

NEWSLETTER

Upcoming Events:

National Marine Educators Association (NMEA) Conference June 25 - July 1, 2016 Orlando, Florida Stop by the GoMRI booth and say

hello if you are also attending!

Announcements:

An archive of the GoMRI eNews can now be found on the GoMRI website: <u>http://research.gulfresearchinitiative.</u> org/eNews/



The GoMRI Management Team attended the 2016 Ocean Sciences Meeting in New Orleans, Louisiana in February. Read more on page 8 of this issue. Photo Credit: Lauren Showalter.

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/

2016 Gulfof Mexico Oil Spill & Ecosystem Science Conference

Oil Spill Scientists and GoMRI Community Gather in Tampa

This year's <u>*Gulf of Mexico Oil Spill and Ecosystem Science Conference*</u> took place from February 1-4, 2016 at the Tampa Marriott Waterside in Tampa, Florida. More than 975 people from 16 countries, including the U.S., participated in the conference to discuss ongoing oil spill science and research related to this year's conference theme "*One Gulf: Healthy Ecosystems, Healthy Communities*." The conference included eighteen sessions, 285 oral presentations (including 42 oral student presentations) and 246 posters (including 120 student posters).

The opening plenary featured a Keynote Address by Dr. Marcia McNutt, Editor-in-Chief of *Science*, on *Big, Open Data: Enhancing Science and Decision-making for the Gulf of Mexico*. A panel discussion followed on the importance of data accessibility and data sharing. Dr. Peter Brewer, GoMRI Research Board member from the Monterey Bay Aquarium Research Institute moderated the panel, which included Dr. Brooks Hansen from the American Geophysical Union, Dr. Donald Lindberg from the National Library of Medicine at NIH, Dr. Robert Gropp from the American Institute of Biological Sciences, and Dr. Lisa DiPinto from NOAA's Assessment and Restoration Division.

Eighteen sessions were held over two and a half days and covered a wide variety of topics, from understanding the ecosystem response to oil exposure to the impacts of oil exposure on public health. A description of the sessions can be found <u>here</u>. The closing plenary included summaries of each of the eighteen sessions from the session chairs and a screening of the "*Dispatches from the Gulf*" documentary (see page 3 for more information on the documentary).

Several workshops, poster sessions, and others events took place throughout the week. NPR's local affiliate, WUSF, attended the conference and wrote a story, which includes an interview with Dr. Rita Colwell. Click <u>here</u> to read the article and listen to the piece. Five scientists from the oil spill science community teamed up with <u>Story Collider</u> to share their individual stories and how they are connected to the Deepwater Horizon spill and research. Read more about that event <u>here</u>.

More information on the conference can be found on the conference website <u>here</u> and in the conference's online program <u>here</u>. An official conference report will also be posted to the conference website in the near future.

GoMRI Newsmakers



GoMRI would like to congratulate three members of the GoMRI community who have been named as 2015 American Association for the Advancement of Science (AAAS) <u>fellows</u>: <u>Dr. Jacqueline Dixon</u> (C-IMAGE I), <u>Dr. Kendra Daly</u> (C-IMAGE I and II), and <u>Dr. Steve Murawski</u> (C-IMAGE I and II). Each year, the AAAS fellowship recognizes scientists from a variety of fields for their "contributions to innovation, education, and scientific leadership." Congratulations!

GoMRI would also like to congratulate Dr. Rita Colwell, Chair of the GoMRI Research Board and Distinguished Professor at the University of Maryland at College Park and Johns Hopkins University Bloomberg School of Public Health, on receiving the National Council for Science and the Environment (NCSE) <u>Lifetime Achievement Award</u>. <u>NCSE</u> is a non-profit organization based in Washington, D.C. dedicated to "improving the scientific basis for environmental decision-making." Their lifetime achievement award is given to scientists who have made outstanding contributions to the advancement of science for the public good.

The GoMRI community welcomes *Dr. Cecilie Mauritzen* to the GoMRI Research Board. Dr. Mauritzen is Chief Scientist for Water and Climate at the Norwegian Institute for Water Research. She has a background in physical oceanography, specializing in large-scale ocean circulation and state changes in the deep ocean. Welcome!



