

Maine Space Grant Consortium
Maine Research Internships for Teachers and Students
(MERITS)
2009 Program Announcement

The Maine Space Grant Consortium (MSGC) is pleased to announce the availability of funds to support a limited number of summer research internships for highly motivated Maine high school juniors and seniors in the summer of 2009.

Since its inception in 1992, MERITS has provided summer internships to hundreds of high school students and teachers at more than 70 businesses and non-profit laboratories across Maine. Recently, MSGC took ownership of the MERITS program after a couple of years of hiatus and revamped the program. The 2009 MERITS programs will only support internships for high school students. In subsequent years the MERITS program will expand and support internships for both high school students and teachers.

MSGC is an affiliate of NASA's National Space Grant College and Fellowship Program. The mission of the Maine Space Grant Consortium is to support NASA's mission and its Mission Directorates by strengthening Maine's aerospace related research and education assets, which are critical to the Agency.

1. Program Description

The MERITS Program provides summer research opportunities for highly motivated high school students who are interested in science, technology, engineering and mathematics (STEM) careers to experience 'real-time' applications of STEM in a research-focused work world at host institutions conducting research and technology development. By doing so, MSGC seeks to expose students to career opportunities in Maine and to provide a direct way by which Maine businesses and research communities can attract young people with high potential for possible future employment.

Clear expectations and mentored research lead to valued results for the students and the host institutions. Students learn and apply research protocols and processes to a project related to research disciplines such as, but not limited to, information technology; semiconductor engineering; electrical engineering; environmental studies; molecular genetics; medical research; estuary and ocean science; marine biology; precision manufacturing; geology and soil science; and analytical chemistry. Participation in the MERITS Program will provide students with an increased understanding of the relevance of high school requirements as preparation for STEM opportunities.

2. 2009 Internship Duration

The summer internship program is seven weeks and will begin on or around (depending on the last day of school) Monday, June 29, 2009 and ends (on or around) Friday, August 14th, 2009. Final dates will be released during the winter/spring, 2009

3. Stipend

MERITS student will receive a stipend of \$2,240. Payments will be made directly to students in three increments. Half of the stipend will be provided once students complete his/her third week of the internship. The second installment (the remaining half of the stipend, less 15%) will be provided to students on the last day of the program, at the program sharing event. The remaining 15% will be provided to students when MSGC receives his/her required final report.

4. Eligibility Requirements

Student applicants must meet the following eligibility criteria:

- Must be a U.S. citizen.
- Be enrolled as a junior or senior in a Maine high school in the fall of 2008.
- Be 17 years-of-age before June 30, 2009.
- Demonstrate an interest in science, technology, engineering or mathematics
- Has some knowledge of computer applications.
- Has maintained a GPA equivalent of a B or higher.
- Commits to participate Monday through Friday for the seven-week internship.
- Be in a position to provide daily transportation to/from the host institution.

5. Host Organizations

A list of host organizations participating in the 2009 program will be posted on the MSGC website by the middle of December. Each host organization will identify research topics for MERITS students to be involved. In the application, student applicants must identify the host organizations and research topics they would consider for summer research experiences. The students' teacher advisors are strongly encouraged to review the research topics with the students and help them in the decision making process.

The selection process will match a student's interest with those of host institutions located in the county in which student applicants reside. Students and parents are responsible for arranging daily transportation to and from the host organizations.

Student applicants may elect to work at host organizations outside of their county of residence. Under these circumstances, it is the responsibility of the students and their parents to arrange housing, if needed, as well as transportation. To facilitate the selection process, the student must indicate in the application that they have secured housing and transportation.

In rare occasions, a highly qualified student considered for a MERITS internship may only be matched with a host organization outside of his/her county of residence. Under these circumstances, MSGC will contact the student and parent and discuss these opportunities. If both parents and student agree to the match, it is the responsibility of the student and parents to arrange housing, if needed, as well as transportation.

6. Application Process

A. Notice of Intent to Apply

Students who plan to submit applications by the deadline are highly encouraged to notify us of their intent by e-mail by **November 14, 2008**. Our goal is to place qualified MERITS students in compatible host organizations within driving distance from the students' residences. To accomplish this goal we need to know how many students intend to apply, their residence, and subject matter interests. This information will allow us to recruit host institutions near the applicants and to post the research topics on the program's website.

The following template may be used by students to notify us of their intent to apply.

The purpose of this e-mail is to notify the Maine Space Grant Consortium of my intent to submit an application to the MERITS Program by the announced deadline. My home address is _____ . My telephone number is _____. My e-mail address is _____. I am interested in the following subject area(s)_____.

