

NASA CONNECTICUT SPACE GRANT CONSORTIUM

REQUEST FOR PROPOSALS

Student Programs

Graduate Research Fellowship Undergraduate Research Grant Student Project Grant Undergraduate & Community College Scholarship Community College Transfer Scholarship Travel Grant

History: In order to encourage broader participation in NASA research programs, Trinity College, University of Connecticut, University of Hartford, and the University of New Haven formed the Connecticut Space Grant College Consortium in 1991. The philosophical intent of this program was and continues to be, to build a research infrastructure in Connecticut which supports the aerospace, space science, engineering and technology related initiatives of federal and state government and private industry. Each Consortium Member institution has a Campus Director (listed below). Questions should be directed to that person. If you are unable to contact the appropriate Campus Director, inquiries may be directed to the NASA CTSGC Office.

Central Connecticut State University	Eastern Connecticut State University	Fairfield University
		Dr. Harvey Hoffman
Dr. Thomas Vasko	Dr. Elizabeth A. Cowles	School of Engineering
School of Engineering	Department of Biology	203.254.4000 x3080
860.832.1896 vaskothj@mail.ccsu.edu	860.465.4385 cowlese@easternct.edu	hhoffman@fairfield.edu
Southern Connecticut State University		University of Bridgeport
······································	Trinity College	, ,
Dr. Todd Schwendemann	Dr. John Mertens, Department of Engineering	Dr. Jani Pallis, Dept. of Mechanical Engineering
Department of Physics 203.392.6431	860.297.2301	203.576.4579
schwendemat1@southernct.edu	john.mertens@trincoll.edu	jpallis@bridgeport.edu
University of Connecticut	University of Hartford	University of New Haven
Dr. Daniel Burkey	TBA	Dr. Chong Qiu
School of Engineering		Department of Chemistry
860.486.5466		203.479.4888
daniel@engr.uconn.edu		CQiu@newhaven.edu
Wesleyan University	Yale University	
Dr. Seth Redfield	Dr. Andrew Szmkowiak	
Astronomy Department	Department of Physics	
860.685.3669	203.432.9854	
sredfield@wesleyan.edu	andrew.szymkowiak@yale.edu	
	Community College Consortium Members	
Asnuntuck Community College	Capital Community College	Housatonic Community College
Professor Amely Cross	Dr. Andre Freeman	Professor Stella Litwinowicz
Department of Chemistry/Physics	Department of Science & Mathematics	Dept. of Engineering & Mathematics
860.253.3056	860.906.5177	203.332.8588
across@acc.commnet.edu	afreeman@ccc.commnet.edu	slitwinowiczr@hcc.commnet.edu
Manchester Community College	Middlesex Community College	Naugatuck Valley Comm. College
Dr. Fatma Salman	Dr. Lin Lin	Dr. Peter Angelastro
Department of Physics	Dept. of Engineering, Computer Science &	Department of Biology
860.512.2743	Technology	203.596.8690
salman@mcc.commnet.edu	860.343.5763	pangelastro@nv.edu
	llin@mxcc.edu	
Northwestern CT Community College	Norwalk Community College	Quinebaug Valley Community College
Douglas Hoffman	Dr. Mobin Rastgar Agah	Professor Jakob Spjut
Department of Mathematics	Department of Mathematics	Department of Engineering
860.738.6332	203.857.3366	860.932.4156
dhoffman@nwcc.commnet.edu	mrastgaragah@norwalk.edu	jspjut@qvcc.commnet.edu
Three Rivers Community College	Tunxis Community College	
Professor Mark Vesligaj	Dr. Karen Wosczyna-Birch	
Department of Engineering	Department of Chemistry	
360.215.9442	860.490.4545	
nvesligaj@trcc.commnet.edu	kwosczyna-birch@commnet.edu	
	Leadership Team	
Dr. Hisham Alnajjar, Director	Dr. Mary (Cater) Arico, Associate Director	Janet Spatcher, Program Coordinator
alnajjar@hartford.edu	arico@hartford.edu	<pre>ctspgrant@hartford.edu</pre>
860.768.4846	860.768-4681	860.768.4813

