



District of Columbia Space Grant Consortium Strategic Plan

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MISSION STATEMENT

Our mission is to support NASA's goals by contributing to STEM workforce development in the District of Columbia, utilizing the unique resources of our diverse affiliate institutions through programs in internships/fellowships/scholarships, research infrastructure, higher education, precollege, and informal education, to increase public knowledge, support educators, and attract and retain students to pursue STEM advanced degrees and careers.

GOALS, OBJECTIVES, and METRICS

Management/Structure

Goal 1: Allocate staff resources in the most effective way to manage programs and perform administrative tasks.

Objective 1: To achieve designated status and increase the DCSGC's affiliates.

Metric: We will have affiliate representatives from every university in the District of Columbia as well as industry, nonprofit science education organizations, and the DC Public Schools.

Objective 2: To capture knowledge and lessons learned (from failures and successes) in a more effective, systematic way.

Metric: The DCSGC will assess its Strategic Plan annually.

Objective 3: To consistently ensure that our programs align with NASA's strategic goals and objectives.

Metric: Only programs that align with NASA's strategic goals and objectives will be considered for funding, and an annual review of the DCSGC Strategic Plan will formally assess that alignment.

Objective 4: To ensure accurate and timely submissions to NASA.

Metric: Reports due for the NASA Office of Education Performance Measurement (OEPM) system, all proposals and budgets, and any other directives will be answered on or before the deadline.

Objective 5: To keep indirect costs to a minimum in order to maximize the funds and resources available for scholarships and programs.

Metric: Minimize indirect costs charged by the lead institution and affiliates for the duration of the upcoming 3-year base grant.

Internships/Fellowships/Scholarships

Goal 2: Competitively provide NASA Internships/Scholarships/Fellowships (NIFS) to meet the needs of NASA and DC, with emphasis on women, minorities, and persons with disabilities.

Objective 1: To provide meaningful research opportunities for DC's diverse student population.

Metric: Only NIFS programs that offer meaningful research opportunities in universities, industries, or NASA, to students pursuing STEM degrees and/or careers, will be supported.

Objective 2: To increase the NASA/DCSGC presence in affiliate institutions.

Metric: NIFS opportunities will be made available to relevant students at each academic affiliate.

Objective 3: To facilitate student opportunities to work at NASA centers.

Metric: Make three NASA internship slots available to students each year.

Objective 4: To provide mentoring for student researchers.

Metric: All students involved with a research project will be matched with a faculty, NASA, or industry mentor.

Objective 5: To sustain high levels of participation by women, minorities, and persons with disabilities in accordance with DC needs.

Metric: NIFS awards will meet or exceed 52% to women, 37% to members of underrepresented minority groups, and 10% to persons with disabilities. These targets were derived from the National Center for Education Statistics enrollment data for D.C.

Research Infrastructure

Goal 3: Support students and faculty in STEM research opportunities in NASA Centers and universities.

Objective 1: To place priority on research programs that include mentoring of students and/or junior faculty.

Metric: At least one research program in which senior faculty and/or industry representatives provide mentoring will be funded.

Objective 2: To increase the visibility of student/faculty research.

Metric: Students and faculty receiving direct research funding will be required to pursue publication of research outcomes in academic publications and/or present their findings at a conference.

Objective 3: To align the DCSGC's research programs with NASA's research and technology priorities.

Metric: At least one program in which DC faculty and NASA personnel collaborate will be funded.

Higher Education

Goal 4: Attract and retain students pursuing advanced STEM degrees and/or careers.

Objective 1: To strengthen the ties between DCSGC universities and NASA centers.

Metric: Programs that require collaboration and/or research experiences at NASA centers through internships, mentoring, data sharing, website development, etc. will be funded.

Objective 2: To provide a means for DC students to attend STEM conferences.

Metric: Travel stipends will be provided for students to attend NASA, academic, and industry colloquia, seminars, and conferences.

Objective 3: Support interdisciplinary STEM curriculum through revised and new courses, including introductory courses for non-STEM undergraduates.

Metric: At least one program will be funded each year that supports new or developing STEM interdisciplinary courses at DC universities.

Objective 4: To establish new STEM Majors or Minors.

Metric: Establish at least one new Major or Minor in a STEM field every other year.

Objective 5: To develop instructional technology, technology transfer, and other technological courses that use emerging NASA-developed technology.

Metric: Support at least one program each year that utilizes technology transfer and/or NASA-developed technology.

Precollege

Goal 5: Inspire precollege students to pursue STEM disciplines and careers by supporting precollege teacher training activities.

Objective 1: To provide professional development training opportunities to precollege STEM teachers.

Metric: The DCSGC will support at least one teacher training activity each year.

Objective 2: To develop sustainable ties with local DC government entities.

Metric: The DCSGC will collaborate with the DC Office of State Superintendent of Education and the DC Public Schools on its precollege teacher training activities.

Objective 3: To support activities for precollege teachers and students that utilize NASA research and themes.

Metric: The DCSGC will work with the DC Public Schools to support activities such as Botball, Space Camp, and NASTAR Center teacher training workshops.

Informal Education

Goal 6: Inform and inspire DC citizens about NASA themes and STEM content.

Objective 1: To increase public appreciation for the direct and indirect benefits of NASA-sponsored research.

Metric: The DCSGC will work with its nonprofit affiliates, local Ambassadors from NASA's Solar System Ambassadors Program, and/or local informal education partners to support at least one public service activity in the District of Columbia each year.

Objective 2: To find additional and creative ways to increase the visibility of NASA and DCSGC opportunities.

Metric: The DCSGC will disseminate materials regarding NASA and DCSGC public opportunities throughout the District of Columbia through email, websites, FaceBook, brochures, newsletters, sponsorship of high level activities, informal education outlets, direct contact, etc.

Workforce Development

Goal 7: Recruit talented DC students, especially minorities, to pursue STEM advanced degrees and careers.

Objective 1: To work directly with NASA personnel to arrange for placement of DC graduates at NASA.

Metric: Foster and maintain relationships with NASA personnel officers and university affairs officers at NASA Centers.

Objective 2: To increase awareness of NASA and industry jobs.

Metric: Regularly update the DCSGC website and FaceBook page with NASA and industry placement opportunities.

Objective 3: Facilitate long-term relationships with students by continuing to inform them of opportunities.

Metric: Regularly post updates to the DCSGC FaceBook page regarding opportunities for internships, competitions, and job placements.

Objective 4: Assess students' progress through longitudinal tracking.

Metric: Former DCSGC students will respond to an annual survey inquiring about their academic and career status.

Diversity

Goal 8: Support women, minorities, and persons with disabilities at a level consistent with those commensurate populations in DC.

Objective 1: To sustain high levels of participation by women, minorities, and persons with disabilities in accordance with DC needs.

Metric: NIFS awards and program support will meet or exceed 52% women, 37% members of underrepresented minority groups, and 10% persons with disabilities. These targets were derived from the National Center for Education Statistics enrollment data for D.C.

Objective 2: To discover additional ways in which to reach underrepresented students.

Metric: Intensive marketing techniques, such as posters/flyers, targeted email solicitations, campus visits, fellow student mentoring, FaceBook, and website promotions, will be employed to encourage women, minority students, and students with disabilities to apply for NIFS funding.

Objective 3: To support programs at the two HBCUs and deaf-serving university in DC.

Metric: At least 10% of the budget will be allocated for Howard University, the University of the District of Columbia, and Gallaudet University through competitive RFPs.