

Department of Earth and Environment Newsletter

Spring
2025
Vol. 2,
Issue 1

*INNOVATE.
ELEVATE.
BE
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COLLEGE OF
ARTS, SCIENCE &
EDUCATION

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MESSAGE FROM THE CHAIR

Dear Earth and Environment Students, Alumni, Faculty, and Friends:

Welcome to the Spring 2025 issue of our department newsletter. Another academic year is ending and with it so will my tenure as Chair. In August 2025 **Dr. Amir Khoddamzadeh** will become the new Chair of EE. I am sure we all wish him well and pledge our cooperation and support. It has been a very fulfilling and often trying time to serve as Chair for the past six years. We have done so much, have accomplished great things, and continued to lead in the Earth and Environmental studies. We are proud of our students (both current and former), staff and faculty and I thank you for the courtesy, support, and devotion to the department you have shown. These are challenging times as we are experiencing Federal cuts to many of our programs, however, the current global demand on resources, increasing generation of wastes, and a greater reliance on diminishing ecosystem services makes the mission of the Department of Earth and Environment more important than ever. I look forward to the future of the Department, the promise of our students, the support of our alumni and the collaborations of our communities in fostering continued efforts at creating a more resilient Earth system and the human society that relies upon it.

Thank you for your ongoing commitment and contributions to our department. Let us continue to strive for excellence and make a positive impact on our planet.

Sincerely,



Leonard J. (Len) Scinto, Ph.D.
Professor and Chair



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GRADUATE STUDENT NOTES

Graduations

Fall 2024 PhD graduates and Faculty Advisors:

The Department graduated 2 PhD students in the Fall 2024 semester ceremony.



Fall 2024 Graduation. Left-to-right: Amir Khoddamzadeh, Jesse Blanchard, Grenville Draper, Paulo Olivas, Hong Liu, Jim Riach, Florentin Maurrasse, Mahadev Bhat, and graduating PhD students **Chloe Vorseth** and **Miguel Valencia**.

PSMEPM Cohort 8



Left to right: Gustavo Dominguez Saman, Bianca Constant, Amber Gillette, Jahna Brooks, Brittany Torres, Mahadev Bhat, Tadeo Monterrubio, Jesse Blanchard, Alicia Cedeno Salgado, Florencia Pigni.



left to right: Mahadev Bhat, Florencia Pigni, Brittany Torres, Lolani Torres, Alicia Cedano Salgado, Amber Gillette, Gustavo Dominguez Saman, Jesse Blanchard
Front: Tadeo Monterrubio, Jahna Brooks, Bianca Constant.

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CURRENT GRADUATE STUDENT ACTIVITIES

Awards

Ivan Oyege and **Moses Kiwanuka** were inducted into the prestigious [Bouchet Graduate Honor Society](#) (BGHS) for 2024 and 2025 respectively. The [society](#) is for "...preeminent scholars who exemplify academic and personal excellence, foster environments of support, and serve as examples of scholarship, leadership, character, service, and advocacy for students in the academy". The full program of the 2025 annual conference is [here](#).



Three of our graduate students were recognized at the CASE Student Academic Achievement and Service Award Ceremony (April 15, 2025): **Ivan Oyege** for Outstanding Dissertation (Dr **Bhaskar** Major Professor), **Vagheeswari Venkadesh** for Outstanding Academic Achievement (Dr **Jayachandran** Major Professor), and **Miguel Valencia** for Outstanding Academic Achievement (Dr **Sukop** Major Professor).

PhD student **LuLu Victoria-Lacy** received the 2025 University Graduate School award for Outstanding Graduate Student Engagement. Congrats LuLu!



Florencia Pigni won the Professional Science Master's in Environmental Policy and Management Cohort 8 leadership award.

UGS Fellowships Awarded

Doctoral Evidence Acquisition (DEA) Fellowship for the **Spring 2025** term

- 1.Moses Kiwanuka
- 2.Blaire Klieman
- 3.Ethiopia Zeleke

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CURRENT GRADUATE STUDENT ACTIVITIES (CON'T)

UGS Fellowships Awarded (Con't)

Dissertation Fellowship (DF) for the Summer and Fall 2025 terms

1. LuLu Victoria-Lacy

Doctoral Evidence Acquisition (DEA) Fellowship for the Summer 2025 term

1. Moses Kiwanuka
2. Juan Sebastian Lozano

Dissertation Fellowship (DF) for the Summer and Fall 2025 terms

1. LuLu Victoria-Lacy

Presidential Fellowship - Fall 2024

1. Biplav Oli
2. Trishna Rayamajhi

McKnight Fellowship - Fall 2024

1. Hannah Mckenie Zapata

Fulbright Fellowship - Fall 2024

1. Patrick Ben Emoi Otema

Matt Howard Fellowship Award - Spring 2025

1. Dafrosa Kataraihya

Graduate Symposium Winners



Kylie Gil
Oral-3MT-MS-1st Place



Taylor Bonachea
Poster-MS-3rd Place



Marie Isabelle Dubois
Poster-MS-2nd Place

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CURRENT GRADUATE STUDENT ACTIVITIES (CON'T)

