF Program Officer for the Ecosystem Studies to conduct a day workshop on NSF funding priorities, proposal preparation, review criteria, and students research opportunities. 50 people attended.

Symposium Organizer: Organized a special one-day symposium on “Advances in Molecular Approaches in Soil Microbiology” at Soil Science Society of America Conference, Nov 9-10, 2005, Salt Lake City, UT. Invited experts in various fields of molecular soil microbiology for a special presentation. Compiled manuscripts for publication as special issue in Soil Science Society of America Journal.

Organized first Annual Conference on Student Research and Artistic Initiatives on March 10, 2005. Put together poster displays, research panels, invited keynote speaker, Professor Ray Turner from Roxbury Community College, Boston, MA. There were approximately 150 participants.

Conducted several workshops for The Honors College SRAI student preparations for research and presentation techniques. 2004 and 2005.

Organized Student Research and Artistic Initiatives Inagural symposium on February 25, 2004.

Conducted workshop on soil microbial diversity using molecular techniques from November – December 2001 for USDA-ARS Scientist from Kimberley, ID

Organized Mycorrhizal Research Workshop on June 14, 2000, at Florida International University. Twenty-five researchers and graduate students from Florida attended the workshop.

Invited Papers, Seminars, Testimony, and Presentations:

Role of Mycorrhizal Fungi in Agroecosystem. April 11, 2022. ISARA-Lyon, France.

Biological Management of Invasive Plants in Florida. March 22, 2022. ISARA-Lyon, France.

Agroecology Program at FIU: Curriculum, Graduate Education, Research, and Outreach Activities. March 08, 2022. ISARA-Lyon, France.

Agroecology Program at FIU: Education, Research, and Outreach Opportunities. September 20, 2021. ISC 1056 First Year Seminar in Earth and Environment.

Agroecology Program at FIU: Education, Research, and Outreach Opportunities. March 15, 2021. ISC 1056 First Year Seminar in Earth and Environment.

Role of Mycorrhizal Fungi in Sustainable Agriculture and Crop Production. November 19, 2020. NMSU - AGRO-483-M01-Sustainable Crop Production.

Fundamentals of Soil Health for Sustainable Agriculture and Environmental Quality. November 09, 2020, Sierra Club, Miami, FL

Agroecology Program at FIU: Education, Research, and Outreach Opportunities. September 21, 2020. ISC 1056 First Year Seminar in Earth and Environment.

Mycorrhizal Fungi – Taxonomy, Inoculum Production, Crop Growth Studies. July 02, 2019. Shandong Agricultural University, Taian, Sandong, China.

Biochar from Invasive Woody Plants and their effect on Soil Health and Crop Production. Third International Symposium on Environmental Application and Impact of Biochar and Emerging Materials. Xuzhou University of Technology June 28-30, 2019, Xuzhou City, Jiangsu Province, China.

Agroecology Program and Agriculture Science Education at Florida International University. May 02, 2019, SRM Institute of Science and Technology, Kattankulathur, Tamil Nadu, India.

Role of Mycorrhizal Fungi in Sustainable Agriculture and Crop Production. April 12, 2018. NMSU - AGRO-483-M01-Sustainable Crop Production.

The Role of Organic Gardens in Campus Sustainable Food Production. Tuesday Times Roundtable, Office of Global Learning Initiative, February 06, 2018.

National Needs Fellowship and Tips for New Investigators. USDA-NIFA Workshop Webinar, May 25, 2017.

