

HANNAH R. HUNT

4th Year PhD Student, Chemical Oceanography

EDUCATIONAL BACKGROUND

- University of South Florida, PhD Student, Chemical Oceanography (2020-Present)
- University of Tampa, Bachelor of Science, Marine Chemistry (2017-2020)
- University of British Columbia (2016-2017)

EMPLOYMENT HISTORY

GEOTRACES GP17-ANT SUPERTECH (NOVEMBER 2023—JANUARY 2024)

Selected as one of five GEOTRACES Trace-Metal SuperTechnician for the 65-day GP17-ANT cruise occupying the Amundsen Sea (cleanly filtering over 10,000 L for ~20 PIs).

PHD STUDENT, USF COLLEGE OF MARINE SCIENCE (AUGUST 2020-PRESENT)

Working in Tim Conway's research group investigating stable iron isotope fractionation at the coastal margins from the Congo River output to the South Atlantic basin (GEOTRACES Section: GA08), sedimentary inputs to the North Pacific Ocean (GEOTRACES Section: GP02), and riverine, estuarine, and submarine groundwater sources of dFe to the West Florida Shelf.

TEACHING ASSISTANT, USF COLLEGE OF MARINE SCIENCE (FALL 2021)

Teaching assistant for graduate level Chemical Oceanography OCE6050 course at University of South Florida's College of Marine Science. Assisted in instruction (office hours), grading and hybrid course delivery.

UNDERGRADUATE RESEARCH STUDENT, UNIVERSITY OF TAMPA (2017-2020)

Analysis of low concentration nutrients in sea water samples using the SEAL segmented flow analysis instrumentation. Development of a high sensitivity reverse flow injection analysis technique for the detection of nanomolar concentrations of ammonium in oligotrophic sea waters. Worked in Dr. Robert Masserini, Jr's research lab.

OPERATIONAL DIRECTOR, GLOBAL EXPEDITIONS GROUP, BVI (2016-2018)

Organized and oversaw the advanced scuba diving program. Managed six staff members and approximately 70 students over the course of three, 21-day expeditions on live-aboard sailing vessels. Taught the introductory and advanced diving program as well as sail racing and training.

HONORS AND AWARDS

- Renate E. Bernstein Outstanding Authorship Award (\$1,000) — 2023
- Florida Sea Grant Graduate Students Coastal and Ocean Fellowship (\$25,000) — FY 2023
- Robin B. Pearlman Award (\$1,000) — 2021-2022 Academic Year
- USF Graduate Fellowship (\$24,000) — 2020-2021 Academic Year
- Interdepartmental Grant (\$5,000) — University of Tampa — Summer 2019
- Phi Kappa Phi Honors Society Member

PUBLICATIONS

1. Masserini, R.T., Abbot, W., **Hunt, H.R.**, Friden, E., Heil, C.A., Klass, S.M., 2022. *An improved reverse flow injection analysis (rFIA) technique for determination of nanomolar concentrations of ammonium in natural waters with automatic background fluorescence detection: Ammonification during a Karenia brevis bloom in Tampa Bay*. Marine Chemistry 245. <https://doi.org/10.1016/j.marchem.2022.104158>
2. **Hunt, H.R.**, Summers, B.A., Sieber, M., Krisch, S., Al-Hashem, A., Hopwood, M., Achterberg, E.P., Conway, T.M., 2022. *Distinguishing the influence of sediments, the Congo River, and water-mass mixing on the distribution of iron and its isotopes in the Southeast Atlantic Ocean*. Marine Chemistry 247. <https://doi.org/10.1016/j.marchem.2022.104181>
3. Kurisu, M., Sakata, K., Nishioka, J., Obata, H., Conway, T.M., **Hunt, H.R.**, Sieber, M., Suzuki, K., Kashiwabara, T., Kubo, S., Takada, M., Takahashi, Y., (In Review). *Source and fate of atmospheric iron supplied to the subarctic North Pacific traced by stable iron isotope ratios*. Geochimica et Cosmochimica Acta.

INVITED PRESENTATIONS

1. **Hunt, H. R.**, S. Caprera, J. Tamborski, K. Buck, R. Boiteau, P.D. Chappell, M. Charette, A. Knapp, C. Smith, E. Hall, K. Hubbard, K., T.M. Conway (2023). *Tracing Riverine Iron Through Dynamic Estuarine Systems to The West Florida Shelf*. Gordon Research Conference 2023. (Talk)

PUBLISHED PRESENTATIONS

2. **Hunt, H.R.**, M. Penn, & R. Masserini (2020). IS24A-3277: *Development of a Microfluidic Reverse Flow Injection Analysis (rFIA) Method with Automatic Background Fluorescence Correction for the Detection of Nanomolar Concentrations of Ammonium in Natural Waters*. Ocean Sciences Meeting 2020. (Poster)
3. **Hunt, H. R.**, S. Caprera, J. Tamborski, K. Buck, R. Boiteau, P.D. Chappell, M. Charette, A. Knapp, C. Smith, E. Hall, K. Hubbard, K., T.M. Conway (2023). SS009A: *Tracing Riverine Iron Through Dynamic Estuarine Systems to The West Florida Shelf*. ASLO Aquatic Sciences 2023. (Talk)

