

**ISABEL C. ROMERO**

Research Assistant Professor

College of Marine Science, University of South Florida, 140 7<sup>th</sup> Ave. S.,

- 2008 Final-year Dissertation Fellowship, College of Letters, Arts and Sciences, University of Southern California, Los Angeles.
- 2008 WiSE Travel Grant 14<sup>th</sup> Ocean Science Meeting, Orlando, FL, \$2,500: *Interaction between diazotrophic bacteria and mangrove roots under different nutrient conditions*. University Southern California, USA.
- 2008 Wrigley Institute Summer Fellowship, University of Southern California, Los Angeles.
- 2008 The Carnegie Institute for Science, Washington D.C. Travel and Research Assistantship (*Bulk isotopic analysis of mangrove trees and sediments*), supervisor Dr. Marilyn Fogel.
- 2007 Oakley Fellowship, Grad

- 1999-2000 General Biology Course for undergraduate students in Engineering and Economics (full course instructor, 35 students), Spring and Fall semester, University ICESI, Colombia.
- 1996-1997 Marine Invertebrates Zoology laboratory assistant and field work coordinator (teaching assistant, 12-15 students), Marine Biology Section, Universidad del Valle, Colombia.
- 1996 General Invertebrates Zoology laboratory assistant (teaching assistant, 30 students), Biological Science Department, Universidad del Valle, Colombia.

**Advising Experience (thesis committee member, research mentor)**

- 2023-present. Master thesis: Kiersten Monahan. Improving our quantitative and mechanistic understanding of organic carbon preservation in Amazon-Guianas Mudbanks. CMS, USF.
- 2021-present. Master thesis: Andrea Murray. Visual and Chemical Analysis of Eastern Oyster (*Crassostrea virginica*) MicrooT11 Tf50 788 -119 Tm /TT11 Tf [()] -7 ( ) -101 Tf ( )

## **Research Grants**

**Total Funding:** \$18,757,587 (Total Awards)  
\$1,190,744 (to Romero)

- 2023 NSF-RAPID: Remineralization effects of enhanced allochthonous dissolved organic matter in the West Florida Shelf impacted by Hurricane Ian (\$190,000 total; PI Puspa Adhikari, FGCU) (\$40,032 to Romero, co-PI)
- 2023 National High Magnetic Field Laboratory (#P20181): Characterization chemical impacts in Tampa Bay after Piney Point disaster (21T Hybrid LTQ/FT-ICR-MS) (PI: Romero; \$100,000 in analysis of samples)
- 2023-2026 FIO-Florida Restore Act Centers of Excellence Program: Evaluation of past Florida Gulf Coast mangrove restorations as a basis for future restoration success and resiliency (\$915,090 total; PI B. Rosenheim, University of South Florida) (\$159,920 to Romero, co-PI)
- 2022-2023 NSF-RAPID: Mass Mortality of the Keystone Herbivore

2009-2010 SeaGrant Los Angeles, California Research support: Isotopic signals (leaf wax D/H) of ecological responses to environmental change, Carpinteria Salt Marsh Reserve. (\$6,000 Total; PI: Sarah Feakins, University Southern California).

### **Field Research and Oceanographic Cruises**

- 2021 Mesopelagic fauna sampling Northern Gulf of Mexico. R/V Point Sur. USF-DEEPEND / NOAA Restore
- 2018 Mesopelagic fauna sampling Northern GoM. R/V Point Sur. USF-DEEPEND/GOMRI
- 2018 Depocenters sampling Northern Gulf of Mexico. R/V Point Sur. USF-Mississippi Univ./GOMRI
- 2017 Sedimentary sampling North-South Gulf of Mexico. R/V Weatherbird II. USF, CIMAGE IV/GOMRI
- 2016 Mexican coastal sampling. UNAM-USF collaboration, CIMAGE II/GOMRI
- 2015 Mexican offshore sedimentary sampling. R/V Justo Sierra. UNAM-USF, CIMAGE IV/GOMRI
- 2015 Sedimentary sampling Northern GoM. R/V Weatherbird II. USF/CIMAGE IV/GOMRI
- 2014 Sedimentary and fish sampling - Northern Gulf of Mexico. R/V Weatherbird II. USF, CIMAGE I /GOMRI
- 2013 Sedimentary and fish sampling - Northern Gulf of Mexico. R/V Weatherbird II. USF, CIMAGE I/GOMRI
- 2012 Sedimentary and microbial sampling Orca Basin, Gulf of Mexico. R/V Pelican. USF/Harvard Univ./NSF
- 2010 Microbial sampling and activity in Lake Tahoe, CA. USC/NSF
- 2009 Salt Marshes sampling, Santa Barbara, CA. USC/Sea-Grant Los Angeles
- 2002–2007 Mangrove ecosystem sampling, Belize (5 campaigns). USC/NSF-Biocomplexity
- 1998–2000 Colombian Pacific Coast mangrove ecosystem sampling, Colombia. Univalle/Colciencias.