Announcement

The Gulf of Mexico Research Initiative (GoMRI) is pleased to announce the development of the GoMRI Request for Proposals for 2018-2019, to fund research activities for GoMRI Years 9-10 (1 January 2018–31 December 2019). This RFP-VI, to be released in October 2016, will build on previous RFPs, and will only fund two-year awards.

The total funds available for distribution through the 2018-2019 GoMRI RFP will be approximately \$35 million per year. Please see the GoMRI RFP-VI webpage below for more detailed information!



http://gulfresearchinitiative.org/request-for-proposals/rfp-vi/



Texas • Louisiana • Florida Mississippi-Alabama

The four Gulf Sea Grant Programs recently released several additional publications related to oil spill science, research, and dispersants. "Navigating Shifting Sands: Oil on Our Beaches" focuses on oil that washed up onto Gulf coast beaches after Deepwater Horizon, how scientists are working to remove any oil that remains, and information that first responders can use in future spills to mitigate oil on coastal beaches. The second publication, "Top 5 Frequently Asked Questions about the Deepwater Horizon Oil Spill," discusses the most frequently asked questions about the oil spill, including the impact to seafood and wildlife, clean up techniques, where the oil went and where it is now, and if dispersants make it unsafe to swim in the water. The team also released a series of publications, "Fate, Transport and Effectiveness of Dispersants Used in the Deepwater Horizon Oil Spill," "Chemical Dispersants and their Role in Oil Spill Response," and "Responses of Aquatic Life in the Gulf of Mexico to Oil and Dispersants," which focus on the use of dispersants in oil spill response. Be sure to visit their website and check out these excellent resources.

The Gulf Sea Grant team will also continue to host seminars in 2016. Check their <u>website</u> for more information on seminar dates, topics, and registration information, and for summaries from previous seminars.

Note from the Research Board Chair

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

The GoMRI mission and *Legacy Goals* comprise the foundation of our program. We are now more than half way through the ten year duration of the program and have made great strides in achieving our goals. Looking ahead, the Research Board wishes to establish a legacy for GoMRI, notably to synthesize the excellent science that has been, and will continue to be, produced under the GoMRI aegis. There are already many discoveries and contributions that will live long after the end of the program; these include scientific publications, a cadre of next generation oil spill scientists, and a massive compilation of data that will continue to be available long into the future from the GoMRI data management system developed and maintained by GRIIDC.

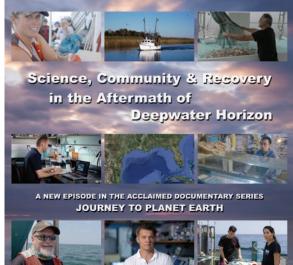
There are many other contributions that are part of GoMRI's legacy, including special issues of peer reviewed scientific journals, documentaries such as the Dispatches from the Gulf film produced by Sceenscope with GoMRI funding,

changes Photo Credit: <u>C</u> made and through a network of partnerships, notably with Smithsonian's Ocean Portal and the four Gulf Sea Grant Programs. The Research Board is exploring additional ways for the GoMRI legacy to be useful to the broader community long after the program ends. We ask ourselves questions such as, "What have we learned from the massive amount of research done the Gulf? How can that information be applicable globally?" To answer these important questions, GoMRI science is key, but thoughts and suggestions from the GoMRI community and our partners are also very important. Therefore, the GoMRI Research Board is pleased to announce the Save the Date for <u>*RFP-VI*</u>, a request for proposals that includes a provision for funding proposals addressing synthesis of findings

The Research Board looks forward to receiving research proposals responding to RFP-VI and the additional excellent science that will be accomplished in this round of GoMRI funding. Indeed, the scientific community working in partnership with GoMRI is clearly dedicated to providing improved understanding of oil spills and their impact and, we hope, will find ways to ensure the program legacy so that lessons we have learned can be a guide in the future.

from the GoMRI program. RFP-VI will provide funds for years 9 and 10 of the ten year program.

DISPATCHES from the GULF



NARRATED BY MATT DAMON A FILM BY MARILYN & HAL WEINER

Flyer provided by Screenscope, Inc.