Graduate Symposium Winners (Con't)



Demonica Brown
Poster-MS-1st Place



Ivan Oyege
Oral PhD-3rd Place



Lauren Emer
Oral-3MT-PhD-3rd Place



Aujeeta S Razzaque
Oral-3MT-PhD-2nd Place



Blair Kleiman
Oral-3MT-PhD-1st Place



James Sturges
Oral PhD-1st Place



Lauren DeVito
Poster PhD-3rd Place



David Santamaria
Poster PhD-1st Place



Johanset Orihuela
Poster PhD-1st Place

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CURRENT GRADUATE STUDENT ACTIVITIES (CON'T)

Graduate Symposium Winners (Con't)

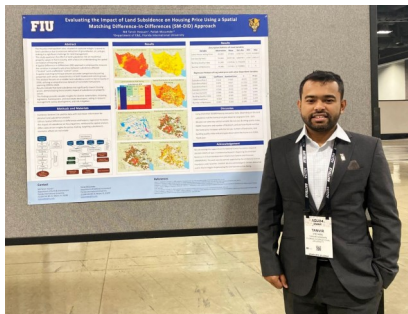
Not Pictured:

Brandon Sosa-Oral PhD 2nd Place

Noah Frade-Oral-3MT-MS-2nd Place

Julius Nunez-Oral-3MT-MS-3rd Place

Other Graduate Student Items



Md Tanvir Hossain presented his research, *Evaluating the impact of land subsidence on housing price using a spatial matching difference-in-differences (SM-DID) approach*, at the [American Geophysical Union's 2024 Fall Meeting](#). The meeting was held in Washington DC from 9-13 December 2024.



Johanset Orihuela, Miguel Valencia, Veronica Prelaz, undergraduate **Katelyn Garcia** and others attended

[GSA Connects](#) in Anaheim, California, this past September. **Katelyn Garcia** was there as part of the [On To the Future](#) mentorship program. We ran into numer-

ous alumni including **Zoe Verlaak, Crystal Pletka, Vanessa Londono, Yosmel Sanchez Hernandez,** and **Camilo Ponton.**



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CURRENT GRADUATE STUDENT ACTIVITIES (CON'T)



Miguel Valencia presented in and helped organize GSA's first spanish language session, "146 - T178. Presentaciones de Geociencias en Español II: Una Nueva Experiencia en una Reunión de la Sociedad Geológica Americana (GSA)":

<https://gsa.confex.com/gsa/2024AM/meetingapp.cgi/Session/57374>



What to Expect at a Geology Conference (GSA Connects 2024)! GEO GIRL

156 views · 41 min ago · ...more



GEO GIRL 72.6K



Johanset Orihuela had a brief GSA-meeting-related cameo on the popular *Geo Girl* geology YouTube channel, (<https://www.youtube.com/watch?v=5Ryyka9LPzQ>).

Johanset Orihuela and **Florentin Maurrasse** also presented at the [Society for Sedimentary Geology](#) (SEPM) in Flagstaff, Arizona in May 2024.

Everglades naturalist and recent MS graduate **Taylor Bonachea** captured a video of an alligator and crocodile fighting near the Shark Valley Observation Tower. The story went viral:

<https://people.com/viral-video-alligator-crocodile-brutally-fighting-everglades-national-park-11702380>

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Other Graduate Student Items (Con't)

Students, including [Sofia Lopez Farina](#), participated in the 2025 Agroecology Symposium “*Enhancing Food Security: Bridging Local And Global Perspectives*”:



