

Request for Proposals: (1) Competitive Research Program, and (2) Core Research Program Awards

SUMMARY

The Mississippi Based RESTORE Act Center of Excellence (MBRACE) is requesting proposals from Jackson State University (JSU), Mississippi State University (MSU), The University of Southern Mississippi (USM), and University of Mississippi (UM) for two funding tracks: (1) the Competitive Research Program, and (2) the Core Research Program.

FUNDING

It is anticipated that approximately \$1,400,000 will be available to fund three (3) Competitive Research Program awards at approximately \$450,000 each and approximately \$1,400,000 will be available to fund one (1) Core Research Program Award.

ELIGIBILITY

Competitive Research Program Awards

Individuals from each of the four participating universities (JSU, MSU, USM, UM) are eligible to submit a proposal. Proposals may include investigators from other universities if required to accomplish the proposed research, but the Lead PI must be from JSU, MSU, USM or UM. MBRACE Executive Steering Committee (ESC) members are not eligible to participate as PI, Co-PI, or a collaborator (funded or unfunded) on Competitive Research Program Awards. There is no restriction on the number of proposals an individual may participate in, and an individual is eligible to submit a proposal to both funding tracks.

Core Research Program Award

One proposal should be submitted to the Core Research Program funding track with representation from each of the four MBRACE partner universities (JSU, MSU, USM, UM). University ESC members are eligible, but not required, to be listed as a PI on the Core Research Program award. An individual from each of the four partner universities must be identified as the Lead Investigator from that university and one of the four Lead Investigators must be identified as Lead PI for the entire proposal; if a Lead Investigator is not the university representative on the ESC, the university ESC member should designate a Lead Investigator from his university.

DEADLINE FOR SUBMISSION

The deadline for submission of proposals is August 15, 2019 at 5:00 p.m. CT.

QUESTIONS ABOUT THIS REQUEST FOR PROPOSALS

Questions about this RFP should be directed to MBRACE Director, Dr. Kelly Darnell (kelly.darnell@usm.edu).

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PROGRAM DESCRIPTION

The Resources and Ecosystems Sustainability, Tourist Opportunities, and Revived Economies of the Gulf Coast States Act (RESTORE Act, P.L. 112-141) established a Gulf Coast Restoration Trust Fund in the Treasury of the United States. Eighty percent of the civil penalties paid after July 6, 2012, under the Federal Water Pollution Control Act (33 U.S.C. 1321) in connection with the *Deepwater Horizon* oil spill are deposited into this Trust Fund.

The RESTORE Act has five components, including the Centers of Excellence Research Grant Program (CERGP). The CERGP will receive 2.5% of Trust Fund principal, plus a quarter of any interest accrued, divided equally among the five Gulf Coast States. RESTORE Act legislation and regulations can be viewed online at Treasury's <u>RESTORE Act website</u>.

The Mississippi Department of Environmental Quality (MDEQ) is the named eligible entity for Mississippi to carry out the duties of the CERGP. On September 1, 2016, the U.S. Department of Treasury awarded MDEQ a grant to begin its research program with the Mississippi Based RESTORE Act Center of Excellence (MBRACE) as the State's RESTORE Act Center of Excellence. MBRACE is a consortium of four Mississippi Universities: Jackson State University (JSU), Mississippi State University (MSU), University of Mississippi (UM), and The University of Southern Mississippi (USM). USM serves as the lead university for the consortium. The mission of MBRACE is to seek sound, comprehensive science and technology-based understanding of the chronic and acute stressors, both anthropogenic and natural, on the dynamic and productive waters and ecosystems of the northern Gulf of Mexico and to facilitate sustainable use of the Gulf's important resources. MBRACE focuses on the five eligible CERGP disciplines:

- 1. Coastal and deltaic sustainability, restoration and protection, including solutions and technology that allow citizens to live in a safe and sustainable manner in a coastal delta in the Gulf Coast Region
- 2. Coastal fisheries and wildlife ecosystem research and monitoring in the Gulf Coast Region
- 3. Offshore energy development, including research and technology to improve the sustainable and safe development of energy resources in the Gulf of Mexico
- 4. Sustainable and resilient growth, economic and commercial development in the Gulf of Mexico
- 5. Comprehensive observation, monitoring, and mapping of the Gulf of Mexico

More information about MBRACE can be found on the program's website.

