

GRIIDC

Dataset Hall of Fame*

Most Downloads (92) & Publications (18)

Consortium: Consortium for Advanced Research on Transport of Hydrocarbon in the Environment (CARTHE) II

Title: GLAD experiment CODE-style drifter trajectories (low-pass filtered, 15-minute interval records), northern Gulf of Mexico near DeSoto Canyon, July-October 2012

DOI: [10.7266/N7VD6WC8](https://doi.org/10.7266/N7VD6WC8)

Largest (6.52 Terabytes)

Consortium: Gulf of Mexico Integrated Spill Response Consortium (GISR)

Title: ROMS-WRF: Regional Ocean Modeling System (ROMS) coupled with the Weather Research Forecasting (WRF) model forecasts for the Gulf of Mexico for the period July-Sept 2012

DOI: [10.7266/N7B8566B](https://doi.org/10.7266/N7B8566B)

Smallest (259 bytes)

Consortium: Aggregation and Degradation of Dispersants and Oil by Microbial Exopolymers (ADDOMEx)

Title: Test of Coastal water with coastal microbial concentrate (TeCOAST): Production of TEP as a function of oil

DOI: [10.7266/N7VT1QDW](https://doi.org/10.7266/N7VT1QDW)

*as of May 27, 2020

About the Gulf of Mexico Research Initiative

The Gulf of Mexico Research Initiative is a 10-year, \$500 million independent research program established by an agreement between BP and the Gulf of Mexico Alliance to study the effects of the Deepwater Horizon incident and the potential associated impact of this and similar incidents on the environment and public health.

Would you like to know more about the GoMRI-funded research?

Check out our [Research page](#) on the website:

<http://research.gulfresearchinitiative.org/research-awards/>

Capping Off the Decade of GoMRI

Ten years ago, July 15, 2010, the well below the Deepwater Horizon (DWH) oil rig was capped after discharging gas and light sweet crude oil into the Gulf of Mexico for 87 days. The Gulf of Mexico Research Initiative (GoMRI) was created in response to the disaster to improve society's ability to understand the impacts of the oil on the ecosystem, learn new ways to mitigate oil in the environment, and understand how to be better prepared should a similar event arise in the future. This work has resulted in more than 1,400 peer-reviewed publications. [Check out the full list here.](#)



Graphic Created by Jason Mallett, Consortium for Ocean Leadership, for the Gulf of Mexico Research Initiative.

As GoMRI comes to a close, there have been several efforts to compile the novel findings from the program into products to help answer some larger questions about the spill and recovery in the Gulf:

- How should we respond to the next spill?
- Have our ecosystems recovered?
- What role did microbes play?
- And many more...

Some of these products are shared here, and many more can be found on the [GoMRI website](#), including [Synthesis products](#), as well as the websites of several collaborating organizations – [Screenscope](#), [Sea Grant](#), and the [Smithsonian Ocean Portal](#). Individual research efforts can also be perused on the GoMRI [Flickr page](#) and [YouTube channel](#). Also make sure to check out web stories of [Science Highlights](#) and the research conducted by our [GoMRI Scholars](#).

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What was known about oil spills prior to DWH?

In 2017, a [literature survey](#) was published in which researchers examined over 1,200 oil spill studies conducted between 1968 and 2015 to characterize the field and describe changes. For example, research attention shifted dramatically to the Gulf of Mexico following DWH, rising from 2% of studies in 2004-2008 to 61% in 2014-2015, with the DWH spill ranking as the most studied oil spill. The analyses also provided insights into research trends and gaps, particularly a long-standing lack of human health studies (less than 1% of the surveyed oil spill literature).

Journal Special Issues

Several journal special issues provide synopses of DWH research and resources, such as the April 2020 special edition of the American Geophysical Union's (AGU) *Eos* magazine, [Science from the Spill](#). The issue's [feature article](#) was authored by GoMRI researchers and describes breakthroughs in microbial genomics as a result of spill research. In 2019, a special issue of [Current: The Journal of Marine Education](#), produced by outreach coordinators from GoMRI consortia, synthesized oil spill science and shared educational resources that incorporate oil spill science into education curriculums. For more information on education efforts, check out the [GoMRI Education Resources website](#). In 2018, a special issue of *Marine Technology Society Journal*, [Advancing Oil Spill Technology: Beyond the Horizon](#), focused on technology related to oil spill research. Lastly, in 2016, a special issue of *Oceanography Magazine*, [GoMRI: Deepwater Horizon Oil Spill and Ecosystem Science](#), highlighted scientific advances from the program ranging from how the spill affected marine ecosystems and the fate of oil in the marine environment, to data management, and education and outreach initiatives.

Books

A [two-volume book series](#) titled [Deep Oil Spills: Facts, Fate, and Effects](#) and [Scenarios and Responses to Future Deep Oil Spills: Fighting the Next War](#) was published by the Center for the Integrated Modeling and Analysis of the Gulf Ecosystem (C-IMAGE) in 2019. This series provides a synthesis of oil spill science from GoMRI, the Natural Resource Damage Assessment (NRDA) process, and other agencies for use in future policy formulation, disaster response, and damage assessments. It was a collaborative effort involving over 150 researchers (representing academia, oil industry, and government scientists and contractors) who authored the 63 chapters. C-IMAGE also recently published a [booklet and corresponding webpage](#) that provide a less technical overview of findings related to oil spill impacts on fishes, the processes involved with oil sinking to the seafloor, and sub-sea dispersant use.

Public-Focused Resources

For more public-focused resources, check out the [Gulf of](#)

[Mexico Sea Grant Oil Spill Science Outreach Program's publications](#). In 2019, they updated their [Top 5 Frequently Asked Questions \(FAQs\)](#) about DWH and have several resources focused on human impacts, including [mental health](#) and [fisheries](#). Similarly, the Smithsonian Ocean Portal has several [articles](#) about GoMRI research topics along with an interactive infographic [The Anatomy of an Oil Spill: Science from the Gulf of Mexico](#) and ArcGIS story map [Where Did the Oil Go In the Gulf of Mexico?](#)

Targeted Summary Publications and Reports

In addition to these broader synopses, there have been several targeted summary publications and reports, including the following topics:

- **Oil-Eating Microbes:** A 2020 report titled [Microbial Genomics of the Global Ocean System](#) discusses advancements in marine microbiology and metagenomics and explains how microbial communities in the Gulf of Mexico played a critical role in the oil spill cleanup by contributing core hydrocarbon bioremediation services. The report is a joint effort of the American Academy of Microbiology, AGU, and GoMRI, who convened at an [April 2019 colloquium](#).

- **MOSSFA (Marine Oil Snow Sedimentation & Flocculent Accumulation):** In a 2013 workshop, researchers discussed the formation and fate of oil-associated marine snow and its ecological impacts on deep-sea environments and made recommendations for future marine oil snow research. Their findings and discussions have been published in this [report](#). In addition to the 2013 workshop and report, a synthesis effort on MOSSFA was recently completed in 2019, resulting in this [report](#).