### **Peer-Reviewed Publications**

Google Scholar: H-index = 20; Citations = 1563 (38 peer-reviewed publications)

- 38. Schwing P., Chanton J., Bosman S., Brooks G., Larson R.A., **Romero I.C.**, Diercks A. 2023. Organic carbon and planktic foraminifera radiocarbon derived Holocene sediment accumulation rates in the northern slopes of the Gulf of Mexico. Deep-sea research I, Vol 193, number 103959.

35. **Romero I.C.**, Chanton J.P., Brooks G., Bosman S., Larson R.A., Harris A., Schwing P., Diercks A. 2021. Molecular markers of biogenic and oil-derived hydrocarbons in deep-sea sediments following the Deepwater Horizon spill. *Frontiers in Marine Science*, Vol 8, number 637970.

contaminated marine snow deposition. Marine Pollution Bulletin (141): 164-175.

<https://doi.org/10.1016/j.marpolbul.2019.02.025>

25. **Romero I.C.**, Sutton T., Carr B., Quintana-RizzoT Q q0.24 0 0.24 0 0.24 0 0.24 0 0.24 0 0.24 0 0.24 0 0.24 0

14. Hastings D.W., Schwing P.T., Brooks G.R., Larson R.A., Morford J.L., Roeder T., Quinn K.D., **Romero I.C.**, Hollander D. J. 2016. Changes in sediment redox conditions following the BP DWH Blowout event. *Deep Sea Research II*, Vol 129: 167-178.  
<https://doi.org/10.1016/j.dsr2.2014.12.009>
13. **Romero I.C.**, Schwing P.T., Brooks G.R., Larson R.A., Hastings D.W., Flower B.P., Goddard E.A., Hollander D.J. 2015. Hydrocarbons in deep-sea sediments following the 2010 Deepwater Horizon Blowout in the Northeast Gulf of Mexico. *PLoS ONE* 10 (5): e0128371.  
<https://doi.org/10.1371/journal.pone.0128371>.
12. Brooks G.R., Larson R.A., Flower B.P., Hollander D.J., Schwing P.T., **Romero I.C.**, Moore C., Reichart G.J., Jilbert T., Hastings D.W. 2015. Sediment Pulse in the NE Gulf of Mexico following the 2010 DWH blowout. *PLoS ONE* 10 (7): e0132341.  
<https://doi.org/10.1371/journal.pone.0132341>.
11. Scharler U.M., Ulanowicz R.E., Fogel M.L., Wooller M.J., Jacobson-Meyers M.E., Lovelock C.E., Feller I.C., Frischer M., Lee R., McKee K.,



Dagua River Estuary, Pacific

Walters, P. Kramer, J. Lang, D. Marancik, M. Nijlunsing, J.T. Patterson, M. Pistor, **I.C. Romero**, M. Sevier, W