GRANT INFORMATION

PROJECT PERIOD

Grants will be for no more than a two-year (24 month) duration. The start date for projects is expected to be January 1, 2020. No-cost extensions are not anticipated.

TOPIC AREAS

Competitive Research Program Awards

The mission of MBRACE is to seek sound, comprehensive science and technology-based understanding of the chronic and acute stressors on the dynamic and productive waters and ecosystems of the northern Gulf of Mexico and to facilitate sustainable use of the Gulf's important resources. To support the mission of MBRACE and to help guide the State of Mississippi in efficiently addressing its ecological- and economic-based coastal improvement and restoration priorities, this funding opportunity invites applications that address critical research gaps in the north-central Gulf of Mexico in two topic areas: (1) Water Quality, and (2) Oyster Reefs and their Sustainability.

Science-based needs as they relate to water quality and oyster sustainability in Mississippi and the north-central Gulf of Mexico are diverse in scope and discipline. MBRACE is specifically looking for projects that increase the understanding of:

- Transport and fate of bacteria in Mississippi coastal systems, including source tracking
 and factors affecting bacterial occurrence and growth in water, beaches, and/or sediment,
 specifically in the nearshore environment
- Dynamics of freshwater inflow (e.g. timing, duration, quality) and associated sedimentation, urban runoff, altered salinity regimes, and effects on estuarine and coastal systems, including but not limited to nutrient loading, bacterial loading, harmful algal blooms, and hypoxia
- Oyster biology, ecology, and production, including, but not limited to, larval transport, settlement, growth, abundance, and survival
- Parameters and locations for optimal cultch deployment and oyster seed deployment to enhance oyster production and reef sustainability

Projects may address one or both of the topic areas of (1) Water Quality, and (2) Oyster Reefs and their Sustainability, and can include monitoring, modeling, and/or manipulative experiments, and the use of existing datasets, the collection of additional data to complement existing datasets, and/or the creation of new datasets. Applicants are encouraged to review the MBRACE Science Plan on the MBRACE website.

Core Research Program Award

In 2017, MBRACE awarded four complimentary projects through the Core Research Program to investigate factors influencing oyster reefs and their sustainability. As continuation of the Core Research Program, to support the mission of MBRACE, and to help guide the State of Mississippi in efficiently addressing its ecological- and economic-based coastal improvement and restoration priorities, MBRACE invites the submission of one integrated proposal that investigates both topic areas of: (1) Water Quality, and (2) Oyster Reefs and their Sustainability.

MBRACE is specifically looking for one integrated proposal that increases the understanding of the following:

- Seasonal trends, variability, and atypical conditions in water quality that can be used to establish baseline conditions along Mississippi's coastline
- Transport and fate of bacteria in Mississippi coastal systems, including source tracking and factors affecting bacterial occurrence and growth in water, beaches, and/or sediment, specifically in the nearshore environment
- Dynamics of freshwater inflow (e.g. timing, duration, quality) and associated sedimentation, urban runoff, altered salinity regimes, and effects on estuarine and coastal systems, including but not limited to nutrient loading, bacterial loading, harmful algal blooms, and hypoxia
- Oyster biology, ecology, and production, including, but not limited to, larval transport, settlement, growth, abundance, and survival
- Parameters and locations for optimal cultch deployment and oyster seed deployment to enhance oyster production and reef sustainability

The proposed project should build on projects awarded through the Core Research Program in 2017 by expanding on existing research avenues and/or developing novel questions resulting from collected or generated data and should pursue new research areas as they relate to the more general water quality and oyster ecology research needs identified above. The proposed project should also include plans for synthesizing existing data across universities from Core Research Program projects funded in 2017, if not already completed. Projects can include monitoring, modeling, and/or manipulative experiments, and the use of existing datasets, the collection of additional data to complement existing datasets, and/or the creation of new datasets. Applicants are encouraged to review the MBRACE Science Plan on the MBRACE website.

AVAILABLE FUNDING AND GRANT TIMELINE

It is anticipated that approximately \$1,400,000 will be available to fund three (3) Competitive Research Program awards at approximately \$450,000 each and approximately \$1,400,000 will be available to fund one (1) Core Research Program Award.

Funding is contingent on availability of funds in the Trust Fund. It is expected that funding will be available for projects to commence January 1, 2020. Applicants should plan their research activities to begin accordingly. All research activities must be completed within two years from the start of the grant. No-cost extensions are not anticipated.