- **Photo-Oxidation:** Scientific advancements in how sunlight alters floating surface oil are described in a feature article in *Eos* titled [Why Sunlight Matters for Marine Oil Spills](#). The article summarizes a two-year synthesis effort that began at a [2018 workshop](#).

- **Dispersants:** Published in 2019, a [Proceedings of the National Academy of Sciences \(PNAS\) News Feature](#) highlights GoMRI researchers as they seek to understand what happens when chemical dispersants are used in a deep-sea setting for oil spill remediation. The National Academies of Science, Engineering, and Medicine released a 2019 [report](#) that assessed the effects and efficacy of dispersants as an oil spill response tool. It also included a comparison of the fate and effects of chemically dispersed oil versus untreated oil and a review of dispersant use during actual spill events, such as DWH. A GoMRI synthesis effort is currently underway to complement the National Academies' study and further evaluate GoMRI-funded research relevant to dispersants within the context of what was known prior to GoMRI, what has been learned during GoMRI, and what are the important gaps in knowledge in need of research.

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Targeted Summary Publications and Reports

- **Ray-Fin Fish:** Scientists from the Relationships of Effects of Cardiac Outcomes in Fish for Validation of Ecological Risk (RECOVER) II consortium synthesized data from 53 peer-reviewed laboratory studies that investigated how DWH oil may affect 20 ray-fin fish species in this [article](#).
- **Deep-Sea Fish:** Results of a 10-year (2007-2016) assessment study by scientists in C-IMAGE and the Deep Pelagic Nekton Dynamics in the Gulf of Mexico (DEEPEND) consortia on the vulnerability of deep-sea fishes to oil exposure are summarized in this [article](#).
- **Marine Mammals:** The National Marine Mammal Foundation, who leads the Consortium for Advanced Research on Marine Mammal Health Assessment (CARMMA), published a [special article](#) in 2020 that summarized what we have learned over the decade about the impact of the spill on dolphin and whale populations.
- **Salt Marshes:** A [synthesis workshop](#) was held in April this year to discuss the effects of the spill on coastal wetlands, focusing also on ecosystem-component interactions and feedbacks. Once complete, the report will be posted on the [Synthesis Products](#) page. In 2019, an eight-year study of oil quantity and quality in 1,200+ samples from continental shelf, estuarine waters, and marsh sediments in the Gulf of Mexico was summarized in this [article](#). It discusses how the initial oiling at the marsh edge gradually moved inland, affecting the entire marsh within two years, suggesting that the total area oiled was larger than the visible initial oil distribution when the spill first occurred.
- **Corals:** [Researchers analyzed](#) high-definition imagery of over three hundred deep-sea coral colonies from 2011-2017 to quantify their recovery from the oil spill. After seven

years, the effects of the spill on those coral are still visible compared to reference sites. For more information about corals, another great resource is this [set](#) of educational videos.

- **Human Health:** A 2019 [publication](#) summarizes the results of a 2016 survey of 2,500 U.S. Gulf Coast residents to learn how their lives have been affected since DWH and assess the long-term health and well-being of these communities. One of the key findings of the study was that fishing households experienced depressive symptoms despite social support after oil spill. For more information on public health impacts, check out the [resources](#) available on the Consortium for Resilient Gulf Communities (CRGC) website.

When the well was capped 10 years ago, the immediate threat of spilling oil was abated, but that was just the beginning for Gulf ecosystems as they began to recover and for GoMRI as it began a decade-long journey to better understand impacts, recovery, and future preparedness. There were many questions and not much could be drawn from previous research. The establishment of GoMRI and the dedication of the researchers funded by the program to understand the impacts has contributed significantly to advancing understanding of the Gulf. These examples are just a few of the countless publications and resources that have been developed to share scientific results from the program. As we know all too well, the journey is not over for the Gulf as it recovers from this spill and waits for the next. Our hope is that GoMRI's legacy of research and researchers will serve as the foundation on which new discoveries, technologies, models, and management practices can be built for years to come.



One of the key components of the GoMRI Master Research Agreement (MRA) is that GoMRI-funded data should be fully accessible with minimum time delay from a research database. This led to the creation of the Gulf of Mexico Research Initiative Information and Data Cooperative (GRIIDC) based out of the Harte Research Institute for Gulf of Mexico Studies at Texas A&M University – Corpus Christi. [Check out the GRIIDC website here.](#)

As of July 1, 2020 GRIIDC housed over 3,100 datasets with 81 terabytes of data contributed by 393 research groups and 2,835 researchers. Not only has GRIIDC provided an interface for access to GoMRI datasets, it has also worked to build data management skills within the GoMRI community through over 22 workshops and 29 guidance documents.

Open data is increasingly becoming the new normal and is important for discovering new research, validating previous work, and using as baseline data to mitigate future oil spills. As more journals and funding organizations require open data, GoMRI researchers are set for success after years of data organization training and submission of data to GRIIDC.

In the coming years, GRIIDC is looking forward to growing even more and ensuring a data and information legacy not only for the GoMRI program, but for the entire Gulf of Mexico.

GoMRI Scholars in Action

GoMRI takes the challenge of training the next generation of Gulf of Mexico and oil spill scientists very seriously! GoMRI has funded more than 1,200 Ph.D. candidates and master's degree students, with over 300 graduate students being recognized as GoMRI Scholars. To be considered a GoMRI Scholar, graduate students must have participated in a GoMRI-funded project for at least one year, be primarily funded by GoMRI, and be working on a thesis or dissertation based on GoMRI-funded science. The [first GoMRI Scholar website article](#) was published in July 2014 and focused on University of South Florida student Susan Snyder and her work on fish bile. Since then, the GoMRI website has [profiled](#) almost a third of the GoMRI Scholars. Check out the top ten most read GoMRI Scholar's articles below.

Top 10 Most Read GoMRI Scholar's Website Articles*

*as of July 1, 2020

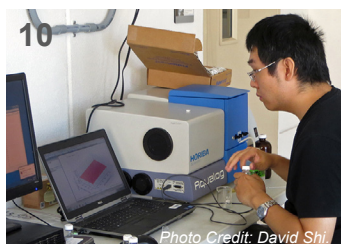


Photo Credit: David Shi

[Grad Student Shi Uses Chemical Fingerprinting to Investigate Oil in the Water Column](#) (Nov. 2017)

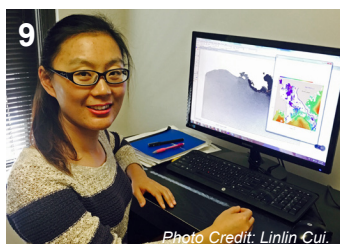


Photo Credit: Linlin Cui

[How Grad Student Cui Uses River Diversion Models to Inform Oil Spill Remediation](#) (Dec. 2016)

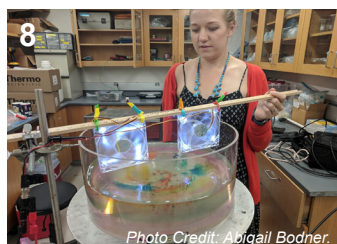


Photo Credit: Abigail Bodner

[Grad Student Pearson Resolves Statistical Conflict in Submesoscale Ocean Processes](#) (Jan. 2019)



