

# 2020-2021 MSSGC AFFILIATE PROGRAMS

The Mississippi Space Grant Consortium (MSSGC) requests program documents for the 2020-2021 Affiliate Programs. Program descriptions and budget documents will be accepted from the Campus Coordinator of the MSSGC Affiliate Institution (UM, MSU, JSU, USM, ASU, DSU, WUM, MVSU, ICC, CCC, MCC, MDCC, HCC, MGCCC, NEMCC, PRCC, JCJC, & SMCC). Templates and instructions can be found online at <a href="http://msspacegrant.org/affiliates.html">http://msspacegrant.org/affiliates.html</a>. Affiliates are encouraged to consider programs that are NASA-relevant, campus-wide, inclusive, and impactful. Eligibility of participants need not be limited to science and engineering majors. Any student receiving direct support from any Space Grant funded program must be a US citizen.

**Title: MSSGC Affiliate Programs** 

Sponsored By: Mississippi Space Grant Consortium

Submit Program Documents via email to <a href="mailto:estephen@olemiss.edu">estephen@olemiss.edu</a>

#### DOCUMENTS MAY NOT BE SUBMITTED IN PAPER FORMAT

# **Key Dates**

1. Release/Posted Date: February 9th, 2020

2. Application Due Date: March 20th, 2020, 11:59pm

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#### **Section 1. Details**

#### 1.A. ENGAGING WITH NASA'S MISSION

NASA's mission involves every possible STEM (Science, Technology, Engineering, and Math) topic that exists. The phrase "Field Related to Space" encompasses any academic discipline or field of study (including the physical, natural and biological sciences, and engineering, space technology, education, economics, sociology, communications, planning, law, international affairs and public administration) which is concerned with or likely to improve the understanding, assessment, development and utilization of space.

NASA's Office of STEM Engagement (OSTEM) strives to support this mission by leveraging NASA's unique resources as a powerful context for inspiration and student learning.

MSSGC's program engages with this mission through utilization of NASA resources and contribution to NASA's objectives. Broadly, MSSGC operates a coordinated network that (1) funds opportunities for students to engage with the NASA mission at the undergraduate and graduate level, (2) pilots research and educational programs that enhance the STEM ecosystem in Mississippi, and (3) disseminates NASA resources and information about NASA's needs and objectives through a statewide affiliate network.

#### 1.B. MSSGC GOALS AND OBJECTIVES

#### 1.B.i. Goals

- A. "Engage" Establish a distributed network of programs that directly supports research and education in NASA-relevant STEM pursuits throughout the state.
- B. "Empower" On an individual level, equip and inspire students, particularly those from underrepresented groups, to pursue careers in Science, Technology, Engineering and Mathematics.
- C. "Enhance" Enhance and nurture the STEM-learners' educational/support network to insure development of a STEM-literate, NASA-relevant workforce for Mississippi and the Nation.
- D. "Enlighten" Contribute to the general scientific literacy of the population.

#### 1.B.ii. Objectives

Objectives not applicable to Affiliate Programs have been greyed out. Objectives that apply to the Affiliate Programs are A3, A8, B1-B5, C1, C2, D1, & D2.

#### In support of Goal A "Engage"

- A1 <u>Fellowships</u>: Annually, fund a minimum of 8 graduate fellows among the four comprehensive universities (UM, MSU, JSU, USM).
- A2 <u>Internships</u>: Annually, fund a minimum of 9 undergraduate internships between both NASA and MS Industry opportunities.
- A3 <u>Affiliates</u>: Annually, fund a minimum of 16 affiliate institutions to establish a state-wide distributed network for Space Grant in Mississippi.
- A4 Student-Led STEM: Annually, fund a minimum of 2 student-led STEM teams.

- A5 <u>Seed Grants</u>: Annually, fund a minimum of 2 seed grants in NASA STEM to foster collaboration and support research opportunities for undergraduates.
- A6 <u>STEM Engagement</u>: Annually, fund a minimum of 4 mini-grant activities to enhance K-12 STEM education in Mississippi.
- A7 Foundations: Annually, host a minimum of 50 participants in STEM efficacy training to enhance the STEM ecosystem in Mississippi.
- A8 -Reach: Meet or exceed the (# of direct participants)/(\$1000 of direct NASA funds) on an annual basis (0.596 for 2018; not including NCAS).

