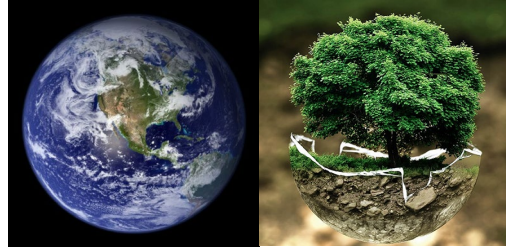


Department of Earth & Environment
2022 Graduate Research Symposium



School of Environment, Arts and Society
College of Arts, Sciences and Education
Florida International University

Virtual on Zoom (It will be video recorded)
Friday, February 18, 2022

Schedule

Welcome and Opening Remarks

- 8:30 **Dr. Assefa Melesse**, Graduate Program Director
- 8:40 **Dr. Leonard Scinto**, Chairperson, Department of Earth & Environment
- 9:00 **Invited Speaker**, Dr. Brian Raue, Associate Dean for Graduate Studies, CASE

Graduate Student Presentations

- 9:18 – 10:30 am Session 1 – Oral Presentations
- 10:30-11:00 am Break
- 11:00 am – 1:00 pm Session 2 – Poster Tour, authors present on Gather app
- 1:00 – 2:00 pm Session 3 – 3 Minute Presentations
- 2:00 – 3:24 pm Session 4 - Oral presentations
- 3:24 - 3:36 pm Break
- 3:36 – 4:36 pm Session 5 - Oral presentations

Awards

- 5:00 – 5:30 pm Presentation of awards for best posters and best talks

Join the symposium on zoom

<https://fiu.zoom.us/j/93277251643?pwd=WGdkd0cvSUVsKzBWWXJReElyOXFZZz09>

Session 1 – Oral Presentations (9:18 - 10:30)			
Moderator: <i>Laure Collins</i>			
Name		Program	ORAL-Presentation Title
09:18	Alwakeel, Julian	PhD	Geochemical Characteristics of Tree Island Soils and Groundwater Loxahatchee Impoundment Landscape Assessment (LILA)
09:30	Borrero, Haydee	PhD	Population Dynamics of <i>Trichocentrum Undulatum</i> (Orchidaceae): The Effects of Hurricanes and Herbivory Across the Species Core and Peripheral Range
09:42	Rogers, Martina	PhD	Estimating aquifer parameters by the tidal method
09:54	Valencia, Miguel	PhD	30-Year Particle Tracking Simulation from Septic Returns in Miami-Dade County, Based on the Urban Miami-Dade Groundwater Model
10:06	Zelege, Ethiopia	PhD	Hydrological drought development and effects human modification in the Tekeze River Basin
10:18	Zhang, Boya	PhD	A multi-sensor monitoring system of surface water level changes in wetlands
Coffee Break & Poster session			
Coffee Break 10:30-11:00			
Session 2 – Poster Presentations (11:00-1:00, with first authors present)			
Moderator: <i>Rodolfo Rego</i>			
Name		Program	POSTER-Presentation Title
Islam, Tania		PhD	Understanding Mental Health Challenges Following Hurricane Harvey
Khadka, Ganesh		PhD	Diversity and Characterization of Endophytic fungi from Medicinal plant <i>Petiveria Alliacea</i> .
Singh, Anchal		MS/EVR	The role of phase-variation in antibiotic resistance of soil bacteria
Session 3 – Three Minute Theses (1:00-1:55 pm).			
Moderator: <i>Shimon Wdowski</i>			
1:00	Dominguez, Jessica	PhD	Utilization of Antagonistic Endophytes and their Bioactive Secondary Metabolites to Control Citrus Greening
1:05	Fache, Anna	PhD	Using historical data to project future electricity needs for Florida in response to climate change
1:10	Londono, Vanessa	PhD	Ocean anoxia 94 million years ago: implications for today's ongoing deoxygenation
1:15	Lozano, Juan	PhD	Blue Energy Mechanism: Nature contributions to increase efficiency in hydropower production
1:20	Moore, Courtney	MS/EVR	Examining the variation in total ecosystem production and carbon storage among vegetated communities of a coastal wetland along a saltwater intrusion gradient.
1:25	Rodemann, Jonathan	PhD	Development of a continuous depth-invariant vegetation index for mapping seagrass cover
1:30	Viadero, Natasha	MS/EVR	Between dry rock and a salty place: How Hydrology influences the Habitat use of Florida Largemouth bass
1:35	Vorseth, Chloe'	PhD	Tight Lines and Survey Designs: A Comprehensive Recreational Economic Valuation of Lake Okeechobee and the Northern Estuaries