Photo Credit: Nina Pruzinsky

[Grad Student Novotny Searches for Oil Transport Pathways in Deep-Sea Fish Stomachs](#) (May 2017)

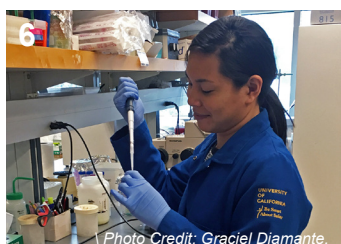


Photo Credit: Graciela Diamante

[Grad Student Diamante Investigates How PAHs Affect Fish Development](#) (Feb. 2017)



Photo Credit: Vanessa Parks

[Grad Student Parks Assesses How Disasters and Social Factors Influence Human Health](#) (Jul. 2017)



Photo Credit: Natalie Slayden

[Grad Student Pruzinsky Uses Morphological Patterns to ID Young Tuna for Population Assessments](#) (Aug. 2019)

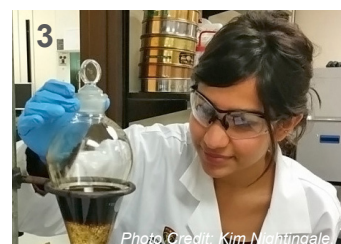


Photo Credit: Kim Nqiangale

[Grad Student Jaggi Seeks Solution to World's Clean Water Shortage](#) (May 2016)

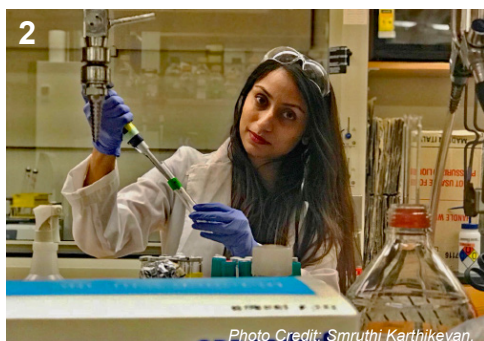


Photo Credit: Smruthi Karthikeyan

[Grad Student Karthikeyan Uses Genetics to Understand Microbial Oil Degradation in Beach Sands](#) (Sep. 2018)



Photo Credit: Natalia Sidorovskaia

[Grad Student Mahmud Makes Acoustics and Tracking Marine Mammals "Click"](#) (Jun. 2017)

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At the GoMRI Synthesis Symposium in February, several GoMRI Scholars took part in a panel focused on the future, representing all of the students who have served as essential team members for GoMRI research and have brought curiosity and energy to the GoMRI scientific program. Below are excerpts from that panel discussion.

How did involvement with GoMRI (and GoMRI-funded researchers) shift your perspective related to research and future jobs/application of your research?



Photo Credit:
Kathryn Keating.

Kathryn Keating, Understanding Resilience Attributes for Children, Youth, and Communities (RCYC) in the Wake of the Deepwater Horizon Oil Spill (RFP-V): "This experience has sharpened my focus, illuminating a path in work related to Gulf issues and coastal communities. It provided opportunity and access to mentorship within the RCYC project through my advisor, Dr. Tim Slack and the co-PI's on our project, Dr. Jaishree Beedasy and Dr. Thomas Chandler, and also within the larger GoMRI community. Coming to [the Gulf of Mexico Oil Spill & Ecosystem Science Conference (GoMOSES)] to present my research gave me my first experience in communicating research to an interdisciplinary audience. I continue to learn new ways to engage in interdisciplinary conversations as a social scientist, working to weave my social work perspective into these discussions as well.

One of the things that my involvement with the RCYC project led me to better understand, as a social worker and someone who is deeply interested in the policy implications of research related to the spill, was how I could potentially blend my macro-level social work skills with the skills I was developing as a sociological researcher. This led me to apply for the National Academies of Science, Engineering, and Medicine Gulf Research Program Science Policy Fellowship. I received the fellowship and worked from 2018-19 in an applied policy role with the Gulf Coast Ecosystem Restoration Council, based in New Orleans. It was an excellent experience that clarified my thinking around the ways in which my sociology and social work backgrounds might contribute meaningfully to the ongoing interdisciplinary restoration and monitoring work in the Gulf."

Cheng Li, Dispersion Research on Oil: Physics & Plankton Studies (DROPPS): "I started my PhD study at Johns Hopkins University in 2010, the exact year when Deepwater Horizon oil spill happened. My initial research was on studying bottom boundary layer flows off the New Jersey coast. During a one month field trip, I was amazed by how beautiful and powerful the ocean wave is. The Deepwater Horizon oil blowout in the Gulf gave that beautiful image additional meaning, and the necessity of oil spill research and recovery became more personal. I am so thrilled to become part of it.

From scratch, I built my wave tank specially designed for oil spill research. The objective of this research is to generate high quality oil droplet size distribution data for models to accurately model the oil spill processes. One thing special about the DWH oil spill is that the response included application of an unprecedented amount of oil dispersant, COREXIT 9500A. The actual effects of dispersant on the oil droplet size distribution is critical in modeling accurately. For example, when you have large droplets, because of inertia, it will not follow the ocean flow and for generation of small droplets, one might argue that more surface area is exposed for faster biodegradation. The data generated through the research is being used by modelers to develop oil spill models."

Kaitlin Frasier, C-IMAGE: "Involvement with GoMRI researchers and research questions helped shape my understanding of research as a fundamentally interdisciplinary activity. GoMRI allowed me to meet a wide range of scientists not just from academia, but also from industry, government institutions, and non-profits, as well as people with scientific training who subsequently moved into roles that I had not previously considered. I realized that successful scientific careers can come in many shapes."

What are the future research directions that you hope to move? What are you most excited about related to future research?



Photo Credit: Trevor Holmgren.

Cheng Li, DROPPS: "I am now working at the National Energy Technology Lab, part of the Department of Energy (DOE). My future research, as of now, is on multiphase flows. It is a very important subfield of fluid dynamics. Not only for oil spill dispersion at sea, but people also study multiphase flow processes like rain formation, agricultural sprays, and combustion. For my PhD

research, I was more focused on oil as the dispersed phase, and sea water as the continuous phase. For example, particle-laden flows, where solid particles are the dispersed phase and gas acts as continuous phase, and

this is used extensively in the field of chemical engineering. For my current and future research, I will be working on various multiphase flow systems. My GoMRI experiences have well prepared me for my current research role at DOE, studying particle-laden flow, both knowledge and technique-wise. With the development of better computational and experimental research resources, we are going to understand better and predict what is happening in a complicated multiphase flow systems. I am very grateful for GoMRI.

Kaitlin Frasier, C-IMAGE: "I am excited about the increasing feasibility of large scale interdisciplinary oceanographic research through remote sensing, autonomous technology and big data."

What could GoMRI have done differently to better engage students?