Ivan Oyege



Fabiana Moran and Natalie Valdes



Luis Cendan



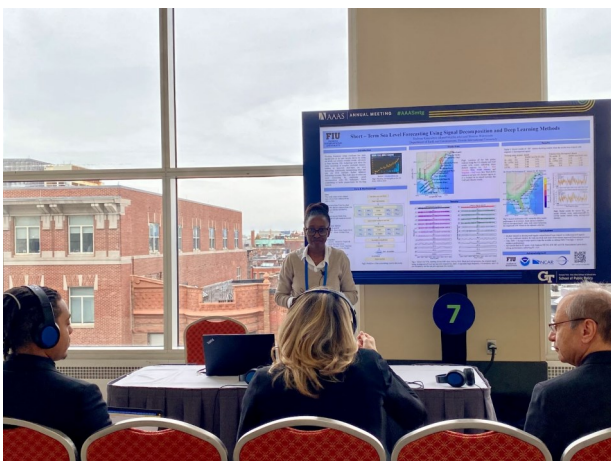
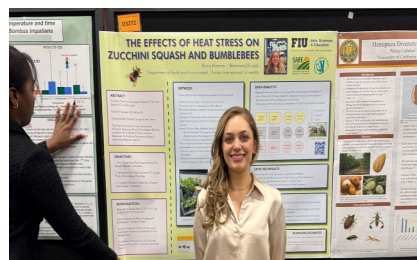
Daveena Ramnaraine

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Other Graduate Student Items (Con't)



Blaire Kleiman attended the [Entomological Society of America conference](#) in November in Phoenix Arizona and presented her poster "*How Heat Stress Effects Bumblebee Pollination of Zucchini Squash*".



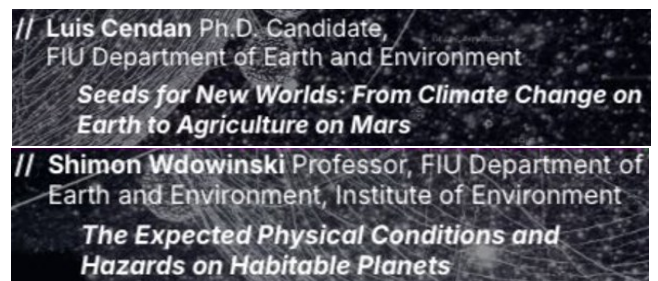
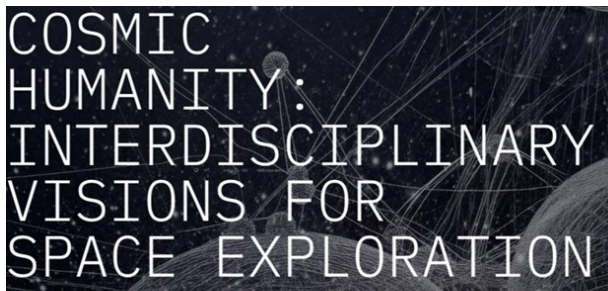
Dafrosa Kataraihya gave an e-poster presentation at the [American Association for Advancement of Science \(AAAS\)](#) meeting on February 15th, where she presented part of her dissertation work. This work focuses on 'Short-term (days) forecasting of coastal sea level variability using Signal Decomposition and Deep Learning Techniques.' Results indicate that combining signal decomposition and deep learning techniques improves the model's accuracy by approximately 30%. This research is important as it helps coastal planning managers and emergency response teams develop adaptive strategies to mitigate the impacts of coastal flooding.



Daniel Tucker presented at the Dade Chapter Florida Native Plant Society on March 25, 2025. "[The Palmetto of Florida: A Living Legacy of Resilience and Adaptation](#)" focuses on the evolutionary, ecological, and historical significance of Florida's Sabal species.

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Other Graduate Student Items (Con't)



The [Symposium on Space Exploration](#) at @FIUSchool of Architecture included two representatives from E&E. **Luis Cendan** - Seeds for New Worlds: From Climate Change on Earth to Agriculture on Mars and **Shimon Wdowinski** - The Expected Physical Conditions and Hazards on Habitable Planets.



Back from the Brink: *Sabal miamiensis*

Daniel Tucker was featured along with **Dr. Larry Noblick** in the [Montgomery Botanical Newsletter](#) for their work with the *Sabal miamiensis* which was thought extinct in the wild. Daniel has planted two mature plants in an [Environmental Endangered Land \(EEL\)](#) site in Miami-Dade County. Additionally, he was the recipient of the Florida Native Plant Society Research Grant, International Palm Society Grant, and the Kelly Foundation Botany Scholarship for my work in Sabal in palms. Congratulations!



FOR IMMEDIATE RELEASE

Historic Replanting of *Sabal miamiensis* in Miami-Dade's Environmentally Endangered Lands

Miami, FL – March 3rd, 2025 – In a groundbreaking conservation effort, two mature *Sabal miamiensis* palms were successfully reintroduced into a protected Environmentally Endangered Lands (EEL) site managed by Miami-Dade County within its native range. This historic reintroduction marks a significant milestone in restoring this rare and once-thought-extinct Florida palm.