NASA Connecticut Space Grant Consortium (CTSGC)

ABOUT NASA CTSGC	5
PROPOSAL DEVELOPMENT CONSIDERATIONS	6
Eligibility Requirements	6
Preparation of Proposals	6
Period of Performance	6
Review of Proposals	6
Application Submission	7
Award Notification	7
Tax Consequences of Awards	7
Evaluation of Funded Projects and Reporting Requirements	7
Equipment and Supplies	7
Prior Award Recipients	7
Funds Distribution	7
PROGRAM INFORMATION	10
Graduate Fellowship	10
About this award	10
Post award responsibilities	11
Apply for this award	11
Evaluation rubric	12
Undergraduate Research Grant	13
About this award	13
Post award responsibilities	13
Apply for this award Evaluation Rubric	14 15
	15
Student Project Grant	16
About this award	16
Post award responsibilities	16
Apply for this award	17
Evaluation rubric	18
Scholarship: Undergraduate Scholarship, Community College Scholarship, Community College Tra	
Scholarship	19
About this award	19
Post award responsibilities Apply for this award	19 19
Evaluation Rubric	20
	20
Travel Grant	21
About this award	21
Post award responsibilities	21
Apply for this award	22
Evaluation Rubric	23

NASA CT SPACE GRANT CONSORTIUM 203 Dana Hall, University of Hartford (Lead Institution), 200 Bloomfield Avenue, West Hartford, CT 06117

NATIONAL SPACE GRANT PROGRAM GOAL AND OBJECTIVES

About NASA CTSGC

NASA Connecticut Space Grant Consortium (CTSGC) is one of 52 state-based, university-led Space Grant Consortia funded by NASA Office of STEM Engagement (OSTEM) to develop and implement student fellowship and scholarship programs, interdisciplinary space-related research infrastructure, education, and public service programs; and cooperative initiatives with industry, research laboratories, and state, local and other governments. Space Grant operates at the intersection of NASA's interest as implemented by alignment with the Mission Directorates and NASA CTSG's interests. Although it is primarily a higher education program, Space Grant programs should encompass the entire length of the education pipeline, including elementary/secondary and informal education. NASA CTSGC is a Capability Enhancement Consortium.

Proposal Development Considerations

Proposed research/work/interests should be related to one of NASA's strategic enterprises, or Mission Directorates. They are Aeronautics Research, Human Exploration and Operations, Science, and Space Technology.

For the use of NASA facilities, University Affairs Offices at NASA Centers may be contacted. Contact information and NASA facility mission statements may be found at each of the NASA facilities' websites. For a directory of facility, websites see: <u>http://www.nasa.gov/about/sites/index.html</u>

Eligibility Requirements

 NASA Office of Management and Budget (OMB) mandates that only citizens of the United States of America may receive direct funding from any NASA Space Grant award. Direct funding for non-citizens must be comprised of institutionally matched funds or other nonfederal funds. For further clarification, please see NASA Grants and Cooperative Agreements Subpart A of 14 CFR Part 1260.

Recipients of Space Grant funds must provide proof of U.S. Citizenship via the Grant Verification Form at the time of application. Proof of citizenship may be in the form of one of the following:

- U.S. Passport (may be valid or expired)
- Naturalization Certificate
- U.S. Birth Certificate
- Military ID Card
- 2. Students must be considered a full-time student at their institution (enrolled in a minimum of 12 credits). An exception would be a student finishing their last semester, needing less than normal credit hours to fulfill their degree requirements.

Preparation of Proposals

If you are considering applying for a NASA CTSGC funding, you should contact your Campus Director as far in advances as possible to review the application process, and the steps that should be followed for a successful application submission.

Period of Performance

All grant activity must be completed by May 30, 2020.

Review of Proposals

The proposal review committee is composed of NASA CTSGC academic Campus Directors. Reviews are performed after the submission of proposals. The reviewers may request additional information if needed. The request will be made through the NASA CTSGC Office. Decisions are anticipated within six weeks of the submission of proposals. Reviewers will evaluate proposals using the rubrics shown under each program.