Cheng Li, DROPPS: "It's a very tough question. The GoMRI community is highly interdisciplinary. We are always on a steep learning curve trying to understand different aspect of the research. When you understand more about the research and begin to appreciate its beauty and sophistication, you are likely to engage more. In general, to better engage students requires facilitating a better understanding between different subfields. To better engage students, presumably from various backgrounds, it will be beneficial to have a clear big picture, to identify key problems, and to connect students from various backgrounds. The establishment of consortia is a great practice to engage students from different backgrounds. More work can be done to better engage students through consortia or community-wise seminars, 101 lectures, or outreach activities."

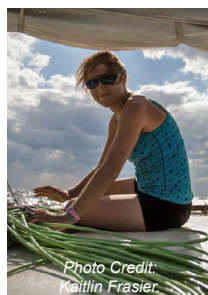


Photo Credit:
Kaitlin Frasier.

Kaitlin Frasier, C-IMAGE: "In my experience as a student within one of the GoMRI consortia (C-IMAGE), there was a constant, dedicated effort to engage students, however there was limited interaction between students across the various consortia. I would have enjoyed the opportunity to interact with students from other fields beyond the physics and biology groups within our consortium."



The GoMRI partnership with the [Smithsonian Ocean Portal](#) has not only yielded amazing web-based content over the years, such as their recently released interactive explaining [What Are Fossil Fuels?](#) and an ArcGIS story map on [Where Did the Oil Go In the Gulf of Mexico?](#), but also allowed for some really cool events! One of these took place on March 6, 2020 at Denizens Brewing Co. in Silver Spring, Maryland, as a joint event between GoMRI, the Smithsonian National Museum of Natural History, and [Nerd Nite DC](#). Three

members of the GoMRI research community, Laura Bracken Chaibongsai (CARTHE), Lela Schlenker (RECOVER), and Laura Timm (DEEPEND), told their engaging research stories of the failure-lined road to innovation and technology, the bedroom antics of mahi-mahi, and barcoding shellfish, respectively, to a sold-out audience! And speaking of really cool web content, the Ocean Portal recently released this piece on [oil degrading microbes!](#)

Photo Caption: Laura Bracken Chaibongsai tells her story of technology development and innovation to an engaged audience during the March 6, 2020 Nerd Nite event. Photo Credit: Katie Fillingham, GMT.

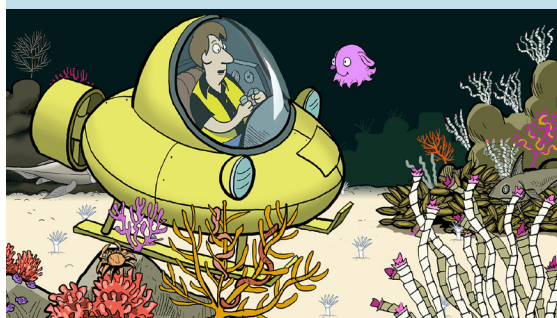


Education Spotlight

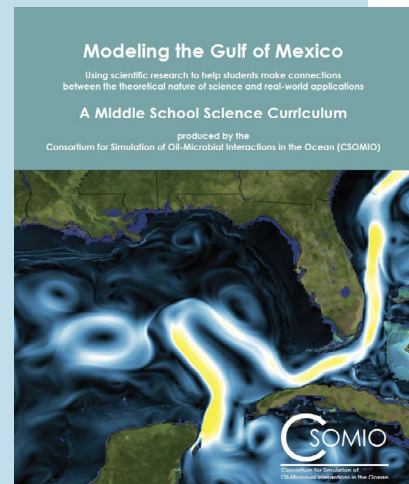
The [Consortium for Simulation of Oil-Microbial Interactions in the Ocean](#) (CSOMIO) created a middle school science curriculum called "[Modeling the Gulf](#)" to help students make connections between the theoretical nature of science and real-world applications. The curriculum includes five lessons plans related to ocean modeling, including the fields of biogeochemistry, fluid dynamics, and microbiology.

"As someone with experience in both K-12 and informal education, I understand the desire for teachers to have innovative, real-world curricula and materials. By creating them with [Next Generation Science Standards] in mind, my goal was to make it easy to incorporate into a practicing educator's classroom. 'Modeling the Gulf' takes a relevant phenomenon and uses it as a launch point to familiarize students with both physical science concepts and the basics of mathematical/computer modeling," described Karolyn Burns, a science educator who developed the curriculum on behalf of CSOMIO.

The [Ecosystem Impacts of Fluid and Gas Inputs from the Geosphere](#) (ECOGIG) consortium released the fourth episode of *The Adventures of Zack and Molly*, an award-winning animated series created in partnership with Jim Toomey to introduce children to the deep ocean. The latest episode describes mysterious hydrothermal vents and the superhero *Beggiatoa*, bacteria that live and thrive in the extreme and toxic conditions surrounding the vents. You can find the entire film series, along with learning guides connected to the Next Generation Science Standards, [here!](#)



Zack (left) and Molly (right) in "The Adventures of Zack and Molly." Credit: Jim Toomey; provided by ECOGIG.



Modeling the Gulf of Mexico

Using scientific research to help students make connections between the theoretical nature of science and real-world applications

A Middle School Science Curriculum

produced by the Consortium for Simulation of Oil-Microbial Interactions In the Ocean (CSOMIO)

CSOMIO curriculum cover.

Looking for more Gulf of Mexico- and oil spill-related educational content? You're in luck! The GoMRI website houses a collection of the wide variety of education and education-related materials developed through funding from GoMRI. Find it all [here!](#)

Note from the Research Board Chair

Dr. Rita Colwell, University of Maryland & Johns Hopkins University

Nearly 10 years ago, I received a [phone call](#) from Dr. Ellen Williams, then chief scientist at BP, who informed me of a research program being launched that was to be dedicated to understanding impacts of the Deepwater Horizon oil spill and would be unprecedented in scope. This program would become the Gulf of Mexico Research Initiative (GoMRI). When asked by Dr. Williams to consider serving as leader of the program, I readily accepted. Of course, I, as well as the members of the GoMRI Research Board, did not know exactly what the future would bring but we believed that with dedicated effort and in partnership with our Management Team and outstanding research scientists, we could succeed. In fact, the program has, by far, exceeded all our expectations.

Today, I look back on the past 10 years of GoMRI with tremendous pride and great admiration for the dedication of the scientists and the discoveries arising from the entire GoMRI research community. As you read this *farewell* issue of the GoMRI newsletter, I am certain you will appreciate the relentless pursuit of knowledge exhibited by members of the GoMRI Research Board, Research Consortia, Individual Investigators, and our critical outreach partners. As of this date, the GoMRI community has produced 1,434 peer-reviewed journal articles, created 3,222 valuable sets of data, and contributed significantly to the education and training of more than 1,200 graduate students. These impressive numbers comprise the legacy of GoMRI, but the sum is more than statistics. The legacy of GoMRI includes the community, the network, the *family* of researchers of all ages, representing many different institutions and reaching across a variety of research disciplines. The GoMRI program has set a new precedent for how collaborative research can be done, and perhaps more importantly, how it should be done if the complex challenges of the world today are to be met.

We learned a great deal during these 10 years, including the amazing role of microorganisms in responding to oil spills, what effects the chemical components of oil have on living systems, [why sunlight matters](#), what [MOSSFA](#) is and what it does, and how all of the information gained from every discipline fits together in oceanographic and [operational models](#). And so much more!