Dispatches from the Gulf **Documentary Features GoMRI Scientists**

Screenscope, Inc. has completed production of the Dispatches from the Gulf documentary film, which features scientists working to better understand the effects of the Deepwater Horizon oil spill. Dispatches from the Gulf is the newest episode in the Journey to Planet Earth series and is narrated by Matt Damon. Several screenings of the film will be held over the next few months; a list of screening dates and locations can be found on film's website. The film premiered at the DC Environmental Film Festival at the National Museum of Natural History on March 25. GoMRI's Research Board Chair Dr. Rita Colwell and GoMRI scientists Dr. Mandy Joye, Dr. Steve Murawski, and Dr. Martin Grosell participated

in a panel after the showing (see photo). All screenings are free and open to the public. The Dispatches from the Gulf website also features several shorts and a link to order a free copy of the documentary for educators.



Photo Credit: C-IMAGE



Slice 'n Dice

Provided by Dr. Nancy Rabalais, CWC Director

The sediment core group from <u>Coastal Waters Consortium-</u><u>II</u> held their first expedition into the marshes of Terrebonne Bay in December 2015 to collect pond and marsh sediment cores for examining the historical trends in phytoplankton composition and hydrocarbon remnants. The coring in the ponds was quite successful with six cores recovered, of which three were sliced 'n diced into 1-cm increments for further study. Marsh coring was more difficult because of the dense root mats and smearing of the sediment structure as the core tube was inserted into the marsh. The environments did not particularly want to let go of their sediments, and extracting the cores was a monumental task.

The coring team, Mark Besonen, Gene Turner and Mike Parsons, was joined by Marci Savage, Wendy Morrison and Nancy Rabalais at the LUMCON Marine Center in Cocodrie for core processing. Each core was carefully split in half longitudinally, photographed in color to document the stratigraphy, and scanned for color/spectrophotometric and magnetic susceptibility measurements down core.

continued on next page ...

Mark Besonen and Gene Turner extracting marsh core. Photo Source: Mike Parsons.

Education Spotlight:

CWC Coastal Waters Consortium has two research experience for undergraduates (REUs) internship positions available for summer 2016. The internships will last for ten weeks starting in June 2016. Applications will be accepted until *April 1, 2016*. Please visit the <u>CWC website</u> for more information on the positions and to learn how to apply.

CWC hosted an Introduction to Oceanography workshop, open to teens and adults, in January 2016. CWC will continue to host camps throughout the coming summer; visit their <u>website</u> for more information and to learn how to register.

ACER ACER scientists have partnered with Dauphin Island Sea Lab's (DISL) Estuarium in their <u>Boardwalk Talks</u> series. The informal talks take place on the boardwalk outside the Estuarium and feature scientists talking about their science in a casual, "lecture-free" format. Scientists and staff from ACER will be participating in the series over the next two years. Boardwalk talks take place on the 1st and 3rd Wednesday of every month. Visit the <u>DISL website</u> for more information.

CARTHE, **C-IMAGE**, and **RECOVER** attended Oceans Day 2016 in Tallahassee, FL on February 10th and 11th, hosted by *Florida Ocean Alliance*. Click *here* and *here* to see images from the event.



Above: CWC hosts an Introduction to Oceanography class. Photo Credit: CWC.

Below: C-IMAGE, CARTHE, and RECOVER participate in Oceans Day 2016. Photo Credit: C-IMAGE.





Left: Mark Besonen places pins at 10-cm intervals. Photo Source: Nancy Rabalais. Right: Magnetic susceptibility measurements at 1 cm intervals. Photo Source: Nancy Rabalais.

continued from previous page...

The core subsections were weighed and sorted into containers for analysis: hydrocarbon PAH determinations, dated with ²¹⁰Pb and ¹³⁷Cs to obtain the dates of the sections, high performance liquid chromatography (HPLC) pigments for phytoplankton biomass, diatom counts for community composition, and sedimentary characteristics of bulk density, water content, loss of carbon on ignition and sediment grain size. All the investigators have their 80+ 1-cm packets of mud from three cores to begin their analyses.

Additional cores will be taken in brackish and freshwater marshes in 2016.

What we hope to discover: through this work, we are hoping to discover a history of diatom assemblages coupled with chronic oil release, the dramatic 2010 *Deepwater Horizon* oil spill and eutrophication, and/or enhanced primary production of the overlying water.

Keeping up with the Consortia Blog Roll and Social Media!

Some of the Consortia have updated their blogs. Check them out!

<u>CARTHE</u> Measure, Model, Mitigate - Featuring excellent updates on the LASER experiment!