This effort was a collaborative project between Miami-Dade County's EEL Program, Montgomery Botanical Center (MBC), and Florida International University's Conservation & Sustainable Horticulture Lab in the Department of Earth and Environment (FIU), with support from Botanic Gardens Conservation International (BGCI). The initiative serves as a key component of Daniel Tucker's Ph.D. research at FIU, focusing on the conservation of *Sabal miamiensis*. The replanting underscores the vital role of botanical institutions, global conservation organizations, and public conservation programs in safeguarding endemic flora.

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Undergraduate Student Notes



I wanted to say thank you for aligning me with the [Meteorology club](#) ever since I joined, I've been to a few events, and it has been a blast so I've participated in Steam Weather Day, and also have taken trips to NHC/NWS as well as the WoW. **Eli-Lamb**



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The Garden Club participated in [FIU's sustainability fair](#) in April. (left)

The Club also did a tabling event at GC. (Right)



Thanks to all FIU team members for participating in the [WxChallenge](#) competition during 2024-2025 school year. In particular, thanks to our local manager Rigo Olivera for his great leadership. Congrats to all!!

WxChallenge FIU Local Winners Fall 2024	WxChallenge FIU Local Winners Spring 2025
Missoula, MT - Rigo Olivera (graduate student)	New Orleans, LA - Rigo Olivera (graduate student)
Key West, FL - Melanie Garcia (undergraduate student)	Lynchburg, VA - Melanie Garcia (undergraduate student)
St. Louis, MO - Rogelio Patricio (undergraduate student)	Aberdeen, SD - Sage Ferris (undergraduate student)
Erie, PA - Valeria Espina (graduate student)	Medford, OR - Suraima Aragon-Teclas (graduate student)
Tallahassee, FL- Sean McCormick (undergraduate student)	Louisville, KY - Aleric Krenz (graduate student)

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Alumni Notes

We love to hear from our Alumni! Please send us an update, current photos, etc., and keep in touch! You can use this [link](#) to get us your contact information; please share it with your classmates and friends that we may have lost track of and might not be receiving this newsletter.

In the end, we could use some donations from you. Please visit <https://case.fiu.edu/earth-environment/give/> to help us out.



Our recent graduate, **Dr Chloe' Vorseth**, (PhD Earth Systems Sciences 2024) last December will be accepting a scientist position in the Socioeconomic Division of the US Army Corps of Engineers, Tallahassee. She graduated with a PhD in Earth Systems Sciences last December, and was co-advised by Dr Andrew Stainback of Baylor University and **Mahadev Bhat**.

She was supported through the [Everglades Foundation's](#) Scholarship.



Dr Alyssa Dausman (PhD Geosciences 2008), is Senior Vice President and Chief Scientist at [the Water Institute](#), where she oversees all science and research. She performs scientific research and strategically leads select large-scale projects using Structured Decision Making to support strategic planning. She was invited to speak in Paris at the United Nations Educational, Scientific, and Cultural Organization headquarters on integrating science into policy for water resource planning. She has also been funded by the Department of State to teach Structure Decision Making in Armenia to support natural resource planning.

Alyssa began her career as a hydrologist with the U.S. Geological Survey in Florida in 2000 after completing her BS at Tulane University and her MS at the University of New Orleans. She received her PhD from FIU in 2008. A supporter of advancing educational opportunities and networking, Alyssa is a Director on the Board for the Newcomb Alumni Association at Tulane University. As an avid yoga practitioner, Alyssa has also volunteered for over 10 years teaching yoga to active military in the Gulf Coast with the Warriors at Ease program, for which she was recognized with the Commemorative Service Award in 2020 by Naval Special Warfare.

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Alumni Notes (Con't)



Katie Bardsley (MS Geosciences, 2009) has been dedicated to the advancement of education since she began tutoring math in the 10th grade. Over the years, she has gained a wealth of experience working with a wide range of students—from special education to gifted and talented.

Katie holds a BS in Geology and Mathematics from the University of Windsor, an MS in Geology from FIU, and an MEd from Regis University in Colorado.

Her teaching journey has taken her from high school math and calculus classrooms in Colorado to college lecture halls in Florida and beyond. She has taught geology at Arapahoe Community College and, since 2015, has been teaching earth science, meteorology, and astronomy courses at Hillsborough Community College (HCC). She has served as both adjunct and full-time faculty.

Katie now serves as the Associate Dean of Academic Affairs at [HCC Brandon](#). In this role, she continues to bring her passion for science and education into everything she does—whether in the classroom, supporting faculty, or working to improve student success across campus.

Faculty Notes

Awards



Krishnaswamy Jayachandran and **Assefa Melesse** were honored for their Jefferson Science Fellow appointments at an [April 17th Faculty Success](#) event. The Fellowships meet the bar for [High-value faculty awards and fellowships](#), which recognize outstanding academic and research achievements, fostering excellence and innovation across disciplines. These prestigious honors elevate faculty members' professional profiles and contribute to FIU's global reputation for scholarly leadership. **Krishnaswamy Jayachandran** also received a Book Author Award at the same event.