Agriculture Science Education at Florida International University: Student Access, Success, and Diversity. APLU-CADE: 2015 National Access, Diversity and Excellence Summit, July 30-31, 2015, Florida International University, Miami, FL

Soil Ecology: Processes and functions of soil organisms. Agroecology Class, Feb 20, 2014, University of Texas – RGV, Edinburg, TX

Agroecology and Sustainable Agriculture. One of the keynote speakers at Subtropical Agriculture and Environmment, February 21, 2014, Weslaco, TX

Technological Advances in Biofuel Production of Second and Third Generation - Enzymes, Microorganisms and Algae. VI Latin American and Caribbean Biofuel Conference. August 20-23, 2012, World Trade Center Morelos, Mexico

Identifying efficient algal strain from the Everglades for biodiesel production. Second World Algal Summit, May 5-6, 2011, San Dieago, CA

Native Phytopathogens as Potential Biological Control Agents for Inavsive Plants in South Florida. Environmental Resource Management Class. February 03, 2011.

Current Status of Algae Use for Biofuel Production. Latin American and Caribbean Biofuel Conference. August 17-18, 2010, Santiago, Chile.

Biofuel Science Education for Agroecology students at FIU. USDA-NIFA-HIS PDs Conference, November 28-Dec 1, 2010. Washington DC

Agroecology Program at Florida International University: Progress Report. Project Directors Meeting, USDA, Washington DC November 29 – December 2, 2010.

Biological Management for Exotic Invasive Plant Species in Florida. September 22, 2010. Environmental Studies Graduate Seminar.

Agroecology Program at Florida International University. USDA-Hispanic Serving Institutions Priority Setting and Strategic Planning Meeting, July 26-28, 2010, Washington, DC

Is a Biological Control Strategy Effective on Lygodium? Friday June 11, 2010, 11.30-1.00, B2-1S, Florida Bay Conference Room, South Florida Water Management District.

Native Biological Agents for the Management of Invasive Exotic Plant Species. February 4, 2010. Environmental Resource Management Class.

Multicultural Undergraduate Scholars in Agroecology at Florida International University: In Interdisicplinary Approach. Joint MSP/NNF Project Directors and Beneficiaries Conference, October 20-21, 2009, 1410 Waterfront Center, Washington DC Invited Speaker.

A Potential Biological Control Agent for Invasive Plant Species, Old World Climbing Fern (*Lygodium microphyllum*). 23rd Annual Symposium, Florida Exotic Pest Council, April 21-24, 2008, Jacksonville, FL

Lectures on Principles of Agroecology and Research Methods in Sustainable Agriculture at Agroecology Annual Symposiums October 23. 2006, January 15, 2008, and February 16, 2010.

Lectures on Principles of Agroecology and School Students Research Projects. Lectures at Agroecology at Biannual Summer School Teachers Workshops July 15-20, 2006, 2008, and July 6-10, 2010.

Screening and Identification of Native Microbial Isolates from Lygodium habitat of South Florida. March 6, 2008, 11.30-1.00, B2-3S Biscayne Bay Conference Room, South Florida Water Management District.

Importance of Agroecology, Sustainable Agriculture and the Scholarships and Internships Opportunities at selected six senior high schools in Miami-Dade County. Twice a year visit to these schools since 2007.

Establishment of Multicultural Scholars Program at Florida International University. Joint MSP/NNF Project Directors Conference, October 16-18, 2007 Washington, DC

Practice of Agroecological Principles for Sustainable Agriculture. Guest Lecture presented at the Global Environmental Issues class by Jack Parker, October 2006.

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Role of Microorganisms in Soil, Plant and Water Environments. The Honors College Research Methods Class Spring 2006.

Fate and Transport of Pesticides in Soil and Water and the significance of Biodegradation. The Honors College Research Methods Class. Fall 2005.

A Microbiologist Strategy for Management Invasive Plants in South Florida. August 2007, South Florida Water Management District, West Palm Beach, FL

Sabbatical Experience in Japan: Research, Education, and Extension Experience at Hiroshima University, Japan. October 2007. Environmental Studies Graduate Seminar.

Biological Control of Invasive Plant Species. Environmental Studies Graduate Seminar, Fall 2006.

Biological Invasion in South Florida: A Microbiologist Approach for Management. SERC Brown Bag Seminar Series. Fall 2006.