Many activities and events that had been organized to present results of GoMRI's scientific research in the format of interdisciplinary synthesis have had to be rescheduled because of pandemic COVID-19. However, you can stay informed of dates, times, and locations of the rescheduled events by following the GoMRI Synthesis and Legacy page of the website, [here](#). Speaking of the website, GoMRI plans to keep www.gulfresearchinitiative.org available and active for the next 10 years. At the end of 2020, you will notice a new design for the homepage, but you will be able to find all your trusted resources! These include the entire [list of publications](#), [datasets](#), [Synthesis products](#), and the amazing library of [educational materials](#).

It is traditional to look back and reflect when a major and influential activity comes to an end. While GoMRI has, in total, gathered a significant amount of new information and amassed extensive and useful sets of data, we also know there is still so much more work to be done and to be incorporated into what has been done to date. Therefore, I am excited for the future of the Gulf of Mexico and the utility of the oil spill research we have done... knowing that it more still is needed. High-impact publications of the Gulf of Mexico Research Initiative will continue to be released over the next several years and will serve to guide future Gulf scientists. Graduate students who grew up in GoMRI will become leaders in their fields and the knowledge gained from GoMRI research will inform decisions in the future. I look forward to all that is ahead and thank each of you for your role in GoMRI over the past 10 years!



Photo Credit: CC 4.0, no changes made.

The Gulf of Mexico Sea Grant Oil Spill Science Outreach team hosted a seminar on March 12, 2020, in Metairie, Louisiana, in conjunction with the Southeastern Louisiana Area Committee meeting, that discussed surface collecting agents (SCAs) – compounds that can be used to herd oil during emergency response operations. Speakers covered the history, science, and logistics of using SCAs during an oil spill. Complementary oil spill response techniques, as well as advances in developing the next generation of chemical herders, were also discussed. Click [here](#) to see the agenda and [here](#) to view the slide presentations.



The team's most recent publication focuses on mangroves, which are extremely productive and beneficial coastal ecosystems. Read about how mangrove forests protect and stabilize shorelines [here](#). Read all of the Gulf of Mexico Sea Grant Oil Spill Science Outreach Program publications [here](#).

The team also recently issued three workshop-related reports:

- **Evaluation of a national workshop series to minimize health, social, and economic disruptions from oil spills:** In 2018 and 2019, seven Sea Grant programs (including the Gulf Sea Grant Oil Spill Science team) received support from the National Academies of Science, Engineering, and Medicine's Gulf Research Program and GoMRI to conduct workshops around the country focused on public health, social disruption, and economic impacts of oil spills. This report summarizes a follow-up evaluation sent to everyone involved in the project six months after it concluded. Access this report [here](#).
- **Fostering emergency responder and university researcher collaboration: Workshop summary report:** Beginning in 2015, team members hosted five workshops around the Gulf of Mexico to give emergency responders and oil spill science researchers an opportunity to network and learn from one another. To read the report and learn attendees' ideas on ways researchers and responders can collaborate during future spills, please click [here](#).
- **Oil in the Bay: 15 years after the Athos I spill:** The Gulf of Mexico Sea Grant Oil Spill Science Outreach team, in partnership with the Sea Grant programs of Delaware, New Jersey, and Pennsylvania, held a special session at the Delaware Estuary Science and Environmental Summit in January of 2019. The workshop aimed to highlight oil spill-related needs and resources in the Delaware Bay, as well as strengthen networks. This report details workshop proceedings. Learn more [here](#).

During the coronavirus pandemic, the team continues to share important science with the community through webinars. The first in a three-part series of webinars on detecting the true, potential, and perceived impacts to human health following an oil spill was held on June 8, 2020, and focused on [impacts of oil spills on air quality](#). Parts two and three of this series will focus on water quality and dispersants, with dates yet to be announced. The team also recently began a seminar series on oysters with the [first part of the series](#) held on June 26, 2020. Dates and times for other topics, including marine snow, will be announced in the coming days and weeks. To keep updated on the latest developments, please click [here](#)! Finally, during the upcoming months the team will be producing outreach publications that summarize the work of the Synthesis core areas and supporting state events that highlight GoMRI's activities.

As GoMRI comes to an end, the Gulf of Mexico Sea Grant Oil Spill Science Outreach team will continue to maintain the oil spill website that features [presentations](#) from GoMRI-supported and other researchers and [outreach publications](#). Moving forward, the team will be sharing information beyond oil spill science, to include additional topics through a partnership with the National Oceanic and Atmospheric Administration's (NOAA) National Centers for Environmental Information.



Dispatches from the Gulf 1, 2, and 3, produced by [Screenscope Films](#), are an amazing legacy of GoMRI. The [three feature length films](#), along with their accompanying [educational resources](#), [podcast](#), and [over 100 short films](#), tell the stories of the researchers investigating the environmental health of the Gulf of Mexico.

Together, the suite of *Dispatches* products examine science, innovation, community, and recovery in the Gulf of Mexico following the Deepwater Horizon oil spill. Digital versions of the three *Dispatches* can be requested [here](#).



**GULF OF
MEXICO**
RESEARCH INITIATIVE
SYNTHESIS & LEGACY

Contributing Author: Callan Yanoff

Over three years ago, in April of 2017, a small group of GoMRI Research Board members got together to begin considering how to synthesize all we have learned during GoMRI. Utilizing the five [GoMRI Research Themes](#) as a guide, this group identified a number of critical questions and subject areas which would serve as the backbone for what eventually turned into the [eight Core Areas and five key questions](#) that shaped the entire Synthesis and Legacy effort.

Even from those early days, the goal of documenting scientific achievements and advances to lead to new understanding and improved practices remained consistent. As each Core Area developed and more scientists, practitioners, and community leaders were brought in, the initial scope expanded to fill in gaps and explore emerging questions more comprehensively – for example, how many people knew what [allostatic load](#) was at that time?

Synthesis guidelines soon evolved into flexible instructions, encouraging leaders to capitalize on the immense collection of GoMRI talent and knowledge to make each workshop their own. These individual and creative approaches have driven results far past expectations – not even a global pandemic could slow down this effort as recent workshops have continued as scheduled by quickly and cleverly adapting to run virtually. What was initially envisioned as a series of five or six workshops, turned into a much larger and even more ambitious undertaking. Synthesis leaders have now completed [20 unique workshops](#), 10 conference special sessions, and collected input from nearly 600 different experts.

While the thrust of the GoMRI-funded research was focused in the Gulf of Mexico, the Synthesis and Legacy efforts were instructed to take a broader view. Lessons learned from these workshops and conferences were identified as applicable to research in different parts the country. The Synthesis knowledge exchange was not

only far-reaching geographically, but has involved many subgroups of the user community, including oil spill responders, NGOs, industry, and federal entities.