<u>C-IMAGE</u> Blog and Podcasts <u>CONCORDE</u> Concordia Blog <u>RECOVER</u> Blog

<u>Compass</u> featured an interview with GoMRI scientists Dr. Natalia Sidorovskaia and Dr. Tracey Sutton in their most recent blog post on their experience participating in one of Compass' science communication trainings. <u>Check it out here!</u>

In addition to blogs, many Consortia are active on other social media outlets, including Twitter, Facebook, and Instagram:

ACER <u>Facebook</u>, <u>Instagram</u> ADDOMEx <u>Facebook</u>, <u>Twitter</u>, <u>Instagram</u>

CARTHE Facebook, Twitter

C-IMAGE <u>Facebook</u>, <u>Twitter</u>

CONCORDE <u>Facebook</u>, <u>Twitter</u>, <u>Instagram</u>

CRGC <u>Facebook</u> CWC <u>Facebook</u>, <u>Instagram</u> DEEPEND <u>Facebook</u>, <u>Twitter</u>, <u>Instagram</u> Deep-C <u>Facebook</u>, <u>Twitter</u> DROPPS <u>Facebook</u>, <u>Twitter</u> ECOGIG <u>Facebook</u>, <u>Twitter</u>, <u>Instagram</u> RECOVER <u>Facebook</u>, <u>Twitter</u>, <u>Instagram</u>



RECOVER recently launched a four-part video series in partnership with the University of Texas Marine Science Institute on their red drum research. The first episode talks about why their location at Port Aransas is an ideal location to study the impacts of the Deepwater Horizon oil spill. Check out the first episode <u>here</u>, and be sure to check back for future episodes!

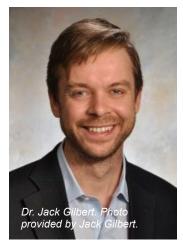
C-IMAGE Co-PI Dr. Dana Wetzel and Outreach Coordinator Ben Prueitt were interviewed by their local WUSF radio station, an NPR affiliate. They talked about C-IMAGE's upcoming exposure studies and how these experiments are helping scientists learn about the effects of the Deepwater Horizon oil spill. <u>Listen to the full story!</u>

GoMRI Researcher Interview with Dr. Jack Gilbert

Dr. Jack Gilbert from the University of Chicago - Argonne National Laboratory answered a few questions about his RFP-II project, <u>Creating a Predictive</u> <u>Model of Microbially Mediated Carbon Remediation in the Gulf of Mexico</u>.

1. Thank you for talking with us! Tell us a bit about your research. What are the goals of your project?

The goals of our project were to examine the network of microbial interactions that were influenced by the oil spill. Initially we were focused on trying to extrapolate these predicted interactions (who eats what from whom, etc.) across the gulf, but it quickly became apparent that the necessary data did not exist. We then pushed this into assembling the



key genomes of the organisms and then determined the influence of the oil spill on microbial metabolic activity.

2. What is your background and how did you get involved with this kind of work?

I am a microbial ecologist; I examine how bacteria interact with each other, and with their environment, and what this means for the ecosystem in which they live. The opportunity to apply microbial ecology to this environment was too good to pass up. Understanding how the oil spill disrupted the ecosystem at the scale of microbial ecology was a fascinating project and gave me the opportunity to contribute to the potential for developing strategies to augment recovery from such spills.

3. What do the bacterial genomes tell you?

Like a human genome, a bacterial genome is the blue print for what that organism is capable of doing. Therefore by sequencing the genome of the bacteria we can figure out what it likes to eat, what kind of chemicals it can degrade, even what environment it most likes to live in.

4. What are some of the most significant or exciting findings of your work?

We determined the slew of bacteria that are lying in wait, ready to respond to the oil spill. The abundant taxa that were initially mentioned in the first studies were really just the tip of the iceberg. We have uncovered a huge number of highly diverse and specialized organisms. We have also shown how these organisms change the cycling of key nutrients, e.g. nitrogen, when the oil hits. This helps us to understand the repercussions on the wider systems ecology of these environments.

5. Bacteria are playing a role in helping mitigate or clear up the oil? How are they doing that?

The bacteria use the hydrogen and carbon in the oil as a food source – oil is made of these hydrocarbons, which are actually a rich source of nutrients for many types of bacteria. The Gulf of Mexico is full of these oil-loving bacteria; most of the time they are quite rare, but when you have a natural oil seep or a manmade oil leak, they have bonanza!