- 2021 **Romero I.C.**, Sutton T, Judkins H, Vecchione M, Cook A, Youngbluth M. Long-term PAH bioaccumulation in deep-pelagic organisms after the Deepwater Horizon spill. In: 16<sup>th</sup> Deep-Sea Biology Symposium. (Virtual) 09/12/21-09/17/21
- 2021 Sutton T, Boswell K, Cook A, Cornic M, Daly K, Frank T, Frasier K, Hildebrand J, Milligan R, Moore J, Murawski S, Pruzinsky N, Remsen A, Robinson K, **Romero I.C.**, Rooker J, Vecchione M, Wells D, Youngbluth M. The Open-Ocean Gulf of Mexico and Deepwater Horizon: A Decadal Synthesis of Research. In: 16<sup>th</sup> Deep-Sea Biology Symposium. (Virtual) 09/12/21-09/17/21
- 2021 **Romero I.C.** Anthropogenic activities and their chemical legacy in the Gulf of Mexico. National Academies of Sciences – Ocean Decade U.S Launching Meeting – Early Career Council Meet & Greet (Virtual) 02/3/21-02/4/21.
- 2021 **Romero I.C.**, T. Frank, H. Bracken-Grissom, A. Cook, M. Youngbluth, T. Sutton. Understanding the long-term persistence of organic pollutants and effects in mesopelagic fauna. Session: SS17 - Unravelling the ecology and biogeochemistry of the mesopelagic zone, In: ASLO Aquatic Science Meeting, Virtual: 06/22/21-06/27/21.
- 2020 **Romero I.C.**, J.P. Chanton, G.R. Brooks, S. Bosman, R.A. Larson, A. Diercks. Deepwater Horizon oil-residues as tracers of subsurface transport, partitioning, and fate of toxic compounds in the Gulf of Mexico

2020

- Bioaccumulation in the Gulf of Mexico Mesopelagic Ecosystem.*” 2018 Ocean Sciences Meeting, Portland, OR.
- 2018 Judkins, H., Vecchione, M., Sosnowski, A., **Romero, I.C.**, Richards, T., Timm, L., Cook, A., Sutton, T. “*What have we learned since 2011 about cephalopods of the northern Gulf of Mexico?*” In: *Gulf of Mexico Oil Spill & Ecosystem Science Conf.* New Orleans: 02/5/18-02/8/18.
- 2018 **Romero I.C.**, John W. Tunnell, Jr., Aprami Jaggi, Jagos Radovic, Joel Koskta, Jeff Chanton, Thomas B.P. Oldenburg, Dave Hollander. Assessing the weathering of residual oil deposited in Mexico coastal environments 37 years after the IXTOC-1 spill using novel analytical techniques. In: *Gulf of Mexico Oil Spill & Ecosystem Science Conf.* New Orleans: 02/5/18-02/8/18.
- 2018 Sutton T., Milligan R., Cook A., Moore J., Boswell K.

- 2017 Barnett, B.K., W.F. Patterson III, J. Chanton, D. Hollander, **Romero I.C.**, E. Goddard, and J. Tarnecki. Evidence in Otoliths for Food Web Impacts from the Deepwater Horizon Oil Spill. In *Gulf of Mexico Oil Spill & Ecosystem Science Conf.* New Orleans: 02/6/17-02/9/17
- 2017 Overholt W., E. Mercado, X. Sun, **Romero I.C.**, D.J. Hollander, K. Konstantinidis, M. Huettel, and J.E. Kostka. Microbial processes in a submerged coastal sands impacted with weathered oil. In: *Gulf of Mexico Oil Spill & Ecosystem Science Conf.* New Orleans: 02/6/17-02/9/17.
- 2017 Bosman S., J. Chanton, D. Hollander, P. Schwing, **Romero I.C.**, E. Goddard, A. Gracia, E. Escobar, B.E. Rosenheim. 13C and 14C isotopic distributions in sediment and suspended particulates in the southern GoM. In: *Gulf of Mexico Oil Spill & Ecosystem Science Conf.* New Orleans: 02/6/17-02/9/17.
- 2017 Machain-Castillo, M. L., Gracia, A., Ruiz-Fernández, A.C.,, Sanchez-Cabeza, J.A, Rodríguez-Ramírez, A., Alexander-Valdés, H, Nava-Fernández, X.A; Gómez-Lizárraga, L. E; Schwing, P.T., Hollander, D.J., **Romero, I.C.** Assessing the role of benthic foraminifera as indicators of the benthic ecosystem health and evolution after the IXTOC-I Oil Spill (Southern Gulf of Mexico). In *Gulf of Mexico Oil Spill & Ecosystem Science Conf.* New Orleans: 02/6/17-02/9/17.
- 2017 Bartlett T.R., **Romero I.C.**, N.H. Zenzola, B.E.Carr, E. A. Goddard, G. Ellis, D. J. Hollander Hydrocarbon Sources Impacted by Oil Spills at Depth: Chemical Signature of the Ixtoc-1 Spill. In *Gulf of Mexico Oil Spill & Ecosystem Science Conf.* New Orleans: 02/6/17-02/9/17.
- 2017 Carr B., Pulster E., **Romero I.C.**, Bartlett T.R., Hollander D., Murawski S. Comparison of Using ASE and QuEChErs Methods for Extracting PAHs from Fish Liver and Muscle. In Gulf of Mexico Oil Spill & Ecosystem Science Conference. New Orleans: 02/6/17-02/9/17.