Funds will be distributed via cost-reimbursable agreements based on monthly reports and submitted invoices. Annual continuation of funding will be subject to acceptable progress as judged by MBRACE. MBRACE may require modifications to the proposed work plan, personnel, and budget of any proposal.

The lead university in the MBRACE consortium, USM, will enter into sub-agreements with the universities granted funding. MBRACE shall not be held liable for any expense incurred prior to the full execution of the grant agreement, including, but not limited to proposal preparation, discussions, or negotiations.

ELIGIBILITY

Competitive Research Program Awards

Individuals from each of the four participating universities (JSU, MSU, USM, UM) are eligible to submit a proposal. Proposals may include investigators from other universities if required to accomplish the proposed research, but the Lead PI must be from JSU, MSU, USM or UM. MBRACE Executive Steering Committee (ESC) members are not eligible to participate as PI, Co-PI, or a collaborator (funded or unfunded) on Competitive Research Program Awards. There is no restriction on the number of proposals an individual may participate in, and an individual is eligible to submit a proposal to both funding tracks.

Core Research Program Award

One proposal should be submitted to the Core Research Program funding track with representation from each of the four MBRACE partner universities (JSU, MSU, USM, UM). University ESC members are eligible, but not required, to be listed as a PI on the Core Research Program award. An individual from each of the four partner universities must be identified as the Lead Investigator from that university and one of the four Lead Investigators must be identified as Lead PI for the entire proposal; if a Lead Investigator is not the university representative on the ESC, the university ESC member should designate a Lead Investigator from his university.

QUESTIONS ABOUT THIS REQUEST FOR PROPOSALS

Questions about this RFP should be directed to the MBRACE Director, Dr. Kelly Darnell (kelly.darnell@usm.edu).

FULL PROPOSAL SUBMISSION

DEADLINE FOR SUBMISSION

The deadline for submission of proposals is August 15, 2019 at 5:00 p.m. CT.

HOW TO SUBMIT

Proposals must be compiled into one PDF document and emailed to MBRACE Director, Dr. Kelly Darnell (kelly.darnell@usm.edu), by the submission deadline, with MBRACE Chief Scientist Landry Bernard (landry.bernard@usm.edu) carbon copied (CC'd) on the submission email. Applicants should use the following format for the subject line of the email: PI Last Name and First Initial, Funding Track, "Proposal Submission". For example: Smith J, Competitive Research Program Award, Proposal Submission. Proposals must be in the required format and include all required sections, as described in **Appendix A**.

PROPOSAL REVIEW

REVIEW PROCESS

All applications will undergo initial administrative review for requirements outlined in **Appendix A.** All applications that pass initial administrative review will be evaluated in a review process organized by the Mississippi-Alabama Sea Grant Consortium (MASGC). The MASGC will maintain a process for evaluating proposals using best practices to ensure no conflicts of interest and a fair and transparent process. Proposals submitted to the two funding tracks, (1) the Competitive Research Program, and (2) Core Research Program, will undergo separate review processes.

Competitive Research Program Award Review Process

MASGC will identify individuals to review proposals submitted to the Competitive Research Program Award track. Reviewers will be external to MASGC, will have expertise in the topic areas identified in this RFP, and will review proposals following a set of defined criteria (see **Evaluation Criteria** below). MASGC will also establish a Research Technical Review Panel to evaluate the externally reviewed proposals. Panel members will place each proposal into a "fundable", "maybe fundable," or "not fundable" category, and will provide ranked recommendations to the MBRACE ESC. The final funding decision for the Competitive Research Program awards will be made by voting members of the MBRACE ESC after soliciting input from *ex officio* ESC members from MDEQ and MDMR on the portfolio of recommendations. Awards will be made in rank order from the independent panel review process unless selection out of rank order is justified by availability of funding, balance or distribution of funds, duplication of effort, program priorities, an applicant's prior award performance, or other relevant factors. If awards are selected out of rank order, the ESC will provide a detailed written justification for their decision. Proposals may require either modification or additional explanation of the proposed work by the universities prior to release of funds to the institutions.