1:40	Deprado, Lorenzo	PhD	Release of Nutrients by Geologic Type from Coastal Aquifers Undergoing Saltwater Intrusion
1:45	Chavez, Selena	PhD	Use of Remote Sensing to Determine Damage and Recovery of Mangrove Forests in the Everglades Following Hurricane Disturbances
1:50	Emer, Lauren	PhD	The Vulnerability of Freshwater Fish to Expanding Oil Fields in the Amazon
1:55	Linenfelser, Joshua	MS/EVR	Tracing the Source and Fate of Nutrients in North Central Florida Bay: A Stable Isotope Approach
Session 4 – Oral Presentations (2:00 – 3:24 pm)			
Moderator: <i>Clinton Jenkins</i>			
2:00	Oyege, Ivan	PhD	Sorption Kinetics and equilibria of Chlorpyrifos on Teflon Lined centrifuge tubes using mixed solvents
2:12	Bradbury, Mason	PhD	The Socio-Ecological Origins of Uneven Urban Tree Cover in Miami, Florida
2:24	Castillo, Nicholas	PhD	Examining the threat of pharmaceutical contaminants to bonefish in South Florida and the Caribbean Basin: a spatial approach
2:36	Kent, Samuel	PhD	Assessing the Impact of Agricultural Nurseries on Nitrate Levels Within the Canals of Miami-Dade County.
2:48	Kleiman, Blair	PhD	How Weeds affect Insects in Mango Cultivation of South Florida.
3:00	Koi, Sandra	PhD	Long-term metapopulation data on the imperiled Atala butterfly (<i>Eumaeus atala</i>) using citizen science and homeowner gardens
3:12	Onwuka, Ikechukwu	PhD	Surrogate Measurements of Suspended Sediment Concentrations to Determine Hydrodynamic Effects on Water Quality in an Everglades Canal in Florida USA.
Break 3:24 - 3:36 pm			
3:36 - 4:36 pm Session 5 - Oral presentations			
Moderator: <i>Hong Liu</i>			
3:36	Cordoba, Nicole	MS/GEO	Hydrologic Properties of Mangrove and Sawgrass Peat Under Varying Salinity Conditions in Shark River Slough, Everglades, Florida
3:48	DeCuba, Jeanette	MS/GEO	Benthic foraminiferal response to the Deepwater Horizon Oil Spill
4:00	Herdocia, Carlos	PhD	Biomarker Characterization of Aptian Sediments Containing Oceanic Anoxic Event 1a with the La Frontera Section Subbetic Basin, S. Spain
4:12	Islam, Tania	PhD	Factors associated with mental health challenges following Hurricane Harvey
4:24	Katz, Jeremy	PhD	On the Vertical Turbulent Mixing Parameterization in Numerical Simulations of Tropical Cyclones
5:00 – 5:30 pm Presentation of awards for best posters and best talks			

Awards

A panel of judges will announce the winners at 5:00 PM. Awards for best oral presentations, best posters, and best 3-minute talks, will be given in both the MSc and PhD cohorts. Best Poster, Best Oral Presentation and best Three-Minute Thesis awardees, plus runners-up will receive a certificate and monetary award.

Acknowledgements

All of us are grateful to Rodolfo Rego, Caridad Machado, Gail Excell, and Kristen Davis for their organizing efforts that have brought the Earth and Environment faculty, staff and students together to experience and celebrate the terrific research of the graduate students.