Application Submission

Submit the application and additional forms via the links at ctspacegrant.org.

Award Notification

<u>Award/Decline Letters</u>: Each application/applicant will receive an email notification of their application with an attached award/decline letter. *Decisions are typically made within six weeks following the application deadline.*

<u>Website and Social Media</u>: Awards will be announced on the NASA CTSGC website and via Twitter. (<u>www.ctspacegrant.org</u>, @CTSpaceGrant).

Tax Consequences of Awards

Award recipients should familiarize themselves with tax laws to determine the tax status of their grants. NASA CTSGC does not give tax advice. Recipients may find it helpful to consult the Internal Revenue Service (IRS) Publication #520, "Scholarships and Fellowships," which is available at IRS offices. Any questions regarding the tax status of awards should be addressed to the IRS. Income Code 15 is available at <u>http://www.irs.gov/publications/p15/index.html</u>

Evaluation of Funded Projects and Reporting Requirements

The following are required upon completion of the project: Project report, Longitudinal tracking, participation in Grants Expo Poster Session, and Outreach.

<u>Public Information</u>: This is a federal grant; therefore, information such as title, abstract, names, institution and year will be posted on the NASA CTSGC website and will be kept there for an extended period of time.

Equipment and Supplies

NASA CTSGC funds may not be used for equipment purchases. The definition for equipment, as stated in 45 CFR Parts 74 and 92, is an article of tangible nonexpendable personal property that has a useful life of more than one year and an acquisition cost of \$5,000 or more per unit. Items below \$5,000 are classified as supplies. If essential to the project, NASA CTSGC funds may be used for the purchase of supplies.

Prior Award Recipients

Applications will not be accepted from applicants who received a(n) Undergraduate Scholarship, Community College Transfer Scholarship, Graduate Research Fellowship, or Undergraduate Research Grant award from NASA CTSGC during the prior academic year. Please note, NASA CTSGC defines an academic year as beginning on or about September 1st and ending on or about August 31st.

Funds Distribution

• <u>Graduate Research Fellowship</u>: Funds will be available upon successful completion of a sub-award between the grant awardee's institution and the University of Hartford, and

then will be paid to grant awardee's institution to be distributed according to its policies related to graduate student research grants. Graduate applicants should meet with their respective institution's grants' office prior to application submission. Note: NASA CTSGC cannot award final payment until all post-award requirements are met. Details will be conveyed within the award agreement.

- <u>Undergraduate Research Grant</u>: Funds will be distributed in two payments to the student's institution; the institution will pay the student upon completion of a sub-award between the institution and the University of Hartford. The first payment will be \$3,000 at the beginning of the research. The remaining balance will be paid upon submittal of all required post-award documentation.
- <u>Student Project Grant</u>: Funds will be paid to the student's institution upon receipt of a detailed invoice on a reimbursement basis; the institution will pay the student upon completion of a sub-award agreement between the institution and the University of Hartford. Submission of a completed budget form (most institutions will also need detailed, itemized original receipts). Note: NASA CTSGC cannot award final payment until all post-award requirements are met.
- <u>Undergraduate Scholarship</u>: Full amount is paid directly to the student award recipient from their respective institution Financial Aid Office upon completion, submission and approval of a report.
- <u>Community College Scholarship</u>: Full amount is paid directly to the student award recipient from their respective institution Financial Aid Office upon completion, submission and approval of a report.
- <u>Community College Transfer Scholarship</u>: Full amount is paid directly to the student award recipient from their respective institution Financial Aid Office upon completion, submission and approval of a report.
- <u>Travel Grant</u>: Funds will be paid to the student's institution on a reimbursement basis. NASA CTSGC will pay detailed invoices from the affiliate upon completion of a sub-award to the master agreement. Most affiliate institutions will require detailed, itemized receipts. Contact your Campus Director for details. No travel advances will be allowed from NASA CTSGC funds. *International travel is not allowed to be funded with Space Grant dollars.* Note: NASA CTSGC cannot award final payment until all post-award requirements are met.
- <u>Industrial, Education, and Technical Internship</u>: Funds will be distributed in three equal payments directly to the partner, as follows: first payment at the beginning of the internship, a second upon receipt of a mid-point report from the supervisor of satisfactory performance, with the final balance paid upon submission of all required post-award

documentation. Student interns will be paid in accordance with the sponsoring organizations' practices.