#### In support of Goal B "Empower"

- $BI \underline{\text{Obtain a Degree}}$ : Annually, successfully identify the next step after graduation for 80% of the students receiving significant direct awards by the program. (79.2% for 2014-2018 awards)
- *B2* Remain in STEM Disciplines: Annually, at least 75% of the individuals receiving significant direct awards remain in STEM disciplines as evidenced by their next step after graduation. (74.5% for 2014-2018 awards)
- B3 <u>Pursue Advanced Degrees</u>: On average, over the course of the contract, for students receiving significant direct support, exceed the percentage of individuals that pursue advanced degrees by at least 40% as compared to the general population of individuals receiving comparable STEM degrees as reported by the National Association of Colleges and Employers. (34.3% for 2014-2018 awards vs. 24.6% for the general population receiving comparable STEM degrees = 39.3% increase)
- *B4* <u>Diversity, Women:</u> On average, over the course of the contract, match or exceed the percentage of significant direct awards made to women to the percentage enrollment of women in 2016 as reported by the DoE NCES. (53.2 % for 2014-2018 awards 60.0% target)
- *B5* <u>Diversity, Underrepresented</u>: On average, over the course of the contract, match or exceed the percentage of significant direct awards made to racially or ethnically underrepresented individuals to the percentage enrollment of racially or ethnically underrepresented individuals in 2016 as reported by the DoE NCES. (41.3 % for 2014-2018 awards 42% target)

### In support of Goal C "Enhance"

- C1 <u>Authentic Experiences</u>: Annually, 75% of students supported by or participating in a MSSGC-sponsored program will agree<sup>1</sup> with the statement, "I gained useful skills and experiences from my participation in this Space Grant program."
- C2 <u>Effectiveness</u>: Annually, 75% of teachers participating in a MSSGC-sponsored event, will agree with the statement, "The material presented will make me a more effective STEM teacher."
- C3 <u>Inspire Future Generations</u>: Annually, 80% of teachers working with MSSGC Graduate Fellows will agree with the statement, "The fellow's presence in my classroom has inspired some of my students to pursue further study in the STEM fields who may otherwise have not."

<sup>&</sup>lt;sup>1</sup> Based on a 5-point Likert scale: 1. Strongly disagree, 2. Disagree, 3. Neither agree nor disagree, 4. Agree, 5. Strongly agree

#### In support of Goal D "Enlighten"

D1 – <u>Increase Awareness</u>: Annually, 75% of participants at MSSGC-sponsored educational programs/events will agree with the statement, "The material presented in this program has increased my awareness of current science or math issues."

D2 – NASA Opportunities: Annually, 80% of MSSGC affiliates and partners will agree with the statement, "The MSSGC office has kept my campus abreast of relevant NASA and Space Grant opportunities and announcements."

#### 1.C. AFFILIATE PROGRAM ASSESSMENT: REPORTING REQUIREMENTS

Affiliates are required to report on the efficacy of their programs and to demonstrate contribution to MSSGC objectives in order to maintain continued funding. Affiliates are required to submit two annual reporting documents.

<u>Student Data Tables</u>: Assessment of objectives A and B is achieved through Affiliate Reporting submitted via Student Data Tables. The MSSGC Director provides the Affiliate Coordinator with a Student Data Table template that describes the details needed for accurately reporting student participants.

Affiliate Program Report: Each Affiliate will provide the MSSGC Director with an annual program report that details the activities funded by the Affiliate. The reports are typically due near the end of February. This information is used by MSSGC to complete the Annual Performance Document (APD) which is submitted to NASA annually on April 1. Assessment of objectives C and D require the affiliates to administer some form of evaluation or survey (paper form, online survey, etc.) in order to assess the statements described in Section 1.B.ii. The results of these assessments will make up a portion of the annual Affiliate Program Report.

## **Section 2. Affiliate Programs**

#### 2.A. MSSGC AFFILIATES

The MSSGC affiliates carry out NASA-relevant programs that include mentoring, lab experiences, pre-service training, tutoring, scholarships, and outreach. The MSSGC Director reviews each affiliate's program annually to ensure each affiliate is contributing to MSSGC's objectives *and* has alignment with the priorities of NASA's Mission Directorates and Centers.