Soil Characterization and Nutrient Dynamics in Everglades Wetlands. April 15, 2004. Tropical Research and Education Center, University of Florida, Homestead, FL

Phosphorus Interactions in the Everglades Wetlands Ecosystems. May 24, 2002. USDA-ARS, Kimberly, ID

Soils of South Florida. March 12, 2002, MAST Academy High School, Miami, FL

The Impact of Low-level Phosphorus Loading on the Everglades Wetlands of Florida, USA. July 16, 2001, The University of Queens Land, School of Agriculture and Horticulture, Gatton, Queens Land, Australia.

Fate and transport of herbicides in soils. October 9, 1998, Graduate Environmental Engineering Seminar Series.

Atrazine Degradation and its impact in Soil and Water Environment. Spring 1997, Geology Department Seminar Series.

Bioremediation of Pesticides. Fall 1996, Chemistry Department Seminar Series.

Behavior of Pesticides in Soil. Fall 1996, Environmental Studies Graduate Seminar.

Pesticides and Environment. Fall 1996, Environmental Studies Colloquium EVR 4920

TEACHING: Courses Developed

AGR 3930 Agriculture Colloqium
EVR 4272 Agroecology
EVR 4274 Sustainable Agriculture
EVR 4592 Soils and Ecosystems
EVR 4592L Soils and Ecosystems Lab
SWS 5305 Advanced Soil Resources Analysis
SWS 4303 Soil Microbiology
SWS 4303L Soil Microbiology Lab
IPM 4020 Integrated Pest Management
HOS 3012 Introduction to Horticulture Science
HOS 3012L Horticultre Science Lab
AGR 4240 Modern Crop Production
AGG 4941 Internship in Agriculture (Codeveloped with Dr. Bhat)
AGG 4055 Food Security and Food Safety (Codeveloped with Dr. Shetty)
AGR 4641 Sustainable Bioenergy (Codeveloped with Dr. Shetty)
AGR 6251 Sustainable Farming Systems
AGR 6255 Ecological Agriculture
EVS 6194 Applied Soil Biology

Courses Taught

EVR 3013 Ecology of South Florida
EVR 4592 Soils and Ecosystems
SWS 5305 Advanced Soil Resources Analysis
SWS 4303 Soil Microbiology
EVS 6194 Applied Soil Biology
AGR 3930 Agriculture Colloqium
AGG 4941 Internship in Agriculture
EVR 4272 Agroecology
AGR 6255 Ecological Agriculture
EVR 4274 Sustainable Agriculture

Co-Developed and executed Agroecology Certificate Program
Co-Developed and executed Agriculture Science Major (degree) in BS Environmental Science
Developed and executed Professional Horticulture Certificate Program (PHCP)
Developed and executed International Workshop on Agreocology and Sustainable Agriculture (IWASA)
Developed and executed Professional Science Master's in Environmental Policy and Management (PSM-EPM)

OFFICES HELD IN PROFESSIONAL SOCIETIES

ASA Fellow Award Selection Committee Member: ASA-SSSA-CSSA (2022-present)
Global Engagement Committee Member: NACTA (2019-present)
Experiential Learning Committee Member: NACTA (2020-present
Journal Award Committee Member: NACTA (2019-Present)
Conference Organizing Committee Member: NPSMA (2021)
Biological Control Executive Board Member: Weed Science Society of America (2005-10)

PROFESSIONAL ACTIVITIES AND PUBLIC SERVICE

Association Memberships

American Association for the Advancement of Science (AAAS)
American Society of Agronomy (ASA)
Soil Science Society of America (SSSA)
Crop Science Society of America (CSSA)
American Society for Microbiology (ASM)
North American Colleges and Teachers of Agriculture (NACTA)
National Professional Science Master's Association
Weed Science Society of America (WSSA)
International Mycorrhizologists Society (IMS)
Society for Environmental Restoration (SER)
American Institute for Biological Sciences (AIBS)