 <u>NASA Academy</u>: Funds will be paid to the student's institution in two payments, one for stipend payment, and once on a reimbursement basis. NASA CTSGC will pay detailed invoices from the affiliate upon completion of an 'Amendment' to the master agreement. Most affiliate institutions will require detailed, itemized receipts for reimbursable travel costs. Contact your Campus Director for details. No travel advances will be allowed from NASA CTSGC funds. Note: NASA CTSGC cannot award final payment until all post-award requirements are met.

Program Information

Graduate Fellowship

About this award

- Award Graduate Student Fellowships are currently available. Refer to the NASA CTSGC website for the number and amounts of awards available each program year. A student is eligible for one NASA CTSGC fellowship per program year. (Note: Space Grant Fellowship recipients cannot receive other federal fellowships or traineeships while receiving a Space Grant fellowship. Please be sure to specify the proposed period of performance within your application to ensure no overlap of federal fellowships/traineeships.)
- **Eligibility** Graduate student applicants must be full-time graduate students at one of the Consortium Member Institutions with a minimum GPA of 3.0. First-semester graduate students should provide an undergraduate transcript. Applicants must provide proof of U.S. Citizenship through the Grant Verification Form. Also, have not received a(n) Undergraduate Scholarship, Community College Transfer Scholarship, Graduate Research Fellowship, or Undergraduate Research Fellowship award from NASA CTSGC during the prior academic year. Please note, NASA CTSGC defines an academic year as beginning on or about September 1st and ending on or about August 31st.
- Award Opportunities Funding opportunities are available to Graduate Students preparing for careers useful to NASA.
- **Eligible Budget Items** The budget may include items such as tuition, student stipend, technician and support staff salaries, summer salaries, fringe benefits, supplies, and materials. No indirect costs may be charged. To avoid duplication with other Consortium Grant programs, travel may not be charged to this fellowship research grant. All federal requirements pass through NASA CT Space Grant Consortium's lead institution, University of Hartford, to all awarded grants. When preparing budget proposals, it may be helpful to reference the Office of Management and Budget Uniform Guidance link: <u>https://www.nssc.nasa.gov/grants</u> **Equipment and Supplies** – NASA CTSGC funds may not be used for equipment purchases. The definition for equipment, as stated in 45 CFR Parts 74 and 92, is an article of tangible nonexpendable personal property that has a useful life of more than one year and an acquisition cost of \$5,000 or more per unit. Items below \$5,000 are classified as supplies. If essential to the project, NASA CTSGC funds may be used for the purchase of supplies.
- **Fund Distribution** Funds will be available upon successful completion of a sub-award between the grant awardee's institution and the University of Hartford, and then will be paid to grant awardee's institution to be distributed according to its policies related to graduate student research grants. Graduate applicants should meet with their respective institution's grants' office prior to application submission. Note: NASA CTSGC cannot

award final payment until all post-award requirements are met. Details will be conveyed within the award agreement.

Post award responsibilities

- **Reporting** A project report will be requested upon completion of the fellowship work. The required reporting format is available on the NASA CTSGC website. NASA CTSGC considers a successful project investment in the future of the researcher, their department and the institution, and therefore track these outcomes for reporting to NASA.
- **Outreach** Fellowship award recipients are required to share their knowledge of and enthusiasm for STEM careers by performing outreach within the college, community college, or middle/high school community of their choice. (For example, giving a presentation to a local middle/high school class or to college first-year students about studying or careers in STEM.) For additional information on outreach opportunities, please refer to the NASA CTSGC website.
- **Poster Session** Students will be required to furnish a research poster for an annual forum following the completion of their research. Details will be communicated closer to the date. A template for the poster is available on the NASA CTSGC website.
- Longitudinal Tracking NASA CTSGC and NASA require tracking of all significant student awardees to their "next career step." Please be aware that you will be contacted by your Campus Director to follow up on your career path and/or progress.