The NASA/Mississippi Space Grant Consortium (MSSGC) consists of eighteen (18) affiliate institutions: Alcorn State University, Coahoma Community College, Delta State University, Hinds Community College, Itawamba Community College, Jackson State University, Meridian Community College, Mississippi Delta Community College, Mississippi Gulf Coast Community College, Jones County Junior College, Southwest Mississippi Community College, Mississippi State University, Mississippi University for Women, Mississippi Valley State University, Northeast Mississippi Community College, Pearl River Community College, University of Mississippi, and University of Southern Mississippi.

A Campus Coordinator is designated at each Affiliate to act as the face of NASA Space Grant at their institution. The Campus Coordinators act as the steering committee for MSSGC. The MSSGC Director maintains a close working relationship with each of the Coordinators via regular phone calls and email communications. The Director and Assistant Director make routine trips to visit Affiliate Institutions to maintain a close collegial relationship. The Director hosts two in-person

meetings with the Coordinators each year. Coordinators routinely make direct contribution to the selection or review of awardees, review of program outcomes, and suggestion for growth or improvement in the program.

#### 2.B. ELIGIBILITY

Program descriptions and budget documents will be accepted from the Campus Coordinator of the MSSGC Affiliate Institution (UM, MSU, JSU, USM, ASU, DSU, WUM, MVSU, ICC, CCC, MCC, MDCC, HCC, MGCCC, NEMCC, PRCC, JCJC, & SMCC).

In order to remain eligible each Affiliate must (a) fulfill the reporting requirements, (b) demonstrate timely allocation of program funds, (c) participate in biannual consortium meetings, and (d) meet cost sharing requirements.

#### 2.C. SCOPE OF WORK

Each MSSGC Affiliate will conduct an educational program that may include scholarships, stipends, student research opportunities, STEM-related training or education enhancement, or other activities that (1) meet the goals of the Mississippi Space Grant Consortium (MSSGC) Strategic Plan and (2) contribute to the NASA Mission. The Affiliate Campus Coordinator will (a) manage the activities or the program and (b) complete all reporting as required by NASA and the MSSGC Director.

#### 2.D. PERIOD OF AWARD

Funding is intended to coincide with the academic cycle. Therefore, the period of performance should be listed at 1 June 2020 through 31 May 2021. This will ensure that funds are available at the beginning of the 2020-2021 academic cycle and can be fully invoiced at the close of the Spring semester prior to the end of the award period.

#### 2.E. FUNDING LEVELS AND COST SHARING REQUIREMENTS

Funding levels are set based on institution type:

• Comprehensive Graduate Degree Granting Institutions: \$20,000 (UM, MSU, USM, JSU)

• Regional Universities: \$15,000 (ASU, DSU, WUM, MVSU)

• Community Colleges: \$7,500 (ICC, CCC, MCC, MDCC, HCC, MGCCC, NEMCC, PRCC, JCJC, & SMCC)

The direct funds requested from MSSGC may not exceed these levels.

In accordance with NASA's requirements for MSSGC, the Affiliates are required to provide cost sharing equivalent to the direct funds requested from MSSGC. This is a **1-to-1 cost sharing requirement**. For every \$1 requested from MSSGC, the Affiliate must provide at least \$1 of match. The match can be either cash or in-kind but must be from a non-Federal source.

### **Section 3. Program Documents Submission Instructions**

#### 3.A. CONTENT

A complete Program Documents Submission Package includes the Budget Summary spreadsheet and 1 or more Project Element description forms. The MS Excel template for the complete package can be downloaded from:

#### http://msspacegrant.org/affiliates.html.

Instructions for completing the budget package are included in the MS Excel template.

#### 3.B. SUBMISSION DEADLINE

Proposals should be submitted by March 20th, 2020, 11:59 pm.

#### 3.C. SUBMISSION REQUIREMENTS

Submit the complete application as a single PDF document via email to <a href="mailto:estephen@olemiss.edu">estephen@olemiss.edu</a>.

Affiliates will compile all required parts of the application package into **one** PDF document.

The Budget Summary sheet *must* be signed by both the Campus Coordinator *and* an Authorized Organizational Representative (AOR or fiscal agent) for the Institution.

For questions, contact

- MSSGC Director, Dr. Nathan Murray, <u>nmurray@olemiss.edu</u>, 662-915-3190.
- MSSGC Asst. Director, Dr. Earnest Stephens, <u>estephen@olemiss.edu</u>, 662-915-1187.