National Geographic Society (NGS)
National Academy of Biological Sciences, India (life member)

Referee/Reviewer

Editorial:

Regional Editor	Allelopathy Journal (2008 – 2014)
Associate Editor:	Journal of Environmental Quality (2002- 2007)
Associate Editor	NACTA Journal (2021-present)
Associate Editor	Frontiers in En. Science: Soil Process
Topic Editor	Frontiers in Env. Science: Emerging Talents in Soils
Topic Editor:	Encyclopedia of Earth (2006 - Present)
Editorial Advisory Board Member:	Journal of Sustainable Agriculture (2008 – Present)
Editorial Advisory Board Member:	NACTA (2017-2020)
Editorial Advisory Borad Member:	Land (2020 – Present)
Editorial Advisory Board Member:	Carbon Research (2022-Present)
Editorial Advisory Board Member:	Ecosystem and Ecography (2010 – 2016)
Editorial Advisory Board Member:	Agriculture, Ecosystems, & Environment (2002- 2008)
Editorial Advisory Board Member:	Chemosphere (1999-2001)
Executive Board Member:	Biological Control (2005-2010)

Reviewer for Journals:
(more than 400 manuscripts reviewed for publications in listed journals)

Soil Science Society of America Journal
Journal of Environmental Quality
Agronomy Journal
Environmental Practice
Journal of Soil Contamination
Weed Science
Water, Air, & Soil Pollution
Journal of Soil & Water Conservation
Journal of Population and Environment
Indian National Science Academy and Agriculture
Plant and Soil
Bioremediation Journal
Journal of Food and Agriculture
Journal of Allelopathy
Biocontrol
Chemosphere
Applied Soil Ecology
Journal of Chemical Ecology
World Mycotoxin Journal
Journal of Agriculture, and Ecosystems & Environment
American Chemical Society book chapters

Reviewed journal articles for USDA-ARS Scientists

Reviewer for granting agencies:

Research Program Reviewer:	Canadian Research Secretariat WorkSafeBC (2005, 2008, 2010, 2014, 2015, 2018, 2019, 2020, 2022)
Ad-hoc Reviewer:	National Science Foundation (2002, 2004, 2005, 2006, 2010)
Ad-hoc Reviewer	NOAA (2011)
Ad-hoc reviewer	USDA-National Research Initative

USDA-ARS Ad-hoc reviewer
USDA-ARS CRIS projects reviewer
USDA/CSREES proposals reviewer
Everglades National Park Projects reviewer
DERM proposals reviewer
South Florida Water Management District Projects reviewer

Reviewer for Books (pre-publishing)

McGraw Hills

Reviwer for Conferences (moderator):

Tree Islands Ecology section of the Greater Everglades Ecological Restoration, For Everglades Restoration 2050: Advancing the Science to Achieve Success – Planning, Policy, and Science Meeting, July 28 – August 1, 2008, Naples, FL

Soil Microbial Structural and Functional Diversity section of the Soil Science Society of America National Conference, October 5 – 8, 2008, Houston, TX

Ecological Society of America Annual Conference - Presided Oral Session # 48: Mutualism-Parasitism I: Plants; Modeling Wednesday, August 6, 2003, Savannah, GA

Soil Science Society of America Annual Conference, Moderator for Soil Ecology Section, October 31 – November 4, 1999. Salt Lake City, UT

External reviewer for tenure and promotion files:

University of Tennessee, Knoxville, TN, 2003
University of Maine, Orono, ME, 2005
University of Illinois, Urbana Champaigne. IL, 2011
New Mexico State University, La Cruze, NM, 2014
University of West Indies, Jamaica, West Indies, 2022

Other:

Minorities in Agriculture, Natural Resources, and Related Sciences (MANRRS) FIU Club

Faculty Advisor

Sabbatical Leave Experience – January 2022 – April 2022; Visiting Professor, Agroecology and Sustainable Food Systems, ISARA-Lyon, Lyon, France.