Apply for this award

Submit the application and additional forms via the links at ctspacegrant.org.

Form 1. Applicant Contact/Demographic Information

* This information is utilized for NASA reporting only.

Form 2. Proposal Information

- a. **Proposal Abstract** (100 word maximum) includes information relating the proposed project to NASA's strategic enterprises.
- b. Narrative 2,500 word maximum
 - i. Purpose and objectives
 - ii. Relationship to NASA's strategic goals
 - iii. Methodology
 - iv. Feasibility and timeline (plan) of the project
 - v. Budget narrative
 - vi. Expected outcomes and Assessment Plan
 - vii. Career potential

* Consult the scoring rubric for more information on how proposals will be evaluated according to these criteria.

- c. **Budget** Please be sure to include a Budget Worksheet for each institution involved in collaboration grant proposals.
- d. **Two Letters of Recommendation** (internal or external) One letter must be from the research project supervisor. All recommendation letters need to be signed and on institutional letterhead. *Faculty who wish to submit confidential letters of recommendation may use the online system.*
- e. **Resume/Curriculum Vitae** One-page maximum. For team proposals please submit a resume/CV for each team member.
- f. **Student Transcript** Official is preferred; however, unofficial is acceptable if availability at the time of submission is a problem.

Criteria	Evaluation	Max Score
Abstract	States a specific testable research question or objective.	10
Relation to NASA's strategic goals	Clearly stated and directly related to the mission of NASA/aerospace/STEM.	15
Methodology	Provides a clear explanation of the proposed experimental or theoretical methods, hypothesis, prototype, or product.	15
Feasibility & timeline (planning)	The facilities and advisor/expertise are available and the timeline is appropriate for conducting the proposed research.	15
Budget narrative and worksheet	There is a clear, detailed budget plan, including a justification of expenditures for the proposed plan and a complete budgetary schedule for the length of the program.	15
Expected outcome & Assessment plan	The deliverables are clear, innovative, with a clear assessment plan.	20
Career potential	Relationship to prior work and future plans is well documented.	5
Recent award	Student has never received a NASA CTSGC award.	5
		100

Evaluation rubric

Undergraduate Research Grant

About this award

- **Award** Undergraduate Student Research Grants are currently available. Refer to the NASA CTSGC website for the number and amounts of awards each program year. A student is eligible for one award per program year.
- **Eligibility** Undergraduate student applicants must be full-time students at the time of application and during the entire project period at one of the Consortium Member Institutions with a minimum GPA of 3.0. Applicants are required to provide proof of U.S. Citizenship through the Grant Verification Form. Also, have not received a(n) Undergraduate Scholarship, Community College Transfer Scholarship, or Undergraduate Research Grant award from NASA CTSGC during the prior academic year. Please note, NASA CTSGC defines an academic year as beginning on or about September 1st and ending on or about August 31st.
- Award Opportunities Students may be preparing for senior design projects, honors research, or searching for an educational experience, which is consistent with the mission of NASA as exemplified by its four strategic enterprises: Earth Science, Space Science, Human Exploration and Development of Space, and Office of Aero-Space Technology and/or which will assist them in establishing relationships within NASA, and/or with local industrial contacts. Students desiring to complete their research in collaboration with local STEM companies should contact the companies in advance and include a letter of support from the firm along with their application.
- **Budget** A budget is not required for Undergraduate Research Grant. Funds will be paid directly to the student as a stipend.
- **Fund Distribution** Funds will be distributed in two payments to the student's institution; the institution will pay the student upon completion of a sub-award between the institution and the University of Hartford. The first payment will be \$3,000 at the beginning of the research. The remaining balance will be paid upon submittal of all required post-award documentation.