6. If funding were not an issue, what would you add to your project?

I would like to have a genome for every organism in the sediment of the gulf - and then reconstruct their metabolic responses to the oil invasion, essentially creating a program that helps to predict the ecosystem's response to the pollution.



Smithsonian's Ocean Portal's most recent <u>article</u> features three ways in which GoMRI scientists are using genomics, the study of an individual's or a community's genes, to better understand the impacts of oil spills. The article features work by GoMRI-funded scientists <u>Joel Kostka</u>, <u>Jack Gilbert</u>, and <u>David Portnoy</u>. To read more about Dr. Jack Gilbert's research, please see the GoMRI Interview above.

Also be sure to check out Ocean Portal's recent blog post on the importance of data transparency and data sharing and how GoMRI is working to achieve this. *Read it here!*





GoMRI Scholars in Action

The Gulf of Mexico Research Initiative (GoMRI) is recognizing the graduate students whose vital research contribute to improving understanding about the damage, response, and recovery of the Deepwater Horizon oil spill. Candidates for this program must be graduate students who have participated in a GoMRI-funded project for at least one year, whose work is primarily funded by GoMRI, and who are working on a dissertation or thesis based on GoMRI-funded science.

Learn more about the scholars' research and career paths on the GoMRI website:

<u>Grad Student Chancellor Estimates Deepwater Horizon Impacts on</u> <u>Larval Fish</u>

Grad Student Young Studies Gulf Water at its Most Basic Level

Science Corner

Published science highlights from the GoMRI program

Study Shows Raindrops Push Oil Spill Pollutants into Air and Below Sea Surface

D.W. Murphy, C. Li, V. d'Albignac, D. Morra, and J. Katz Journal of Fluid Mechanics, 2015, Vol. 780, pgs. 536-577

<u>Study Describes How Hurricane Isaac Stirred Up a Marine Snow Storm</u> K. Ziervogel, C. Dike, V. Asper, J. Montoya, J. Battles, N. D'souza, U. Passow, A. Diercks, M. Esch, S. Joye, C. Dewald, and C. Arnosti Deep Sea Research Part II: Topical Studies in Oceanography, 19 June 2015

Study: Oil May Have Diminished and Altered Phytoplankton Communities

M.L. Parsons, W. Morrison, N. Rabalais, R.E. Turner, and K. Tyre Environmental Pollution, 2015, Vol. 207, pgs. 152-160

Study Identifies Molecular Fingerprints for Tracking Oil and Dispersant Fate

M. Seidel, S. Kleindienst, T. Dittmar, S.B. Joye, and P.M. Medeiros Deep Sea Research Part II: Topical Studies in Oceanography, 30 May 2015

Study Suggests Coastal Marine Animals Assimilated Carbon from Deepwater Horizon

R.M. Wilson, J. Cherrier, J. Sarkodee-Adoo, S. Bosman, A. Mickle, and J.P. Chanton Deep Sea Research Part II: Topical Studies in Oceanography, 29 May 2015

Study: Nitrogen Enhances Microbial Oil Degradation

M. Bookstaver, M.P. Godfrin, A. Bose, and A. Tripathi Journal of Petroleum Science and Engineering, 2015, Vol. 129, pgs. 153-158

Study Shows Oil and Dispersants Damage Mangroves Differently

B. Tansel, A. Arreaza, D.Z. Tansel, and M. Lee Marine Pollution Bulletin, 2015, Vol. 98, Issue 1-2, pgs. 34-39

Study: Different Dispersant Surfactants Help and Hinder Oil-Degrading Bacteria

M. Bookstaver, A. Bose, and A. Tripathi Langmuir, 2015, 31 (21), pgs. 5875-5881

To see all GoMRI publications, please visit the GoMRI Publication Database.

GoMRI Attends 2016 Ocean Sciences Meeting in New Orleans

Members of the GoMRI scientific community and management team attended **Ocean Sciences from February 21-26, 2016** in New Orleans, LA. The management team hosted a booth in the exhibit hall, which provided the opportunity for GoMRI scientists who were attending the conference to stop by and say hello and also enabled visitors who have not heard of the program an opportunity to learn about GoMRI and ask questions.