Core Research Program Award Review Process

MASGC will identify individuals to review the proposal submitted to the Core Research Program Award track. Reviewers will be external to MASGC, will have expertise in the topic areas identified in this RFP, and will review proposals following a set of defined criteria (see **Evaluation Criteria** below). Following external review, MASGC will develop a list of recommendations for improvement of the proposed research plan, if necessary, based on results of the external evaluations and discussion with the external reviewers; the list of recommended revisions will be provided to the voting MBRACE ESC members, who will solicit input from *ex officio* ESC members from MDEQ and MDMR, and vote to either accept the proposal as written or to accept the proposal after modifications. If modifications are requested, the MBRACE Director and Chief Scientist will ask the Lead Investigators to respond to the requested revisions and modify the proposal as necessary. The MBRACE Director and Chief Scientist will review the re-submitted proposal to ensure appropriate revisions were made before providing the revised proposal to the ESC for approval. The final funding decision will be made by the ESC. It is expected that only one (1) proposal will be submitted to the Core Research Program Award track.

EVALUATION CRITERIA

Following initial administrative review for requirements outlined in **Appendix A**, proposals will be evaluated by external reviewers based on relevance, scientific merit, qualifications, and appropriateness of the budget. Reviewers will assign a numerical rating (1–5) to each evaluation category based on their view of how well the applicant met the criteria; the rating will then be weighted using the percentages listed below for the Competitive Research Program Awards (Table 1) and Core Research Program Award (Table 2). For proposals submitted to the Competitive Research Program Award track, the highest rated proposal will be ranked first, the second highest rated proposal will be ranked second, and so on. It is expected that only one (1) proposal will be submitted to the Core Research Program Award track.

Table 1. Competitive Research Program evaluation criteria.

Category	Criteria
Importance and Relevance (40%)	 How well the proposed research addresses at least one of the MBRACE Competitive Research Program topic areas How relevant the anticipated outcomes are to at least one of the MBRACE Competitive Research Program topic areas How well the proposed project contributes to existing knowledge and understanding of the Gulf of Mexico ecosystem
Scientific Merit (40%)	 How clearly the application describes the project goals, objectives, and/or hypotheses Whether the proposed approach and methods are sound and appropriate How clearly the applicants demonstrate understanding of the study system
Qualifications (10%)	 The degree of expertise and track record of PIs in the proposed research The potential for successful project completion within the proposed timeline
Appropriateness of the budget (10%)	Whether the budget accurately reflects cost of the proposed research and demonstrates efficient use of resources

Table 2. Core Research Program Award evaluation criteria.

Category	Criteria
Importance and Relevance (40%)	 How well the proposed research addresses the MBRACE Core Research Program Award topic areas How relevant the anticipated outcomes are to the MBRACE Core Research Program Award topic areas How well the proposed project contributes to existing knowledge and understanding of the Gulf of Mexico ecosystem How well the proposal integrates research across the four partner universities
Scientific Merit (40%)	 How clearly the application describes the project goals, objectives, and/or hypotheses Whether the proposed approach and methods are sound and appropriate How clearly the applicants demonstrate understanding of the study system

Qualifications (10%)	 The degree of expertise and track record of Lead Investigators in the proposed research The potential for successful project completion within the proposed timeline Whether the proposal includes Investigators from each of the four MBRACE partner universities
Appropriateness of the budget (10%)	Whether the budget accurately reflects cost of the proposed research and demonstrates efficient use of resources

IMPORTANT DATES

Date	Event
Proposal deadline	August 15, 2019, 5:00 p.m. CT
Anticipated project start date	January 1, 2020

GRANT ADMINISTRATION

GRANT TERMS AND CONDITIONS

The following terms and conditions apply to all proposals:

- 1) Grants must be hosted by JSU, MSU, USM or UM.
- 2) As required by the RESTORE Act, field efforts must be located in the Gulf Coast Region (as defined at 31 C.F.R. §34.2), which includes oceans and coasts off coastal counties that border the Gulf of Mexico, from 25 miles inland from the coastline to the offshore boundary of the Exclusive Economic Zone.
- 3) Funding is made available pursuant to the CERGP of the U.S. Department of the Treasury and has been awarded by MDEQ for research activities.
- 4) Grant funds may be used for the purchase of equipment but shall not be used for the acquisition or construction of physical infrastructure (i.e. ships or laboratories).
- 5) All sub-awards resulting from this solicitation will be subject to the terms and conditions of the Federal Award, the RESTORE Act Financial Assistance Standard Terms and Conditions and Program-Specific Terms and Conditions under the Centers of Excellence Research Grants Program, MDEQ's Standard Sub-Award Terms and Conditions, the RESTORE Act, 33 U.S.C. 1321(t), and Treasury Regulations 31 C.F.R. § 34 et seq., specifically 31 C.F.R. §§ 34.700 708 governing the Centers of Excellence Research Grants Program, all applicable terms and conditions in 2 C.F.R. Part 200 of the Office of Management and Budget ("OMB") Uniform Guidance for Grants and Cooperative Agreements, including Appendix II to Part 200, and all other OMB circulars, executive orders or other federal laws or regulations applicable to the services funded as a result of this solicitation. These terms and conditions will apply to all sub-recipients and sub-recipient contractors. Links to the RESTORE Act Financial Assistance Standard Terms and Conditions and Program-Specific Terms and Conditions and MDEQ's Standard Sub-Award Terms and Conditions are posted on the MBRACE website.