Sincerely,

Your name

B. Application

To be considered in this highly competitive program, the completed application package must be received at MSGC by no later than **Friday, January 16, 2009**.

All application forms are available for download in a single file from <http://www.msgc.org/programs/precollege/MERITS.php>. Some of the forms are in interactive pdf formats and require Adobe Reader 8.0 which can be downloaded for free from www.adobe.com.

A complete application package includes forms and documentation for the following nine (9) areas:

- a. Student Information Form
- b. Student's Education Career Information
- c. Educational Transcript
- d. Personal Essay (Maximum of 300 words)
- e. Interest and Career Preferences
- f. Computer Skills
- g. Host Institutions and Research Topics
- h. Parental Consent Form
- i. Teacher Recommendation

The entire completed application package should be sent electronically to Jana Hall at the following address: jana.hall@msgc.org. The following materials which require authentication or a signature should also be mailed (original hard copies) to the below address:

1. Educational transcripts
2. Parental Consent Form
3. Last page of the student application form-student signature page (page 5, Host institutions and research topics page)
4. Teacher recommendations

MERITS Program
Maine Space Grant Consortium
87 Winthrop Street, Suite 200
Augusta, Maine 04330

Unofficial academic transcripts (if available) will be accepted via email with your application package if you cannot scan and send original transcripts.

Teacher recommendation letters/forms can be emailed directly to Jana Hall by the recommending teacher if that teacher so desires.

7. Selection Process and Schedule

The MSGC MERITS Selection Committee will conduct the selection process.

Matching – The Selection Committee will review all applications and match their research topic interests with available host organizations in the county in which they reside.

Interviews – The Selection Committee will interview student applicants during the February Break. The purpose of the interviews is to allow the Selection Committee to gauge the interest and motivation of student applicants in the internships and in STEM careers.

MSGC staff will contact each applicant and arrange. Interviews will be conducted in two locations to accommodate the geographical variation. MSGC staff will contact student applicants and arrange a time for the interviews. Students who fail to attend scheduled interviews will not be further considered for a MERITS award.

Student Selection – The Selection Committee will convene in late February to review the findings of the interviews and select students for MERITS awards.

Award Notification – In early April, MSGC staff will notify students of their selection. At the time of notification, students must confirm their acceptance of the award and commitment to participate throughout the seven-week internship.

8. Post-Selection Requirements

Each student selected for a MERITS award must meet with the identified mentor at the host organization before the end of May. The purpose of this meeting is two-fold. First, the meeting permits the student and mentor to discuss the research project. Secondly, and more importantly, it

provides an opportunity for them to get to know one another and determine if there is a “fit”.

Following the meeting, each student must contact MSGC by phone or e-mail to provide an overview of the meeting and to confirm his/her interest in working at the host organization and with the mentor. Communications with MSGC immediately after the meeting is strongly encouraged to provide an opportunity to identify another suitable host organization if necessary. If another host organization is found, the student will be required to meet the mentor and report back to MSGC.

9. Internship Schedule

Pre-Internship Orientation – (Final dates to be determined) On Monday, June 29, 2009, a one-day orientation will be scheduled for all MERITS students. Parents, teacher advisors and mentors are encouraged to attend the orientation. The purpose of the orientation is to provide the students an overview of the program and clearly define expectations and requirements. The orientation also provides students the opportunity to meet their student colleagues.

Internship Period – (Final dates to be determined) Internships start on Tuesday, June 30, 2009. All MERITS students are expected to report to their host organizations at that time. Students must provide a brief progress report to MSGC via e-mail sharing their weekly experience with the staff. The format for this e-mail will be provided at the orientation. Students must adhere to the policies and regulations of their host institutions. Failure to do so may result in immediate termination of the internship.

End of Internship Celebration – (Final dates to be determined) On Friday, August 14, 2009, all MERITS students, parents, high school advisors and mentors are invited to celebrate the students’ summer research experiences. At the celebration, each student will be required to make a short (up to 15-minute) PowerPoint or other presentation sharing their experiences. A format for the presentation will be provided at the orientation. The location will be provided once confirmed.

Final Report – MERITS students are required to submit a final report on their summer research experiences. The report is due at MSGC by *Friday, August 21, 2009*. The format for the final report will be provided at the orientation. MSGC will withhold 15% of the final payment until the final report is submitted.

10. Student Follow-up and Tracking

To comply with NASA’s National Scholarship and Fellowship Program, MSGC has implemented a student longitudinal tracking policy. Awarded students will be required to send to MSGC updated contact information and a brief report on his/her academic and/or workforce progress, for a minimum of six years from the student award date. Historically updates are requested from students twice annually.