4. **Hunt, H. R.**, M. Sieber, B.A. Summers, J. de Jong, R. Middag, E.P. Achterberg, and T.M. Conway (2023). *Deconvolving the Influence of Sedimentary Margin Sources, the Congo River Plume, and Water-Mass Mixing on the Distribution of Fe and its Isotopes in the Southeast Atlantic Ocean (GA08)*. Gordon Research Conference, Chemical Oceanography. (Poster)
5. **Hunt, H. R.**, M. Sieber, S. Takano, N. Lanning, X. Bian, S.C. Yang, J.N. Fitzsimmons, S.G. John, H. Obata, J. Nishioka, M. Charette, T.M. Conway (2024). OB34C-0889: *Understanding the Extent and Longevity of North Pacific Sedimentary Margin Iron Sources*. Ocean Sciences Meeting 2024. (Poster)
6. Onak, C., Meyer, A., **Hunt, H. R.**, Hamme, R., Cullen, J. T., and Conway, T. M. (2024). *Iron isotope fractionation associated with spatial and temporal changes in redox conditions – a time series analysis of Saanich Inlet*. Ocean Sciences Meeting 2024.
7. Knapp, A. N., Barnard, S., Boiteau, R. N., Buck, K. N., Caprara, S., Chappell, P. D., Cleveland, C. Confessor, K., Conway, T. M., Gao, Y., Garrett, M., Hubbard, K. A., **Hunt, H.R.**, Iorillo, A., Smith, C. G., Tamborski, J. J., and Webb, E.A. A (2024). *Sources and cycling of dissolved organic nitrogen and dissolved organic phosphorous on the West Florida Shelf*. Ocean Sciences Meeting 2024.
8. Lindgren, A., Tamborski J. J., Smith, C. G., **Hunt, H. R.**, Caprara, S., Conway, T. M., Chappell, P. D., Buck, K. N., Boiteau, R. M., Knapp, A. N. (2024). *Quantifying Submarine Groundwater Discharge on the West Florida Shelf Using Radium Isotopes*. Ocean Sciences Meeting 2024.
9. Confesor, K., Knapp, A. N., Buck, K. N., Caprara, S., Boiteau, R. M., Conway, T. M., **Hunt, H. R.**, Tamborski, J., Lindgen, A., Webb, E. A., Chappell, P. D. (2024). *Seasonal shifts in Trichodesmium clade distributions on the oligotrophic West Florida Shelf*. Ocean Sciences Meeting 2024.
10. Farrell, I., Bright, P., Kouba, K., Lindgren, A., Knapp, A. N., **Hunt, H.R.**, Caprara, S., Buck, K. N., Chappell, P. D., Conway, T. M., Smith, C., Tamborski, J. J., Webb, E. A., Boiteau, R. M. (2024). *Molecular tracking of dissolved organic nitrogen supplied by submarine groundwater to the Gulf of Mexico*. Ocean Sciences Meeting 2024.

NON-PUBLISHED ABSTRACTS/PRESENTATIONS

11. **Hunt, H. R.**, M. Sieber, B.A. Summers, J. de Jong, R. Middag, E.P. Achterberg, and T.M. Conway (2022). *Deconvolving the Influence of Sedimentary Margin Sources, the Congo River Plume, and Water-Mass Mixing on the Distribution of Fe and its Isotopes in the Southeast Atlantic Ocean (GA08)*. USF Graduate Student Symposium. (Poster)

COMMITTEE SERVICE

CHEMISTRY FACULTY SEARCH, USF CMS (2022–2023)

Student Representative on the Chemical Oceanography Faculty Member Search Committee for the University of South Florida College of Marine Science (for two faculty). Responsible for reviewing applications, interfacing with candidates, and coordinating student meetings.

GRADUATE STUDENT SEMINAR, USF CMS (2021–2022)

Member of the Graduate Student Seminar (GSS) Committee for the 2022 event. Responsibilities included planning and execution of the seminar and poster sessions.

COMMUNITY OUTREACH AND VOLUNTEER EXPERIENCE

- Underwater Cleanup, British Virgin Islands (2018)
- Volunteer, University of Tampa Student Research Symposium, Tampa, FL (2019)

RESEARCH CRUISES (145 DAYS AT SEA)

- GEOTRACES GP17-ANT (Amundsen Sea) – November 24, 2023 - January 28, 2024 – R/V Nathaniel B. Palmer
- NSF West Florida Shelf Project (STING)
 - February 20 - March 6, 2023 – R/V Atlantic Explorer
 - June 29 - July 13, 2023 – R/V Endeavor
- Mote Marine/FWC-FWRI Quarterly Estuarine Surveys – R/V William R. Mote
 - November 16-17, 2022
 - February 7-8, 2023
 - April 25-26, 2023
 - May 30-31, 2023
 - August 8-9, 2023
- NOAA AOML: South Florida Program Bi-monthly Regional Survey – R/V F.G. Walton Smith
 - March 12-19, 2022
 - May 21-27, 2022
 - August 3-11, 2022
 - December 2-9, 2022
- Gulf of Mexico Time Series Cruises (GOMETs) – June 13-17, 2021 – R/V Weatherbird II
- Piney Point Response Day Cruises – April-May 2021 – R/V Weatherbird II