REPORTING

MBRACE administrators will coordinate with grantees to fulfill reporting requirements. Required reports, detailed below, will be used to inform technical and financial reports to MDEQ, semi-annual reports to the U.S. Treasury, and an annual report to the Gulf Coast Ecosystem Restoration Council, as required for continuation of program funding. Reports may be made publicly available by MBRACE. Applicants are permitted to include costs for report preparation in the budget and should read the following reporting requirements carefully. All grant recipients will be required to:

- 1. Submit monthly technical reports in a format provided by MBRACE.
- 2. Submit monthly distribution of effort reports for all individuals paid by MBRACE.
- 3. Submit financial reports and related documentation (such as receipts), in a specified format as defined in grant sub-agreement terms and conditions.
- 4. Submit an Organizational Conflict of Interest/Personal Disclosure Form.
- 5. Participate in annual MBRACE All-Hands Meetings (1.5 days in the Fall in Jackson, MS for all key personnel; costs for these meetings should be included in proposal budget [see **Appendix A**]).
- 6. Participate in routine (at least semi-annual) teleconferences or webinars to highlight and share recent accomplishments.
- 7. Submit a final report within 30 days of the close of the award on research accomplishments in a format provided by MBRACE.
- 8. Acknowledge financial support from MBRACE in all research products and outputs.

OTHER INFORMATION

PERMITS

PIs are responsible for compliance with local, state or federal requirements related to their research program, including ensuring they have any permits required to conduct their research. If applicable, copies of permits must be provided to MBRACE.

RESEARCH INVOLVING HUMAN SUBJECTS

Research involving human subjects is allowed when the project has been certified by a responsible body. If one is not in place now, each university has the responsibility for setting up an Institutional Review Board (IRB) to review research protocols and ensure the protection of the rights of human subjects. Projects involving human subjects cannot be recommended for funding until this certification or its equivalent has been provided to MBRACE and Treasury has approved it by a special award condition or otherwise in writing.

CARE AND USE OF LIVE VERTEBRATE ANIMALS

Recipients must comply with all applicable statutes pertaining to the care, handling, and treatment of vertebrate animals held or sacrificed for research, teaching, or other activities.

DATA AND SAMPLE MANAGEMENT

All projects must ensure that data and materials are collected, archived, digitized, and made available using methods that allow current and future investigators to address new questions as they arise. Datasets created with MBRACE support must be submitted to the Gulf of Mexico

Research Initiative Information and Data Cooperative (GRIIDC), the MBRACE-designated data repository, for long-term data preservation, and must also be archived in the MDEQ database (currently under development); GRIIDC will assist with data transfer from their database to the MDEQ database. Project personnel are responsible for conducting QA/QC on all data using community-accepted standards and protocols prior to its' submission for long-term preservation. All data, derived data products and associated detailed, machine-readable metadata must be submitted to GRIIDC within one year of collection, at the time of publication, or by the end of the sub-agreement with USM, whichever is soonest. Ten percent (10%) of the award funding will be held until all data are submitted to GRIIDC, and failure or delay to make data accessible may be considered by MBRACE when making future funding decisions. A data management plan is required within 45 days of award notice, and all data sets and metadata identified in the data management plan must be submitted to GRIIDC. MBRACE will assume the cost for long-term data preservation through GRIIDC, but applicants are permitted to include costs for project-level data management in the budget, including coordinating, organizing, formatting and/or preparing datasets for long-term preservation.