Sabbatical Leave Experience - January 2007– May 2007: Visiting Professor, Department of Environmental Dynamics and Management, Graduate School of Biosphere Science, Hiroshima University, 1-4-4 Kagamiyama, Higashi-Hiroshima, Hiroshima prefecture 739-8528, Japan

Soil Science Society of America Conference - Young Scientist Award Selection Panelist for Association of Agricultural Scientists of Indian Origin - November 2-6, 2003, Denver, CO

Based on my previous involvement with Prokaryotic Interest Group (PIG) at Iowa State University, I created PIG at Florida International University to bring microbiologists together to discuss about microbiology research and education in general.

Secretary: Plant Pathology Student & Faculty Organization, Dept. of Plant Pathology, Kansas State University (1989 - 1990)

President: Cereal Research Program Research Associates Organization, Cereal Program, International Crops Research Institute for the Semi-Arid Tropics (ICRISAT) (1986 - 1987)

President: Graduate Student Organization, Graduate Program, Tamil Nadu Agricultural University (1982 - 1983)

Subject Matter Expert/External Examiner for International Dissertation Work: **10**

Studies on the Establishment and Symbiotic Association of Gluconacetobacter diazotrophicus and AM Fungi and their Effect on Growth and Yield of Sugarcane (Saccharum officinarum L.) var. CoSi 98071. Department of Agricultural Microbiology, Annamalai Univerity, Tamil Nadu, India – 2011

Modified Modalities for Rapid Diagnosis of *Mycobacterium tuberculosis* and gyrA Gene Based PCR-RFLP Assay for Differentiation of Mycobacterial Species. Department of Microbiology, PSG College of Arts and Sciences, Coimbatore, India – 2008

Biomethanation Kinetics of Kitchen Refuse and Characterization of Methanogenic Consortia. Department of Microbiology, PSG College of Arts and Sciences, Coimbatore, Tamil Nadu, India – 2006

Influence of Phosphorus Solubilizing Microorganisms and Rhizobium on Vigna unguiculata (L.) Walp. Department of Biology, Gandhigram Rural Institute (Deemed University), Tamil Nadu, India – 2006

Effect of Paper Mill Wastes on Soil, Groundwater and Biomass Production: A Case Study of

Cholan Paper and Board Mills. Department of Environmental Sciences, Bharathiar University, Coimbatore, Tamil Nadu, India – 2006

Recycling of Tannery Sludge along with Organic Wastes by Composting. 2005 Department of Biology, Gandhigram Rural Institute (Deemed University), Tamil Nadu, India – 2005

Interactions of Vesicular Arbuscular Mycorrhiza and Plant Growth Promoting Rhizobacteria in Relation to Nutrient Management and Production of Rice in Assam. Department of Botany, Gauhati Univeristy, Guwahati, Assam, India – 2005

Studies on the Antibiotic Resistance Pattern and the Impact on Human Body Temperature of E. Coli. Life Sciences Department, Avinashilingam Institute (Deemed University), Coimbatore, Tamil Nadu, India - 2003

Studies on the Interactions of Arbuscular Mycorrhizae and Collar Rot of Groundnut. Department of Biology, Gandhigram Rural Institute (Deemed University), Tamil Nadu, India – 2002

SERVICE TO UNIVERSITY

Departmental Committees Assignments and Programs Administered

Co-Director: Agroecology Program (2005-present)

Director: Professional Science Masters' in Environmental Policy and Management (PSM-EPM) 2014-2022

Director: Graduate Program (2008-2015)

Member: Graduate Program (2002-2006, 2015, 2022-present)

Faculty Mentor: for Dr. Len Scinto (Earth & Environment), Dr. Jin He (Physiscs), Seung Jae Lee (Civil & Environmental Engineering, Oscar Valverde (Biology)