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Awards (Con't)



2024-2025 FIU Top Scholar Awards went to **Beth Anderson** (for Engagement) and **Assefa Melesse** (for Research)

Florentin Maurasse was selected as the recipient of the **University Graduate School Lifetime Achievement Award**.



2025 UGS Excellence Award Recipients

Congratulations!

UGS Lifetime Achievement Award
Dr. Florentin Maurasse
Professor
Department of Earth & Environment



Over 50 years of service at FIU
Recipient of FIU's first NSF grant
Presidential Award for Excellence Recipient - 1992
Honors College Excellence Award - 2004
First Excellence in Graduate Mentorship Award - 2007
Fellow of the Geological Society of America - 2024

<https://gradschool.fiu.edu/wp-content/uploads/2025/04/2025-UGS-Excellence-Awards.pdf>



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Awards (Con't)



FIU's SUSTAINABILITY AWARD: Amir Khoddamzadeh shared this award with 2 others for promoting FIU's respect for the environment by providing knowledge, education, and modeling ways to achieve climate preservation as well as capitalize on the economic opportunities of the solutions developed.

Other Faculty Items

A community stakeholders' meeting was held at [USDA, Chapman Field](#), on February 26, 2025. Several FIU faculty members and graduate students were in attendance.



Hong Liu co-hosted **Fulbright Scholar Dr Fitria Oktalira**, a researcher who specializes in orchids and education at the [Research Center for Biosystematics and Evolution, National Research and Innovation Agency \(BRIN\), Indonesia](#).

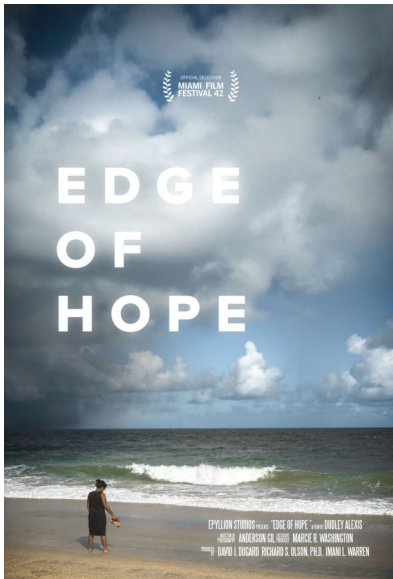


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Other Faculty Items (Con't)

Kateel Shetty, agroecology PhD candidate **Jessica Dominguez**, and **Krishnaswamy Jayachandran** published an article on citrus greening:

[Trees' own beneficial microbiome could lead to discovery of new treatments to fight citrus greening disease | FIU News - Florida International University](#)



Mike Sukop appears in a [new film](#) that had its debut at the [Miami Film Festival](#) in April. A product of a Mellon Foundation grant that supports [FIU's Commons for Justice](#), the film looks at how Miami's people are affected by rising sea levels, extreme heat, and intensified hurricanes. Sukop talks about Miami's list-topping economic exposure to sea level, mangroves, the Biscayne Aquifer and saltwater intrusion, flooding, septic systems, infrastructure, CAT 5 surge, Dorian's effect on the Bahamas, and the possibility of a Katrina-like event in Miami. You can see the trailer here: [Edge of Hope](#).



Dr. Amir Khoddamzadeh, **Dr. Maruthi Sridhar Balaji Bhaskar**, and **Luis Cendan** were included in the [Smart City Miami Special Edition Magazine](#) for their contributions during a panel at the Smart City Expo Miami 2024. The discussion was on the topic of Climate Smart Agriculture (CSA) which is an initiative that integrates sustainability into agriculture.

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Latest News

We are thrilled to share that our department has been recognized in the *QS World University Rankings by Subject*, placing among the top 40 (ranked 34-38) U.S. public universities for environmental sciences. This achievement is a testament to the dedication and hard work of our students, faculty, and alumni. Additionally, our Global Sustainable Tourism Program, a joint degree with the Chaplin School of Hospitality & Tourism Management, ranked fourth among public universities in the nation, further reinforcing our commitment to sustainability.

Earlier this year, FIU identified "Experience Impact" as its #1 Strategic Focus Area for the 2025-2030 Strategic Plan, highlighting environmental resilience as a core priority. This vision aligns seamlessly with our mission at E&E, driving education, research, and community outreach to address critical global challenges.