UNDERGRADUATE STUDENT INTERNSHIPS

Following notice of funding, Lead PIs (Competitive Research Program Awards) and Lead Investigators (Core Research Program Award) will be notified that they are eligible to apply for a supplementary internship. The intern will be required to conduct research related to the funded proposal and will receive an award of \$10,000 to cover research expenses, full-time salary (40h/week) and housing for a 10-week summer internship. The MBRACE Director and Chief Scientist will review supplemental internship applications and will make a recommendation to the ESC for awards. At least four internships will be awarded, and a Lead PI or Lead Investigator is only eligible to apply for, and receive, one intern.

APPENDIX A: FULL PROPOSAL CONTENTS AND FORMAT

REQUIRED SECTIONS

Competitive Research Program Awards

The full proposal for the Competitive Research Program Awards must include the components described below. Required forms and page limits are indicated where necessary.

1. Proposal Cover Sheet

- a. Project title
- b. Lead PI name, university, and contact information
- c. Co-PI name(s), university, and contact information
- d. Anticipated project duration, including start and end dates (not to exceed two years)
- e. Funding amount requested by year
- f. Total funding amount requested
- g. Funding track for the application (e.g. "Competitive Research Program Award")
- h. Signatures of Lead PI and Lead Authorized Organizational Representative
- 2. **Project Summary** (up to 500 words): Provide a concise description of the project, including how the project addresses at least one of the Competitive Research Program topic areas. Specify project goals and objectives, the proposed research activities, and the potential scientific impact. Project Summaries from projects that are awarded for funding may be posted on the MBRACE website.
- 3. **Project Description** (≤10 pages): Narrative including tables and illustrations, if applicable, that describes goals, approach, outcomes, timeline, and qualifications of the proposing team. The Project Description must include:
 - a. Relevance of the proposed research to at least one of the Competitive Research Program topic areas
 - b. Goal, objectives, and/or hypotheses to be tested
 - c. Approach, including field/laboratory/modeling methods, experimental design, etc.
 - d. Timeline, clearly displayed by each month of the proposed project, in the form of a Gantt chart, including tasks, milestones, outputs and/or deliverables
- 4. **Data Management Plan** (up to 500 words): Describe the type of data to be used or produced over the course of the grant, QA/QC procedures to ensure data integrity, and details for short-term data management and long-term data preservation procedures (See **Data and Sample Management** section for long-term data preservation requirements).

5. Budget Request

- a. Budget: Using the required budget spreadsheet (available for download on the MBRACE website), submit a separate budget for the lead university and each subcontractor (if any) that covers all costs for the duration of the project. The spreadsheet should be saved as a PDF and submitted within the proposal document as well as submitted separately as the Excel file for review.
- b. Budget justification: Describe the annual award budget for each year of the proposed research. The proposed budget should be consistent with the needs and complexity of the proposed research. A separate budget justification must be

provided for the lead university and each subcontract. Separate the budget justification into the following categories:

- i. <u>Salary</u>: First and last name of project personnel, monthly pay rate, level of effort (# of months), and a brief description of their role in the project
- ii. Fringe: Total fringe benefits by year
- iii. <u>Materials and Supplies</u>: Detailed explanation of materials and supplies required for the proposed work
- iv. <u>Travel</u>: Include costs for participation in annual MBRACE All-Hands meetings (1.5 days in the Fall in Jackson, MS for all key personnel) in addition to any other travel costs. Provide information about the purpose of the trip, the destination (if known), the number of travelers, and expenses per trip. RESTORE Act Terms and Conditions restrict use of funds from this award for travel outside of the United States unless Treasury provides prior written approval. If foreign travel is requested, a detailed justification must be included.
- v. <u>Equipment</u>: Identify and fully justify items of equipment costing more than \$5,000.
- vi. <u>Other Expenses</u>: Detail other expenses such as publication costs, computer services, facility, tuition, equipment or vessel rental costs, etc.
- vii. <u>Subcontracts:</u> List all subcontracts and submit separate detailed budgets and justifications for each.
- viii. <u>Indirect costs (F&A)</u>: List the institution's federally negotiated rate. A copy of the federal rate agreement must be provided.
- 6. **References Cited**: Follow the journal *Science's Science Reference Style* for format of citations.
- 7. **Biographical Sketches**: Provide biographical sketches (\leq 2 pages per person) for the Lead PI, each Co-PI, and any collaborators. There is no standard format or template for the biographical sketches. Include information as you deem appropriate.

Core Research Program Award

The full proposal for the Core Research Program Awards must include the components described below. Required forms and page limits are indicated where necessary.