Chair: Human Resource Committee (2004-2005, 2006-2007)

Member: Human Resource Committee (2003-2004, 2005-2006, 2007-2008, 2020-present)

Secretary: Faculty meetings minutes recorder (2020 – 2021)

Member: Ad-hoc committee for Tenure & Promotion revision (2020-2021)

Chair: Search & Screen Committee for Aquatic Ecologist, Restoration Ecologist, Aquatic Biogeochemistry, Terrestrial Ecosystem Ecologist, two lecturers (2007-2008, 2003-2004).

Chair: Search & Screen Committee for Agroecology Faculty Position 2011-2015

Member: E&E STEM Transformation Institute Faculty 2014-present

Member: Search and Screen Committee for Earth & Environment STEM faculty 2015-2016

Member: Search and Screen Committee for Global Climate Change/Field Ecologist (2002-2003)

Chair: Curriculum Committee (2000-2002)

Member: Curriculum Committee (1998-2000, 2002-2003)

Chair: Environmental Studies Science Task Force Committee (2005-06)

Chair: Environmental Studies Future Hire Strategies Committee (2005-06)

Chair: Ad-hoc Committee for Environmental Studies Honors Track (2005-06)

Chair: Environmental Studies EVR 3013 Ecology of South Florida revisions (2004-2005)

Member: As-hoc Committee for Environmental Studies PhD Proposal Development (2000-2001, 2004-2005)

Member: Ad-hoc Committee for Environmental Studies Laboratory Improvement (1998-1999)

Member: Undergraduate Committee (1997-1999)

Member: Library Committee (1996-1997)

Member: Space and Laboratory Committee (1997-1999)

Chair: Space and Laboratory Committee (1996-1997)

Acting Chair (Environmental Studies): June 26-27, 2003, December 22-23, 2003, and March 17-23, 2004, numerous times during 2008-09 including Acting Chair of merged Department Earth and Environment, Acting Chair of Earth and Environment and Acting Associate Chair of Earth and Environments on numerous times during 2009 -10.

College and University Committees & Programs

Member: President's Committee on NCAA Gender/Diversity Issues and Student-Athlete Well-Being (2010-2014).

Chair: Diversity Sub-Committee of President's Committee on NCAA Gender/Diversity Issues and Student-Athlete Well-Being (2010-2014)

Panelist: Graduate Research Opportunities – Grant Writing Workshop, Organized by College of Arts and Sciences, November 4, 2010

Faculty Senate: Senator (2010-2011, 2011-2013, 2013-2015, 2015-2017, 2019-2021)

UCCOC Committee – Member. This is a five-member committee to administer University Core Curriculum issues. Monthly meeting is required. We have met weekly basis on every Tuesday 11 – 12. Worked out Tier 1 and Tier 2 core curriculum and Gordon Writing Requirements. Spent my service hours for this committee meetings. Completed my service in 2019.

Building and Environment Committee - Member

Tenure and Promotion Committee – Member. Completed tenure and promotion review of 27+ files and made recommendation to Dean.

CAS Strategic Committee – Invited as one of the members for Graduate Education and Special Program Strategic Initiatived (2014-15)

ICTB Director Search & Screen Committee: member of ICTB Director Search and Screen Committee.

ARC's Director of Operations Search & Screen Committee: member of Search and Screen Committee for the Director of Operations. Spent two days – a day for phone interviews and another day for campus interviews.

Land Steward Position – Search and screen for a land steward position to manage agriculture land property in Redlands. Robert Barnum was hired, and I supervise Land Steward Position – now Horticulture Curator.