A critical aspect of the Synthesis and Legacy effort has been that each workshop is designed to be a working session with specific outputs – the products of which are open access for all to learn from. Thus far, over 50 new products have stemmed from workshops, cross-consortia collaboration, and Research Board-led efforts. The products have taken a variety of forms, including books, special journal issues, peer-reviewed publications, workshop reports, recorded webinars, professional diagrams, and conference sessions. This immense collection of outstanding Synthesis papers and reports will undoubtedly continue to shape the way we understand and respond to any future oil events.

The final piece of this effort will be a GoMRI Special Issue in [Oceanography magazine](#), coming out in Spring 2021. This issue is intended to be a high-level overview, synthesizing new knowledge for a broad and general audience and represents the culmination of the entire GoMRI Synthesis and Legacy effort pulling together what was known, what was learned, what questions still remain, how this knowledge is applied, and where to go next.

Please continue to visit the [Synthesis and Legacy website](#) for more information, especially the [Products page](#), as many developing products will be published in the coming year.

We would like to sincerely thank all of our Research Board members, Core Area leaders, and Synthesis participants. This effort could not have blossomed into the expansive project it is today without each and every one of you.

Frequently Asked Questions

For this farewell newsletter issue, we asked a group of individuals from across GoMRI a few Frequently Asked Questions (FAQs) about their experience as part of the program. We thank these individuals for taking the time to provide such thoughtful responses. And yes, we will miss the people most too!

Question: What has GoMRI meant to you and your career?

Steve Sempier, Oil Spill Science Outreach Manager, Sea Grant: *"I cannot express how grateful I am that GoMRI supported the Gulf of Mexico Sea Grant Oil Spill team. GoMRI's support allowed us to create a brand new extension team that allowed us to engage with new audiences and expand our reach. Personally, it was a tremendous opportunity to work with the Sea Grant team and engage with the broader GoMRI-supported community. It was extremely gratifying to work with people that are passionate about what they do and willing to collaborate. In addition, it was humbling to work directly with a Research Board that was comprised of preeminent scholars and administrators that shared the same vision."*

Tracy Ippolito, Outreach Team, Program Manager, CSOMIO & Deep Sea to Coast Connectivity in the Eastern Gulf of Mexico (Deep-C): *"Being part of the GoMRI program through two GoMRI-funded consortia (Deep-C and CSOMIO) has been nothing short of transformative, in terms of my career. As a communication specialist, it allowed me to explore how communication can meaningfully contribute to the impact and legacy of a scientific research initiative. I joined the Deep-C consortium in 2011 as a project coordinator, but my role immediately expanded to include public information and outreach because I had a background in public relations and communication. That said, as a non-scientist, I'll admit I was more than just a little intimidated by the sheer breadth of Deep-C's scientific goals! My consortium's research team consisted of literally dozens of the most highly accomplished oceanographers, biologists, geochemists, and numerical modelers -- all of whom had an important role to play (and story to tell). Thankfully, that network of scientists, and those I worked with as part of CSOMIO, valued the role of communication and outreach and allowed me to draw upon their perspectives and expertise to do my job. I soon found that I thrived in the multidisciplinary setting. Moreover, I discovered I had an aptitude and, somewhat surprisingly, an enthusiasm for translating complex topics and an abundance of data into comprehensible and actionable information. That has now become the focus of my professional efforts and it will soon be the focus of continued studies, as I plan to go back to school in the fall to pursue a Ph.D. with an emphasis on science communication."*

Abby Renegar, Principal Investigator, Coral-Tox: A Species-Sensitivity Assessment of Petroleum Hydrocarbon Toxicity to Scleractinian Corals (RFP-VI): *"To me, GoMRI funding has meant the formation of relationships with colleagues from all parts of the oil spill community; other academics, responders, government, and industry. My career has benefited along the same lines, through development of an extensive network of contacts."*

Kevin Shaw, GoMRI Program Manager: *"GoMRI has come at the end of my professional career and allowed me to re-connect with many former graduate research colleagues during the mid-1970's on what was considered then a baseline research program funded by the Bureau of Land Management to investigate the environs of the outer continental shelf of the northern Gulf off the coasts of Mississippi, Alabama, Florida, and Louisiana (MAFLA) as part of the oil lease sales environmental assessment program. Like GoMRI, there were many Gulf institutions and researchers involved comparable to a consortium with research, administrative and data management components. Unlike GoMRI, the records management, data sharing and data archiving was not of the same caliber and, thus, did not achieve a desired level of documentation or availability to future researchers. Being involved with the GoMRI program management team has allowed me to interface with not only the Research Board members, but also with researchers who now have a much better appreciation of the importance of interaction among their peers to produce the highest quality science. Now I am proud to have been part of a research program that has been conducted at the highest level of compliance and competence."*

Sherryl Gilbert, Assistant Director, C-IMAGE: *"My tenure with GoMRI has undoubtedly been a career-defining experience. GoMRI gave me the opportunity, from the very beginning, to be a part of a diverse team of scientists, engineers, resource managers, administrators, and education specialists. Weaving all of this expertise into a cohesive picture of how oil spills can impact the Gulf of Mexico has been remarkable to witness, given that 10 years of funding enables a consistent additive process to answering some incredibly complex questions."*

Question: What do you think is the biggest question about recovery in the Gulf that is still left unanswered?

Tracey Sutton, Director, DEEPEND: *"Our perspective is admittedly biased, but our findings suggest that the DWH disaster had a catastrophic effect on deep-pelagic life in the Gulf, and as of late 2018, there has been no sign of recovery. For us, this is a huge outstanding question. Allied with this question is the question of cumulative effects - could DWH have depressed life in the deep Gulf to the point that additional stressors have an even larger effect (i.e., Allee effects, "kicking the dog when it's down")?"*

Abby Renegar, Principal Investigator, Coral-Tox: A Species-Sensitivity Assessment of Petroleum Hydrocarbon Toxicity to Scleractinian Corals (RFP-VI): *"I think that perhaps the biggest question is, how is recovery assessed? Despite significant progress over the last decade as a result of GoMRI research, there is still a relatively limited understanding of some environments (like the deep sea). Given the lack of baseline data, the overall extent of the biological impacts will likely never be fully understood, and it is therefore very challenging to comprehend what constitutes recovery in these environments."*

Question: Ten years from now, what do you think will be GoMRI's greatest legacy?

Abby Renegar, Principal Investigator, Coral-Tox: A Species-Sensitivity Assessment of Petroleum Hydrocarbon Toxicity to Scleractinian Corals (RFP-VI): *"The synthesis activities, which bring together the vast amount of research conducted, will be the most important legacy of the GoMRI program."*

Kevin Shaw, GoMRI Program Manager: *"GoMRI's greatest legacy will be the Gulf-wide database and data management system established by the GRIIDC under direction of the Research Board. To date this is the single largest dataset for the Gulf offshore environment which is publicly available for at least the next 10 years will probably include future contributions from Gulf researchers."*

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Question: What will you miss most about GoMRI?