2016 **Romero I.C.**, Gerardo A. Toro-Farmer, Arne-R Diercks, Frank Muller-Karger, Gregg R. Brooks,

**I.C., Hollander D..** Changes in sediment redox conditions following the BP DWH Blowout event. GoM Oil Spill & Ecosys. Science Conference. Mobile, Alabama, 01/26-29/14.  
2013 **Romero I.C.;** Toro-



2003

## **Professional Service**

- 2022 Reviewer National Academies of Sciences, Engineering, and Medicine (NAS) – Gulf Research Program, environmental Protection and Stewardship
- 2022 Conference session organizer: Sedimentation and redistribution of natural sediments and the introduction of anthropogenic contaminants into the deep sea. Ocean Sciences Meeting (Dierks, Romero, Larson, Schwing), 02/24/22-03/04/22
- 2021-22 Diversity, Equity and Inclusion Committee (DEI), College of Marine Science, USF
- 2021 Reviewer National Academies of Sciences, Engineering, and Medicine (NAS) – Early Career Fellowship, Gulf Research Program.
- 2020 Conference session Lead: Gulf of Mexico Oil Spill & Ecosys

**Service to Extramural Community (invited meetings, community engagement)**

2021-22 Interviews by High Schoolers, Oceanography Camp for Girls – USF, College of Marine Science (07/15)

- 2019 Interview by Kristen Coyne at the National High Magnetic Field Laboratory. “Getting to the bottom of the Deepwater Horizon’s impact (April 17, 2019), Tallahassee, FL. <https://nationalmaglab.org/news-events/feature-stories/deepwater-horizon-impact-2>
- 2019 Publication highlighted in “GOMRI eNews” on Feb 4<sup>th</sup> 2019: Decadal assessment of PAHs in mesopelagic fishes from the GoM reveals exposure to oil-derived sources.
- 2019 Podcast “Panel Discussion (Episode 16): What we have learned about the Gulf for the past seven years” by David Levin, WUSF studios, Tampa, FL (November 19, 2019). <https://www.marine.usf.edu/c-image/media-player/>
- 2018 Deep-sea fish research highlighted by the Marine Diaries, Rita Steyn “When is a fish like a canary? <https://www.themarinediaries.com/tmd-blog/when-is-a-fish-like-a-canary>
- 2017 Publication highlighted in “GOMRI eNews” on August 26, 2016: Characterizing the variability of benthic foraminifera in the northeastern GoM following the Deepwater Horizon event (2010–2012). *Environ. Sci. Pollut. Res.* 2017, 24 (3), 2754–2769, DOI: 10.1007/s11356-016-7996-z
- 2017 Podcast “Isabel Romero: One Hundred Years of Solitude” highlighted by GulfCast (Dispatches from the Gulf, filmmakers Marylin and Hal Weiner). [https://soundcloud.com/gulfdispatches/gulfcast\\_027\\_isabelromero\\_storycollider](https://soundcloud.com/gulfdispatches/gulfcast_027_isabelromero_storycollider)
- 2016 The story collider, stories about science: Oil spills and Ecosystems. Tampa, Stageworks Theater. Youtube StoryColliderRomero: <https://www.youtube.com/watch?v=EQPASbgjfO4>
- 2016 Publication highlighted in “Publication highlights – GOMRI” on August 26, 2016: Geochemical signatures of a Marine Gas Well Blowout in the Gulf of Mexico. *J. Geophys. Res. Oceans*, 121, DOI: 10.1002/2015JC011037
- 2016 Research in Mexico coastal environments highlighted in the short documentary “The Ixtoc Blowout” by filmmaker Jake Price (<http://jakeprice.com>).
- 2016 Deep-sea sediment research in the C-IMAGE Consortium featured in the documentary “Dispatches from the Gulf” produced by filmmakers Marylin and Hal Weiner. [www.youtube.com/watch?v=gcU7uIXNYig](http://www.youtube.com/watch?v=gcU7uIXNYig) , and