GoMRI scientists attended Many both oral and poster presentations. Dr. Mandy Joye, lead PI of the ECOGIG consortium, and Dr. Natalia Sidorovskaia, lead PI of the LADC-GEMM consortium, each chaired sessions. GoMRI-funded scientists Several gave presentations, including Brian Dzwonkowski, Brian Roberts, Maelle Cornic, Tracey Sutton, Kara Gadeken, Stephen O'Brien, Hongjie Wang, Xinping Hu, and many others. CWC investigators Ed Overton, Linda Hooper-Bui, and Paola Lopez-Duarte participated in a press conference hosted by Louisiana State University called "Marshes in Coastal Louisiana: Five Years after the Deepwater Horizon Oil Spill." Chuck Wilson, GoMRI's Chief Scientific Officer, participated in a panel during Tuesday's plenary session along with LaDon Swann from Auburn University Marine Programs and the Mississippi-Alabama Sea Grant Consortium and Nancy Knowlton from at the GoMRI booth. Photo Credit: Lauren Showalter.

the Smithsonian's National Museum of Natural History conference and presented their research in where they discussed "Interfaces: Sharing Science with Concerned Communities."



Staff from the GoMRI Management Team interacts with conference attendees



Frequently Asked Questions by Dr. Chuck Wilson

Chief Scientific Officer for the Gulf of Mexico Research Initiative (GoMRI) answers a few frequently asked questions about GoMRI's data management system, <u>GRIIDC</u> (Gulf of Mexico Research Initiative Information and Data Cooperative).

Question: The keynote address of the 2016 Gulf of Mexico Oil Spill and Ecosystem Science conference highlighted the importance of data sharing and transparency. How is GRIIDC working to achieve this?

Answer: BP and the Gulf of Mexico Alliance, on behalf of the Gulf states, established a Master Research Agreement (MRA) that guides GoMRI. The MRA requires that all data collected under GoMRI-funded research be made



publicly available "as soon as possible." Thus, the GoMRI Research Board established a contractual obligation with all awardees that GoMRI-generated research data be "submitted to GRIIDC and/or an appropriate national data archive at the time of publication or within one year of collection." GoMRI funds GRIIDC to facilitate the logical and systematic description and transfer of data from various sources into a central storage, discovery, and access system. This process includes development of appropriate metadata descriptions of specific data sets and assigns Digital Object Identifiers (DOIs) to distinguish each data set. Data stored in a system like GRIIDC allows others to search and discover the data and create maps to visualize data location. Preservation of data in the GRIIDC system ensures long-term data availability for future use.

Question: The importance of data citation is frequently mentioned related to this topic; why is this so important for data sharing and transparency?

Answer: Science is an iterative process that builds on research results embodied in scientific publications. All research publications cite prior studies that the authors reference. Computer technology and rapid access to digital data have promoted a strong movement in the scientific journal world to include data links that support published findings. Additionally, most government agencies now require that data generated with federal dollars be publicly available to meet the Congressionally-driven White House mandate for transparency of federally funded activities. Many data sets can be extremely large, so scientists cite DOIs that point to the data's virtual location used in their publications, preserving those data and making them available for future scientific analyses and replication.

Question: What are GRIIDC's goals beyond serving as an archive of data collected during the GoMRI program?

Answer: The GRIIDC data management system provides researchers with tools and advice to help manage data throughout a project's lifecycle. There are clear standards and national data portals for the oceanographic and genomics communities. However, the chemical, biological and social sciences communities do not have well-established standards or national data archives. GRIIDC offers a scientifically diverse and easy to use program for data storage, curation, and archival systems. In addition, the GRIIDC team provides scientists with terminology that promotes consistency, and they assist with metadata consistency, simplifying data access and comparison.

Question: What makes GRIIDC different from other data repositories that currently exist?

Answer: GRIIDC offers a one-stop shop for different data types whereas other repositories tend to be discipline specific. In addition, GRIIDC offers personal guidance in meta-data development, terminology consistency, and advanced planning for identifying data sets before they are collected. The GRIIDC Data Discovery Portal provides tools for researchers, policy makers, and the general public to search and download scientific data. Shared data can contribute to innovative scientific research questions, policy and program assessment, and educational initiatives development. GRIIDC provides a system for storing and sharing data, promoting increased scientific research impact in the Gulf of Mexico and beyond for broader societal benefit.