Tracey Sutton, Director, DEPEND: *"That's easy - the people, the camaraderie, the synergy. Offshore research in the [United States] has lagged that of many countries, and as a result, most of my collaborations prior to GoMRI were international. That made for "long-d relationships" in terms of science and interaction. GoMRI research highlighted the connectivity between inshore and offshore ecosystems, and more importantly, the connectivity that needs to happen between research groups. GoMRI was in many ways a 'super group' - a focused, multidisciplinary assemblage of people that wanted/needed to talk to each other. Similar societal meetings may have the same scope of disciplines, but they can be so large that ones' mind spins, and are usually a collage of specific interests. I'll miss the size, interactions, teamwork, and structure of GoMRI. Of course, none of that happened by chance. GoMRI's greatest legacy for many of us will be that in terms of leadership and structure, we just saw 'how it's done.' If we can take that forward and do it even fractionally as well, that will be a heck of a legacy."*

Sherryl Gilbert, Assistant Director, C-IMAGE: *"Easy. The people. 100%."*

Chris Hale, Program Manager, Harte Research Institute for Gulf of Mexico Studies: *"It's that diverse community that I will miss. I'm sure I'll see familiar faces here and there as folks move into new exciting areas of work, but the GoMRI gatherings - the conferences, working groups, workshops - were special opportunities to connect and learn from each other, and be inspired. Interacting with members of this community kept me focused and energized to keep going."*

Abby Renegar, Principal Investigator, Coral-Tox: A Species-Sensitivity Assessment of Petroleum Hydrocarbon Toxicity to Scleractinian Corals (RFP-VI): *"The annual conference!"*

Emily Frost, Smithsonian Ocean Portal: *"The people! After working with GoMRI for about eight years and attending six GoMOSES conferences, I met so many wonderful people that I hope to continue collaborations and friendships with for years to come."*

Steve Sempier, Oil Spill Science Outreach Manager, Sea Grant: *"In short, the people. Moving forward everyone's roles, responsibilities, and projects will change so interactions with the 'GoMRI family' will likely become less frequent and may be related to other topics and issues. The face-to-face interactions at GoMOSES, science seminars, workshops, and other events were tremendous opportunities that fostered additional collaborations. I will miss the opportunity to see many people that have grown with the program over the years but am hopeful our paths will cross on new projects and opportunities in the future."*

Tracy Ippolito, Outreach Team, Program Manager, CSOMIO & Deep-C: *"I feel very fortunate to have been part of such an ambitious effort to serve the public good and I am sad to close this chapter of my career. What I will miss most about GoMRI will be the overall sense of cohesiveness and interacting on a regular basis with the people I have met and worked with over these past nine years: the scientists, students, and staff in my own consortia as well as other consortia, talented and creative outreach colleagues spread across GoMRI, and the [GoMRI Research Board and Management] team members who were always supportive and ready to help us succeed in our mission. Membership in the GoMRI family (which is what it eventually became) is likely a once-in-a-lifetime experience. I'm glad I got to be a part of it!"*

Question: What made GoMRI unique, compared to other programs/research you have been a part of?

Emily Frost, Smithsonian Ocean Portal: *"GoMRI was unique in that the program was holistic - focusing on not only the importance of research and science but outreach and community engagement. The diversity of expertise was really stunning across the board."*

Chris Hale, Program Manager, Harte Research Institute for Gulf of Mexico Studies: *"GoMRI is unique in that despite the thousands of people that make up its community- each with diverse backgrounds, experiences, and perspectives- everyone was able to organize around a single mission: Use science to address the cascading effects of an unprecedented tragedy. This diversity enabled the production and application of world class science."*

Abby Renegar, Principal Investigator, Coral-Tox: A Species-Sensitivity Assessment of Petroleum Hydrocarbon Toxicity to Scleractinian Corals (RFP-VI): *"I was definitely an early career scientist when I received research support from GoMRI, so my experience is not broad. That being said, from my perspective, GoMRI is unique as program in that it has supported a very wide range of research topics with a given subject area, over a relatively long period. That level of continuity, along with significant cross-discipline collaborations, is what has made GoMRI a success."*

Sherryl Gilbert, Assistant Director, C-IMAGE: *"I've been fortunate enough to be a part of research and technical teams in previous projects, but none as complex as GoMRI. The successful execution of a complex program like the GoMRI is only made possible from the level of support given to us by the GoMRI leadership team. Their willingness to adapt priorities and funding based on new findings has made the science dictate the next steps, which sounds like common sense, but sometimes isn't how the process works; GoMRI empowered the research."*

Steve Sempier, Oil Spill Science Outreach Manager, Sea Grant: *"GoMRI provided a unifying thread that linked leading researchers and supported the education of the next generation of scientists around the world. I have never been affiliated with such a large-scale research endeavor that was born from a singular event with a mission to both improve understanding of the impacts from that event and reduce impacts of future spills. GoMRI-supported professionals were always willing to contribute to, present at, or participate in outreach efforts our program led. Overall, there was an emphasis on conducting top-tier research and sharing their peer reviewed work as broadly as possible. Being part of the Management Team and serving as an outreach partner with GoMRI was a unique opportunity. It was impressive how streamlined these programs worked together and collaborated on big and small projects."*

Kevin Shaw, GoMRI Program Manager: *"The uniqueness of the GoMRI program began with the initial board members working with the client and their representatives in the early planning stages to develop the overall guidelines on how to conduct an independent research program free of interference from the funding agency. The MRA established National Science Foundation (NSF)-like policy and guidelines that were easily adopted by the research institutions that were awarded funds. The MRA was explicit in defining the major components of the program (Research Board, Administrative Unit, and Grants Unit) and guidelines on how these would interface and report. Within these guidelines there was the flexibility to adjust the conduct of the program based on scientific and administrative needs, all under the direction of the Research Board. Ultimately over the years, the fluidity of the operations gelled into a well 'oiled' program that not only has produced much valued scientific knowledge, but has distributed that knowledge to students and stakeholders throughout the Gulf; all with minimal administrative costs."*

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Question: What do you plan to do next?

Tracey Sutton, Director, DEEPEND: "I will be continuing research established during GoMRI through the NOAA RESTORE Science Program, as well as two additional initiatives that involve related research. We are extremely grateful that GoMRI funding allowed us to build a time-series database of life in the deep Gulf that extended from 2010 (NOAA Natural Resource Damage Assessment surveys) to 2018 (DEEPEND surveys). To our knowledge, there is no time series like this for the deep-pelagic fauna in the history of oceanography. We can now ask questions that were previously untenable, questions that are routine for coastal ecosystems. Through RESTORE, we hope to turn this into an 18-year time series, potentially addressing issues that extend beyond DWH (e.g., climate forcing issues, fluctuating baselines, etc.)."

Abby Renegar, Principal Investigator, Coral-Tox: A Species-Sensitivity Assessment of Petroleum Hydrocarbon Toxicity to Scleractinian Corals (RFP-VI): "Take what I have learned from my GoMRI-funded research and apply it to independent but related lines of research. The CoralTox project sought to understand the relative impacts of petroleum hydrocarbons on scleractinian corals, and I am now adapting the methodology and analytical techniques to research on other aquatic contaminants, like UV filters, that may also impact coral health."