<https://news.fiu.edu/2025/several-fiu-programs-rank-in-the-top-50-in-qs-world-university-rankings-by-subject>

2024 Publications including Students

Congratulations to our students on their 2024 publications! Student names in **bold**.

Ceballos, Y., **Orihuela, J.**, & Borges-Sellén, C. R. (2024). Checklist of cuban meteor-wrongs. *Revista de La Sociedad Geológica de España*, 37(1), 32–44.
<https://doi.org/10.55407/rsge.104724>

Deribe, M. M., Melesse, A. M., Kidanewold, B. B., Dinar, S., & Anderson, E. P. (2024). Assessing International Transboundary Water Management Practices to Extract Contextual Lessons for the Nile River Basin. *Water*, 16(14), 1960.
<https://doi.org/10.3390/w16141960>

Figueroa, A., Chernyavskiy, P., Greenacre, M., Herrera, A., Cuni, L., Villate, J., et al. (2024). Precipitation Drives Frugivory in a Subtropical Generalist Herbivore, the Gopher Tortoise, and Alters Its Functional Role as a Seed Disperser. *Ecology and Evolution*, 14(11), e70585. <https://doi.org/10.1002/ece3.70585>

Figueroa, A., Coblentz, K., Herrera, A., Cuni, L., Villate, J., Liu, H., et al. (2024). Seasonal frugivory drives both diet inconsistency and individual specialization in the generalist herbivore gopher tortoise. *Food Webs*, 40, e00356.
<https://doi.org/10.1016/j.fooweb.2024.e00356>

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2024 Publications including Students (Con't)

Katz, J., & Zhu, P. (2024a). Parameterization of Vertical Turbulent Transport in the Inner Core of Tropical Cyclones and Its Impact on Storm Intensification. Part I: Sensitivity to Turbulent Mixing Length. *Journal of the Atmospheric Sciences*, 81(10), 1749–1767. <https://doi.org/10.1175/JAS-D-23-0242.1>

Katz, J., & Zhu, P. (2024b). Parameterization of Vertical Turbulent Transport in the Inner Core of Tropical Cyclones and Its Impact on Storm Intensification. Part II: Understanding TC Intensification in a Generalized Sawyer–Eliassen Diagnostic Framework. *Journal of the Atmospheric Sciences*, 81(10), 1769–1782. <https://doi.org/10.1175/JAS-D-23-0243.1>

Khadka, G., Shetty, K. G., Annamalai, T., Tse-Dinh, Y.-C., & Jayachandran, K. (2024). Characterization and antimicrobial activity of endophytic fungi from medicinal plant *Agave americana*. *Letters in Applied Microbiology*, 77(3), ova025. <https://doi.org/10.1093/lambio/ova025>

Koi, S., Figueroa, A., & Liu, H. (2024). Citizen science engagement reveals patterns of long-term persistence of an at risk butterfly in three metropolitan centers. *Journal for Nature Conservation*, 81, 126689. <https://doi.org/10.1016/j.jnc.2024.126689>

Martin, S., Oyege, I., Shetty, K., Jayachandran, K., & Sridhar Balaji Bhaskar, M. (2024). The Effect of Saltwater Stress on the Performance of Cherry Tomatoes. *FIU Undergraduate Research Journal*, 2(1). <https://doi.org/10.25148/URJ.020116>

Melesse, A. M., **Deribe, M. M., & Zeleke, E. B.** (Eds.). (2024). *Land and Water Degradation in Ethiopia: Climate and Land Use Change Implications*. Cham: Springer Nature Switzerland. <https://doi.org/10.1007/978-3-031-60251-1>

Orihuela, J., Viñola-Lopez, L. W., Lorenzo, L., Clark, A., & Ceballos-Izquierdo, Y. (2024). First record of terrestrial vertebrates from a Late Pliocene-Early Pleistocene deposit in Cuba. *Journal of South American Earth Sciences*, 149, 105200. <https://doi.org/10.1016/j.jsames.2024.105200>

Oyege, I., Sibitenda, H., & Bhaskar, M. S. B. (2024). Deep learning applications for real-time and early detection of fall armyworm, African armyworm, and maize stem borer. *Machine Learning with Applications*, 18, 100596. <https://doi.org/10.1016/j.mlwa.2024.100596>

Oyege, I., Wasswa, J., Bhaskar, M. S. B., Nkedi-Kizza, P., & Kasozi, G. N. (2024). Mixed-Solvent Sorption and Moisture-Regime-Dependent Degradation of Chlorpyrifos in Selected Tropical Soils. *International Journal of Environmental Research*, 18(2), 14. <https://doi.org/10.1007/s41742-023-00564-4>

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2024 Publications including Students (Con't)

