

**Department of Earth & Environment
2013 Graduate Research Symposium**



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

**MARC Pavilion, Modesto Maidique Campus
Friday, February 15**

Schedule

Welcome and Opening Remarks

- 8:30 Morning refreshments
- 9:00 Prof. Rosemary Hickey-Vargas, Chairperson, Department of Earth & Environment
- 9:05 Prof. Michael Heithaus, Director, School of Environment, Arts and Society
- 9:15 Prof. Kenneth Furton, Dean, College of Arts and Sciences
- 9:30 Prof. Lakshmi Reddi, Dean, University Graduate School

Graduate Student Presentations

- 9:45 – 11:15 am Session 1 – Oral Session
- 11:15 – 11:30 am Coffee break
- 11:30 – 12:30 pm Session 2 – Poster Tour, authors present
- 12:30 – 1:30 pm Lunch (provided for all presenters)
- 1:30 – 3:00 pm Session 3 – Oral Session
- 3:00 – 3:15 pm Coffee break
- 3:15 – 4:30 pm Session 4 – Oral Session

Awards Reception and Social Hour

- 4:30 – 5:30 pm Refreshments and presentation of awards for best posters and best talks

Presentations

Session 1 – Oral Presentations

- 9:45 Joseph Zagrodnik, MS Geosciences, *Rainfall, convection, and latent heating distributions in rapidly intensifying tropical cyclones*
- 10:00 Andres Rodriguez, MS Environmental Studies, *Man-made tree islands as an alternative for restoration efforts in the Everglades*
- 10:15 Yosmel Sanchez, PhD Geosciences, *Organic geochemistry of a Cretaceous restricted basin: bioproductivity and oxygen levels*
- 10:30 Sandy Delgado, MS Geosciences, *Re-analysis of the 1955 Atlantic hurricane season*
- 10:45 Danielle Ogurcak, PhD Geosciences, *Plant water source partitioning and drought stress along a salinity gradient in a subtropical coastal forest*
- 11:00 Shimelis Dessu, PhD Geosciences, *Value of Water in the Mara-Serengeti ecosystem: the dilemma of anthropocentric water resources allocation*

Session 2 – Poster Presentations (11:30-12:30, with all first authors present)

- Juliana Corrales, PhD Geosciences, *Assessment of a nutrient trading program for the Lake Okeechobee watershed*
- Christopher Edwards, MS Environmental Studies, *Recreational angler perspectives of non-native fish and mercury advisories*
- David Gandy, MS Environmental Studies, *Nonnative fishes in freshwater canals of the Florida Everglades: Implications for better management*
- Israel Gonzalez, MS Geosciences, *Linear & nonlinear motion of a barotropic vortex*
- Danielle E. Goveia, MS Environmental Studies, *An analysis of the potential risk exposure to lead through urban community gardens: a look at environmental health in urban ecosystems*
- Kelly Gustafson, MS Environmental Studies, *Regional freshwater resource supply modeling*
- Hari Kandel, PhD Geosciences, *Land cover change: Implications for diurnal temperature range and convective rainfall in South Florida*
- Stephanie Long, PhD Geosciences, *Understanding the long-term effects of phosphorus loading to eastern Everglades National Park by simulating nutrient transport and biogeochemical processes*
- Liliana Helo, MS Environmental Studies, *Assessing consumers' preferences and willingness to pay for environmentally sustainable attributes of food and wine products: An exploratory study in South Florida*
- Sven Holbik, PhD Geosciences, *Investigation of along-arc geochemical variations in the Southern Volcanic Zone: Azufre-Planchon-Peteroa Volcanic Complex, southern Chile*

Jessica Lee, MS Environmental Studies, *Using mark-recapture techniques to evaluate recreational fisheries across hydrological seasons*

Annie Palya, PhD Geosciences, *Understanding sources of carbon from a coastal mangrove forest: Shark River – Everglades National Park*

Carrie Rebenack, PhD Geosciences, *Climate relationships in Pinus elliottii tree-rings from Big Pine Key, Florida*

Vanessa Sanchez, MS Environmental Studies, *Characterizing rhizobial diversity in legumes from pine rockland soils in South Florida*

Klara Scharnagl, MS Environmental Studies, *Community composition of arbuscular mycorrhizal fungi in South Florida pine rocklands*

Session 3 – Oral Presentations

- 1:30 David Lagomasino, PhD Geosciences, *Tracing groundwater through a karstic Yucatan aquifer*
- 1:45 Javiera Hernandez, MS Geosciences, *Does the Pareto distribution of extreme US hurricane damage inherit its fat tail from a Zipf distribution of assets at hazard?*
- 2:00 Julie Johnson, PhD Geosciences, *Boninite plutonic rocks in the Mariana Trench and looking for equivalents in ophiolites*
- 2:15 Pushpa Soti, PhD Geosciences, *Do soil geochemical properties promote exotic species invasions in Florida? – A cross-continent comparison*
- 2:30 Eric Van Vleet, MS Environmental Studies, *Conserving the commons: A subregional study of community-based forest conservation in Oaxaca, Mexico*
- 2:45 Cheng Tao, PhD Geosciences, *Contribution of tropical cyclones to global deep convection with overshooting tops*

Session 4 – Oral Presentations

- 3:15 Albert Yeboah-Forson, PhD Geosciences, *Determination of anisotropic karst features in the Biscayne Aquifer using ERT and GPR Geophysical Methods*
- 3:30 Estefania Sandoval, MS Geosciences, *Ten-year study on restoration projects and their effects on flushing times, water quality, and water chemistry in the coastal Everglades*
- 3:45 Mehrnoosh Mahmoudi, PhD Geosciences, *Effect of hydrology and sediment transport on wetland patterning*
- 4:00 Yongxian Pei, PhD Geosciences, *Quantifying the asymmetries of microwave brightness temperatures in tropical cyclones and their relationship to storm intensity changes*
- 4:15 Margaret Kieper, PhD Geosciences, *1969 Category 5 Hurricane Camille: What a modern-day understanding of hurricane structure reveals*

Acknowledgements

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Awards

A panel of judges will announce the winners at 5pm. Awards for best poster and best talk are given in the programs MS Environmental Studies, MS Geosciences, and PhD Geosciences. The top award is given in each category (mode of presentation, program) that includes more than one student. The runner-up award is given in each category that includes more than two students. Thus, the awards given this year are: Best poster and runner-up for MS Environmental Studies, best poster and runner-up for PhD Geosciences, best talk for MS Environmental Studies, best talk and runner-up for MS Geosciences, best talk and runner-up for PhD Geosciences. Best Poster and Best Talk awardees receive a \$100 gift certificate, and the runners-up receive a \$50 certificate.