Chair: President's Access & Equity Committee (2008- 2012)

Member: President's Access and Equity Committee – Member (2001 – 2014)

Chair: Diversity and Minority Enrollment Sub-Committee of A&E Committee (2003 – 2008)

Member: Ad-hoc screening and selecting President's Access and Equity Award candidates on annual schedule (2003-2009)

Member: Ad-hoc selection committee for Grant-in-Aid Applications. Screen and select candidates for Grant-in-Aid on annual basis (2003-2010)

Member: Ad-hoc selection committee for Delores Auzenne Fellowship Applications. Screen and select candidates on annual basis (2003-2010)

Member: Search & Screen Committee for Assistant Vice-President, Human Resources. (2008-2009)

Member: Search & Screen Committee for Director EEOP Office, Human Resources. (2008-2009)

Member: Academic Judicial Committee (2007- 2010)

Member: Radiation Safety Committee (1999 – present)

Nuclear Science Committee – Member, participate in nuclear science program at FIU.

Best Graduate Students Publication: Served last two years to select best graduate student publication for UGS

ICOT 2018 – Scientific Committee member.

Member: FIU's Hispanic Serving Institutions Strategic Planning and Discussion Group.

Director: The Honors College – Students Research and Artistic Initiatives (SRAI). Founding member and director (2003-2005)

Fellow: The Honors College (2003-2009)

Banner Marshal: Faculty Convocation 2003, Commencement Fall 2003, 2004, Spring 2005

Member: Representative from Environmental Studies for Fairchild Tropical Botanical Garden Research Service Agreement (2006)

Member: Representative from Environmental Studies for the Dept. of Environment and Occupational Health Graduate Program Committee (2006)

Member: NSF - Faculty Institutes for Reforming Science Teaching (2002 – 2008)

Member: Environmental Preserve Committee (1999 – 2003)

Member: Search and Screen Committee for Hydrologic Modeling Position (Earth Science) 2002

Member: Search and Screen Committee for Stable Isotope Position (Geology-SERC) 1999.

Member: Shade House facilities at the Preserve (2003-present).

Representative: College of Arts and Sciences initial meeting on School of Environment, November 17, 2003.

NEWS MEDIA ARTICLES:

Agroecology Program Featured in USDA Science Friday (2013)
http://blogs.usda.gov/2013/06/18/agroecology-program-ag-research-is-more-than-farming/

Danielle Goveia MS Thesis Research on Lead Contamination (2014)
http://news.fiu.edu/2014/01/lead-contamination-research-leads-to-safer-soil-in-liberty-city/73827

PSM-EMP Program (2016)
http://news.fiu.edu/2016/03/fiu-trains-professionals-to-manage-natural-resources/98047

http://www.miamiherald.com/news/local/education/article25716169.html

FIU Magazine on Veteran Farmers Training Program (2015)
http://news.fiu.edu/2015/12/cultivating-success-fiu-supports-farming-business/94926

FIU Washington DC Office Visit Summer 2016
https://www.youtube.com/watch?v=Eq6eXU1G8jo

FIU Agroecology Class Video Fall 2016
https://www.youtube.com/watch?v=8DUafyxvLdI

Ignite – Faculty & Staff Campaign thank you Video Spring 2017
https://youtu.be/OpZPCqkBQv4

USDA Ed. Bulletin – March 2018
https://content.govdelivery.com/accounts/USDANIFA/bulletins/1dcf0df

Jennifer Gil, Agroecology Graduate Student – Fulbright May 2018
https://news.fiu.edu/2018/05/fulbright-fellows-tackle-international-concerns/122697

Daphne Sugino MS Thesis Research on Vermicompost
https://news.fiu.edu/2019/when-earthworms-soil-themselves,-everyone-wins

Claudia Garcia MS Thesis Research on Salinity Stress on Crops
https://news.fiu.edu/2019/oh,-snap-bacteria,-fungus-combo-can-help-crops

FIU College of Arts, Science, & Education News - Water Institute Presents Graduate Students with Annual Award – Jazmin Locke
https://casenews.fiu.edu/2019/02/09/water-institute-presents-graduate-students-with-annual-award/