Tracy Ippolito, Outreach Team, Program Manager, CSOMIO & Deep-C: "Involvement in GoMRI solidified my belief that communication studies have an important role to play in every area of scientific inquiry and that multidisciplinary and interdisciplinary research, while admittedly much easier said than done, is essential. That is why I have decided to pursue a Ph.D. in Communication Studies at Florida State beginning in August 2020. Leveraging what I have learned and experienced over these past nine years, I feel that I have a unique opportunity to explore the relationship between communication theory and practice in an applied context. I plan to continue my work as a communication specialist, but my doctoral studies will enable me to contribute as a researcher, as well, helping fill critical knowledge gaps about the most effective ways to diffuse scientific knowledge/expertise (science communication) to targeted audiences."

Science Corner

Top 10 Most Read GoMRI Science Highlight Website Articles*

10. Study Suggests Wider Range of Mahi-Mahi's Genetic Responses to Oil Exposure

E.G. Xu, E.M. Mager, M. Grosell, C. Pasparakis, L.S. Schlenker, J.D. Stieglitz, D. Benetti, E.S. Hazard, S.M. Courtney, G. Diamante, J. Freitas, G. Hardiman, D. Schlenker
Environmental Science & Technology, 2018, Vol. 52 (22), pgs. 13501-13510

9. Study Analyzes Trends and Gaps in Oil Spill Literature Since 1968

D. Murphy, B. Gemmill, L. Vaccari, C. Li, H. Bacosa, M. Evans, C. Gemmill, T. Harvey, M. Jalali, T.H.R. Niepa
Marine Pollution Bulletin, 2016, Vol. 113 (1-2), pgs. 371-379

8. Study Investigates Oil Spill Impacts and Recovery of Salt Marsh Fiddler Crab Populations

S. Zengel, S.C. Pennings, B. Silliman, C. Montague, J. Weaver, D.R. Deis, M.O. Krasnec, N. Rutherford, Z. Nixon
Estuaries and Coasts, 2016, Vol. 39, pgs. 1154-1163

7. Study Confirms Methane-Eating Bacteria Contributed to Carbon Entering Food Web

J. Cherrier, J. Sarkodee-Adoo, T.P. Guilderson, J.P. Chanton
Environmental Science and Technology Letters, 2014, Vol. 1(1), pgs. 108-112

6. Study Identifies Key Species that Influence Marsh Ecosystem Responses to Oiling

M.J. McCann, K.W. Able, R.R. Christian, F.J. Fodrie, O.P. Jensen, J.J. Johnson, P.C. López-Duarte, C.W. Martin, J.A. Olin, M.J. Polito, B.J. Roberts, S.L. Ziegler
Frontiers in Ecology and the Environment, 2017, Vol. 15(3), pgs. 142-149

5. Study Details Underwater Oil Plume Formation and Droplet Size Distribution

L. Zhao, F. Shaffer, B. Robinson, T. King, C. D'Ambrose, Z. Pan, F. Gao, R.S. Miller, R.N. Conmy, M.C. Boufadel
Chemical Engineering Journal, 2016, Vol. 299, pgs. 292-303

4. Study Finds Clams are Oil Indicator Species for Gulf of Mexico Surf Zones

R.A. Snyder, A. Vestal, C. Welch, G. Barnes, R. Pelot, M. Ederington-Hagy, F. Hilleman
Marine Pollution Bulletin, 2014, Vol. 83(1), pgs. 87-91

3. Study Identifies Efficient Food-Grade Emulsifier as Dispersant Alternative

J.C. Athas, K. Jun, C. McCafferty, O. Owoseni, V.T. John, S.R. Raghavan
Langmuir, 2014, Vol. 30(31), pgs. 9285-9294

2. Study Summarizes Current Knowledge on Marine Oil Snow During and After Deepwater Horizon

K.L. Daly, U. Passow, J. Chanton, D. Hollander
Anthropocene, 2016, Vol. 13, pgs. 18-33

1. Study Finds Three Ways for Oil Spill to Impact Gulf Seaweed

S.P. Powers, F.J. Hernandez, R.H. Condon, J.M. Drymon, C.M. Free
PLoS ONE, 2013, Vol. 8(9), e74802

To see all GoMRI publications, please visit the [GoMRI Publication Database](#).

*as of July 1, 2020

Editor's Note - Farewell Issue

I am Katie Fillingham, and for the past five and a half years I have had the honor of writing, editing, and designing the GoMRI Quarterly Newsletters. Working on these issues has truly been one of the most rewarding experiences of my career thus far, and I have been grateful for the opportunity. I am proud of the legacy they leave behind, telling the story of how the program has evolved over the seven years since we started publishing them.

The creation of these newsletters has been a massive team effort, however, and I would be remiss if I didn't give credit to and thank the many, many people who have been critical to their publication. Heather Mannix and Megan Gibney were instrumental in the generation of the early issues. Jason Mallett, the Consortium for Ocean Leadership's graphic designer, designed all the issues prior to 2017. In 2017, he provided me with the opportunity to learn how to design and lay out the newsletters myself. He has been a wonderful teacher as I learned the process and gained confidence in my design abilities. I will always be grateful for the chance to learn this new skill.



Credit: Katie Fillingham.

On the GoMRI Management Team, Chuck Wilson, GoMRI's Chief Scientific Officer, has been involved in every single issue's Frequently Asked Questions and Notes from the Research Board pieces. He was always willing to listen to and share ideas, and I will cherish those opportunities we had to work together. Through Chuck, I had the pleasure of working with Dr. Rita Colwell, GoMRI's Research Board Chair, in generating the Notes from the Research Board articles. I am endlessly grateful to her for her keen interest in participating in every single issue. Maggie Dannreuther was always willing to talk with me about ideas for stories and ways to coordinate the newsletters with the GoMRI website stories. Leigh Zimmermann shared and listened to ideas and read and edited every single issue ever produced. They were infinitely better because of her support. Jessie Swanseen took on the generation of an issue when our communications team was in a transition – no small feat, and she produced an excellent issue. Once GoMRI's Synthesis and Legacy effort began moving forward, we wanted to integrate regular updates on those activities into the issues, and I am extremely grateful to Callan Yanoff for writing and providing those summaries. Lastly, Leslie Smith led the development of this final issue as I moved on to new programs at the Consortium for Ocean Leadership; we thank her for producing this wonderful farewell issue!

Thank you to the GoMRI researchers, outreach coordinators, and program managers who worked with us to produce articles over the years. It was an honor to work with them and share their stories. Thank you to GoMRI's external communications partners, Sea Grant, Screenscope, and Smithsonian Ocean Portal, who worked with us to coordinate content and produce articles. Being able to share information and updates across our individual platforms enhanced our overall communications program and undoubtedly increased awareness of GoMRI's activities.

And finally, thank you to you, the readers of these newsletters. We produced them with you in mind, and it has been a pleasure sharing the program's stories and successes with you. As we said in our publication announcements, we hope you have found them a useful way to keep up with the GoMRI research communities' activities. While this year marks the end of 10 years of research through the GoMRI program to understand the impacts of the Deepwater Horizon oil spill, much of the work done by the researchers funded by GoMRI and with our external communications partners will continue. We hope you will continue to stay engaged in their efforts as a legacy of the incredible work of this program.