1. Proposal Cover Sheet

- a. Project title
- b. Name, university and contact information for the proposal's Lead PI. This individual should also be the Lead Investigator from his or her university.
- c. Name, university and contact information for the three Lead Investigators, not including the Lead Investigator who is also the Lead PI and listed in item 'b' above.
- d. Co-Investigator name(s), university, and contact information
- e. Anticipated project duration, including start and end dates (not to exceed two years)
- f. Funding amount requested by year

- g. Total funding amount requested
- h. Funding track for the application (e.g. "Core Research Program Award")
- i. Signatures of Lead PI and Lead Authorized Organizational Representative
- 2. Project Summary (up to 500 words): Provide a concise description of the project, including how the project addresses the Core Research Program topic areas. Specify project goals and objectives, the proposed research activities, and the potential scientific impact. The Project Summary from the project awarded for funding may be posted on the MBRACE website.
- 3. **Project Description** (≤20 pages): Narrative including tables and illustrations, if applicable, that describes goals, approach, outcomes, timeline, and qualifications of the proposing team. The Project Description must include:
 - a. Relevance of the proposed research to the Core Research Program Award topic areas
 - b. A clear description of how the proposal integrates research across the four partner universities, including plans to synthesize data collected or generated from projects awarded through the Core Research Program in 2017, if applicable
 - c. Goal, objectives, and/or hypotheses to be tested
 - d. Approach, including field/laboratory methods, experimental design, etc.
 - e. Timeline, clearly displayed by each month of the proposed project, in the form of a Gantt chart, including tasks, milestones, outputs and/or deliverables
- 4. **Data Management Plan** (up to 500 words): Describe the type of data to be used or produced over the course of the grant, QA/QC procedures to ensure data integrity, and details for short-term data management and long-term data preservation procedures (See **Data and Sample Management** section for long-term data management requirements).

5. Budget Request

- a. Budget: Using the required budget spreadsheet (available for download on the MBRACE website), submit a separate budget for each university that covers all costs for the duration of the project. There should be separate budgets for JSU, MSU, UM, and USM. Budget spreadsheets should be saved as PDFs and submitted within the proposal document as well as submitted separately as the Excel file for review. USM will issue subawards to each university upon award. Fund allocation across the four partner universities should be based on each university's scope of work.
- a. Budget justification: Describe the annual award budgets for each year of the proposed research. The proposed budgets should be consistent with the needs and complexity of the proposed research. A separate budget justification must be provided for each university. Separate the budget justification into the following categories:
 - i. <u>Salary</u>: First and last name of project personnel, monthly pay rate, level of effort (# of months), and a brief description of their role in the project
 - ii. Fringe: Total fringe benefits by year
 - iii. <u>Materials and Supplies</u>: Detailed explanation of materials and supplies required for the proposed work

- iv. <u>Travel</u>: Include costs for participation in annual MBRACE All-Hands meetings (1.5 days in the Fall in Jackson, MS for all key personnel) in addition to any other travel costs. Provide information about the purpose of the trip, the destination (if known), the number of travelers, and expenses per trip. RESTORE Act Terms and Conditions restrict use of funds from this award for travel outside of the United States unless Treasury provides prior written approval. If foreign travel is requested, a detailed justification must be included.
- v. <u>Equipment</u>: Identify and fully justify items of equipment costing more than \$5,000.
- vi. <u>Other Expenses</u>: Detail other expenses such as publication costs, computer services, facility, tuition, equipment or vessel rental costs, etc.
- vii. <u>Subcontracts:</u> List all subcontracts and submit separate detailed budgets and justifications for each.
- viii. <u>Indirect costs (F&A)</u>: List the institution's federally negotiated rate. A copy of the federal rate agreement must be provided.
- 6. **References Cited**: Follow the journal *Science* 's <u>Science Reference Style</u> for format of citations.
- 7. **Biographical Sketches**: Provide biographical sketches (≤2 pages per person) for all named Investigators and any collaborators. There is no standard format or template for the biographical sketches. Please include information as you deem appropriate.

FORMAT

Proposals submitted to the Competitive Research Program Award track and the Core Research Program Award track must be submitted as <u>a single PDF file</u> that includes sections 1-7 described above. The Proposal Cover Sheet, Project Summary, Project Description, Data Management Plan, Budget Justification, References Cited, and Biographical Sketches must be single-spaced in 12-point font with 1-inch margins.