Industrial Hemp Project – PantherNow June 17, 2020
http://panthernow.com/2020/06/17/fiu-announces-partnership-with-green-point-research/

USDA-MSP Scholar Myles Covington Research on Orchids (2020)
https://casenews.fiu.edu/2020/07/28/for-biological-sciences-student-life-revolves-around-orchids/

Prescribed fire – Pine Rocklands September 17, 2020
https://news.fiu.edu/2020/a-little-fire-did-a-lot-of-good-for-microbes-in-fius-nature-preserve

ASA Fellow September 25, 2020

https://casenews.fiu.edu/2020/09/25/agroecology-program-director-recognized-as-the-2020-american-society-of-agronomy-fellow/

Blaire Kleiman Biodiversity Research (2020)
https://casenews.fiu.edu/2020/05/15/hey-farmer-leave-them-weeds-alone/

USDA-MSP Scholar Curin Luna's Career Path
https://casenews.fiu.edu/2020/12/01/alumna-trades-dance-floor-for-farm-fields/

FIU Ranked Number 1 University Combating Climate Change (2021)
http://panthernow.com/2021/02/22/fiu-ranked-1-university-combating-climate-change/

Jazmin Locke Dissertation Research on Floating Wetlands
https://news.fiu.edu/2021/growing-our-way-out-of-nutrient-problems-on-our-waterways?utm_source=Newsletter&utm_medium=email&utm_campaign=FIU%20News%20Newsletter

NACTA Journal Associate Editor (2021)
https://nactateachers.org/index.php/newsletters/3128-nacta-e-newsletter-june-2023#featured

USDA-NIFA-HSI Grant Support
https://news.fiu.edu/2021/federal-grant-to-enhance-fius-efforts-training-hispanics-to-be-leaders-in-agriculture-industry?utm_source=Newsletter&utm_medium=Email&utm_campaign=FIU+News+Newsletter

Blaire Kleiman MS Thesis Research on Agroecology-Mango Cultivation
https://news.fiu.edu/2022/the-worlds-most-unwanted-plants-help-trees-make-more-fruit

STARTNOW 2021 Costa Rica Program (Experiential and Experimental Learning for undergraduate students.
https://youtu.be/1KmkXck6gMs.

International Award for two decades of Agriculture research and education - TNAU
https://news.fiu.edu/2022/professor-recognized-for-two-decades-of-agriculture-research

Food's Impact on Climate Change – PantherNow, October 20, 2022
https://panthernow.com/2022/10/20/its-time-to-talk-about-our-foods-impact-on-the-environment/

Citrus Greening Research Grant – February 02, 2023
https://news.fiu.edu/2023/scientists-believe-weapon-against-citrus-greening-already-exists-in-nature

USDA-NIFA Blog on Education, Research, Outreach – June 06, 2023
https://www.nifa.usda.gov/about-nifa/blogs/celebrate-national-higher-education-day

SSARE Agency Blogs on Biofertilizer project – August 15, 2023
https://southern.sare.org/news/mentoring-the-next-generation-of-scientists/
https://southern.sare.org/news/exploring-algal-blooms-as-biofertilizer-in-vegetable-production/

Affiliations:

Agroecology Program http://agroecology.fiu.edu
International Center for Tropical Botany (ICTB)
Institute of Environment (IoE)
Fairchild Tropical Botanical Garden http://fairchildgarden.org
Energy Research Group http://www.erg.fiu.edu
ARCH program between Chemistry and Biochemistry, FIU and UM http://arch.fiu.edu/
The Honors College ARCH Program
International Forensic Research Institute http://www.ifri.fiu.edu
Florida Coastal Everglades Long-Term Ecological Research Program http://fcelter.fiu.edu/
Southeast Environmental Research Center http://serc.fiu.edu
MBRS MARC-USTAR & RISE Program http://www.fiu.edu/~mbrs/