Oyege, I., Katwesigye, R., Kiwanuka, M., Mutanda, H. E., Niyomukiza, J. B., Kataraihya, D. J., et al. (2024). Temporal trends of water quality parameters, heavy metals, microplastics, and emerging organic pollutants in Lake Victoria and its basin: knowns, knowledge gaps, and future directions. *Environmental Nanotechnology, Monitoring & Management*, 22, 100962. <https://doi.org/10.1016/j.enmm.2024.100962>

Paduani, M., Ross, M., & Odom, G. (2024). Mangrove Forests of Biscayne Bay, FL, USA may Act as Sinks for Plastic Debris. *Wetlands*, 44(3), 32. <https://doi.org/10.1007/s13157-024-01785-9>

Rey, C. S., **Oyege, I.**, Shetty, K. G., Jayachandran, K., & Balaji Bhaskar, M. S. (2024). Evaluation of Vermicompost, Seaweed, and Algal Fertilizers on Soil Fertility and Plant Production of Sunn Hemp. *Soil Systems*, 8(4), 132. <https://doi.org/10.3390/soilsystems8040132>

Souza Costa, B., **Munoz Salas, M.**, **Gil, K** and Khoddamzadeh, A.A. (2024). Effect of Silicon Amendment on Growth and Nitrogen Status of Common Landscaping Plants. Special Issue: Plant Growth and Nutrition. *American Journal of Plant Sciences*. *American Journal of Plant Sciences*, 15, 603-616. [10.4236/ajps.2024.158041](https://doi.org/10.4236/ajps.2024.158041)

Valencia, M. E., Sukop, M. C., **Oldfield, G.**, Montoya, A., Walsh, V., Obeysekera, J., et al. (2024). Septic Return Flow Pathlines, Endpoints, and Flows Based on the Urban Miami-Dade Groundwater Model. *Groundwater*, gwat.13435. <https://doi.org/10.1111/gwat.13435>

Wang, X., Jiang, H., & **Guzman, O.** (2024). Relating Tropical Cyclone Intensification Rate to Precipitation and Convective Features in the Inner Core. *Weather and Forecasting*, 39(2), 351–368. <https://doi.org/10.1175/WAF-D-23-0155.1>

Zhang, B., Gann, D., Wdowinski, S., Lin, C., Hestir, E., **Lamb-Wotton, L.**, et al. (2024). Space-Based Mapping of Pre- and Post-Hurricane Mangrove Canopy Heights Using Machine Learning with Multi-Sensor Observations. *Remote Sensing*, 16(21), 3992. <https://doi.org/10.3390/rs16213992>

Seminar

The Department's robust seminar program was led by **Elizabeth Anderson** this Spring semester. Check out the talks and join us at 3:30 on Friday afternoons when you can. You can see prior semester seminars on our [YouTube Channel](#); please join the channel.

Learn about the [history of the Earth and Environment Department](#) by watching this presentation by Dr. Florentin Maurrasse and Dr. Joel Henin.

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Seminar (Con't)

Date	Name	Institution	Subject	Presentation Title
Jan 10	Dr. Bryan Dewsbury	Associate Professor, Dept. of Biological Sciences, FIU	culturally inclusive teaching	Beyond content: Teaching for humanity and civic preparation
Jan 17	Dr. Fernando Miralles-Wilhelm	President and Professor, Center for Environmental Science, University of Maryland	international development, water, and environment	Global change and the water-energy-food nexus: Three stories from an international development perspective
Jan 24	Dr. Nichole Tiernan	International Center of Tropical Botany, FIU	environmental career pathways	From research to reach
Jan 31	Dr. Vanessa McDonough	Fishery and Wildlife Biologist, Biscayne National Park	coastal fisheries / South Florida	Management of fish, fisheries, and fish habitat in Biscayne National Park
Feb 7	Dr. Virginia Walsh	Senior Program Manager, Miami-Dade Water and Sewer Department	hydrogeology / South Florida	Water resource management in Miami-Dade County
Feb 14	Dr. Elena Solohin	Postdoctoral Research Associate, Institute of Environment, FIU	ecosystem ecology and climate change / South Florida	Environmental Science in the Era of Big Data: Using Data Science to Explore Blue Carbon Ecosystem Responses to Global Change
Mar 7	Dr. Amanda Subalussy	Assistant Professor, Dept. of Biology, University of Florida	freshwater ecology / East Africa	Interactions between water and wildlife shape biogeochemical landscapes

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Seminar (Con't)

Date	Name	Institution	Subject	Presentation Title
Mar 14	Dr. Rachel Scarlett	Assistant Professor, Dept. of Geosciences, Georgia State University	urban social- ecological systems research / USA	Building tools and strategies for community-led urban flood management
Mar 21	Dr. Grace Johns	Senior Associate and Economist, Hazen and Sawyer, Florida	environmental economics / South Florida	Assigning dollars to natural resources: Why and how? - The 2023 Biscayne Bay Economic Study
Apr 4	Dr. John Kemeny	Jahns Lecturer, Geological Society of America; Professor	applied geology	Entrepreneurship in Applied Geology: Why your next career move
Apr 11	Dr. Rachel Mallinge	Assistant Professor, Dept. of Entomology and Nematology, University of Florida	pollination biology	If you build it, will they buzz? Evaluating pollinator garden enhancements across resource and landscape gradients
Apr 18	Dr. Hugh Willoughby	Research Professor, Dept. of Earth and Environment, FIU	Career overview and hurricane science.	Hurricane science on a warmer globe

FALL 2024 GRADUATIONS

Congratulations to all!

See our Alumni Notes for news from other alumni.

Name	Degree
Miguel Valencia	PhD-Earth Systems Science
Chloe Vorseth	PhD-Earth Systems Science

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Name	Degree	Name	Degree
Sebastian Eilert	MS-Environmental Studies	Brittany Torres	PSM-Envrion Policy & Mgmt
Lauren Emer	MS-Environmental Studies	Ivo Bompezzi	BS-Environmental Studies
Moses Kiwanuka	MS-Geoscience	Matthew Calero	BS-Environmental Studies
Jennifer Quintero	MS-Environmental Studies	Luis Dieguez	BS-Geoscience
Clara Riquelme	MS-Environmental Studies	Andrea Ferri	BS-Environmental Studies
Shakira Trabelsi	MS-Environmental Studies	Chloe Mcneer	BS-Environmental Studies
Jahna Brooks	PSM-Envrion Policy & Mgmt	Emilly Medina	BS-Geoscience
Alicia Cedeno Salgado	PSM-Envrion Policy & Mgmt	Daniel Parras	BS-Geoscience
Bianca Constant	PSM-Envrion Policy & Mgmt	Alexis Quiroz	BS-Environmental Studies
Gustavo Dominguez	PSM-Envrion Policy & Mgmt	Dylan Rosado	BS-Environmental Studies
Amber Gillette	PSM-Envrion Policy & Mgmt	Andres Sosa	BS-Geoscience
Tadeo Monterrubio	PSM-Envrion Policy & Mgmt	Julia Zeidler	BS-Environmental Studies
Florencia Pigni	PSM-Envrion Policy & Mgmt	Sara Arciniegas	BA-Sustain and the Environ

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Name	Degree	Name	Degree
Esteban Arrieta	BA-Sustain and the Environ	Rogelio Patricio	BA-Sustain and the Environ
Brayden Carr	BA-Sustain and the Environ	Erika Perez	BA-Sustain and the Environ
William Comer	BA-Sustain and the Environ	Danielle Polidora	BA-Sustain and the Environ
Mikayla Craig	BA-Sustain and the Environ	Alyssa Sheets	BA-Sustain and the Environ
Margaret Dunn	BA-Sustain and the Environ	Savana Silva	BA-Sustain and the Environ
Bradford Dyson	BA-Sustain and the Environ	Celeste Thompson	BA-Sustain and the Environ
Britney Gazo	BA-Sustain and the Environ	Abigail White	BA-Sustain and the Environ
Emily Johnson	BA-Sustain and the Environ	Jonathan Wright	BA-Sustain and the Environ
Phara Joseph	BA-Sustain and the Environ	Alaine Mccoy	MN-Environmental Studies
Alex Lopez	BA-Sustain and the Environ	Kaitlyn Turner	MN-Environmental Studies
Nissah Mcdonald	BA-Sustain and the Environ	Fernanda Campos	MN-Environmental Studies
Yadelin Noguera	BA-Sustain and the Environ	Lia Goodman	MN-Environmental Studies
Kaithlyn Obando	BA-Sustain and the Environ	Samarah Martin	MN-Environmental Studies

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Name	Degree		Name	Degree
Nissah Mcdonald	MN-Environmental Studies		Samarah Martin	Cert Agroecology
Rogelio Patricio	MN-Meteorology		Nissah Mcdonald	Cert Agroecology
Aida Yahyavi Rahimi	Cert Geographic Info Sys (graduate)		Alexis Quiroz	Cert Agroecology
William Comer	Cert Agroecology		Savana Silva	Cert Agroecology

We are always looking for new content that highlights the department's achievements. Want to contribute to future volumes? If you have any contributions or suggestions, then contact me (Rodolfo Rego) at rrego@fiu.edu. Thank you!