Post award responsibilities

- **Reporting** A project report will be requested upon completion of the work. The required reporting format is available for download on the NASA CTSGC website. NASA CTSGC considers a successful project investment in the future of the researcher, their department and the institution, and therefore track these outcomes for reporting to NASA.
- **Outreach** Award recipients are required to share their knowledge of and enthusiasm for STEM careers by performing outreach within the college, community college, or middle/high school community of their choice. (For example, giving a presentation to a local

Revised 10/22/2019

middle/high school class or to college first-year students about studying or careers in STEM.) For additional information on outreach opportunities, please refer to the NASA CTSGC website.

- **Poster Session** Students will be required to furnish a research poster for an annual forum following the completion of their research. Details will be communicated closer to the date. A template for the poster is available on the NASA CTSGC website.
- **Longitudinal Tracking** NASA CTSGC and NASA require tracking of all significant student awardees to their "next career step." Please be aware that you will be contacted by your Campus Director to follow up on your career path and/or progress.

Apply for this award

Submit the application and additional forms via the links at ctspacegrant.org.

Form 1. Applicant Contact/Demographic Information * This information is utilized for NASA reporting only.

Form 2. Proposal Information

- a. **Proposal Abstract** (100 word maximum) includes information relating the proposed project to NASA's strategic enterprises.
- b. Narrative 2,500 word maximum
 - i. Purpose and objectives
 - ii. Relationship to NASA's strategic goals
 - iii. Methodology
 - iv. Feasibility and timeline (plan) of the project
 - v. Expected outcomes
 - vi. Career potential

* Consult the scoring rubric for more information on how proposals will be evaluated according to these criteria.

- c. **Two Letters of Recommendation** (internal or external) One letter must be from the research project supervisor. All recommendation letters need to be signed and on institutional letterhead. *Faculty who wish to submit confidential letters of recommendation may use the online system.*
- d. **Resume/Curriculum Vitae** One-page maximum. For team proposals please submit a resume/CV for each team member.

e. Student Transcript – Official is preferred; however, unofficial is acceptable if availability at the time of submission is a problem.

Evaluation Rubric

Criteria	Evaluation	Max Score
Abstract	States a specific testable research question or objective	10
Relation to NASA's	Clearly stated and directly related to the mission of NASA/	15
strategic goals	aerospace/STEM	
Methodology	Provides a clear explanation of the proposed experimental or	20
	theoretical methods/ hypothesis/prototype/ product	
Feasibility &	Facilities are available, and the timeline is appropriate for conducting	20
timeline (planning)	the proposed research	
Expected outcome	Deliverables are clear, innovative, with a clear assessment plan and	20
	obtainable in the specified time frame	
Career potential	Relationship to prior work and future plans is well documented	5
Recent award	Student has never received a NASA CTSGC award.	10
		100

Student Project Grant

About this award

- Award The purpose of these grants is to allow students to purchase items needed for senior capstone, undergraduate research, or extracurricular club design projects including materials, electronic components, chemicals, etc. NASA CTSGC recognizes these small grants will allow students to choose projects that are beyond the normal funds allocated by departments, colleges, and universities. Refer to the NASA CTSGC website for the number and amounts of awards available each program year.
- **Eligible Projects** Any group or individual project that is consistent with the mission of NASA as exemplified by its four strategic enterprises: Earth Science, Space Science, Human Exploration and Development of Space, and Office of Aero-Space Technology, is eligible.
- **Eligible Applicants** Individual students and informal/formal groups of students may apply. The project leader must be a U.S. Citizen, and all project team members must be full-time students at a Consortium Member Institution at the beginning of the project. Individual Applicants/Project Leader (for group projects) must have a minimum 3.0 GPA. There must be a faculty member who agrees to serve as the project advisor. Applicant P.I. must provide proof of U.S. Citizenship through the Grant Verification Form.
- **Budget** Funds may be used for supplies and materials only. Funds may not be used for travel*, equipment/computers, entertainment, entry fees, tuition, salaries, fringe benefits, or indirect costs.

*Students may also apply for Travel Grants to visit NASA Centers, participate in professional meetings, etc.

Fund Distribution – Funds will be paid to the student's institution upon receipt of a detailed invoice on a reimbursement basis; the institution will pay the student upon completion of a sub-award agreement between the institution and the University of Hartford. Submission of a completed budget form (most institutions will also need detailed, itemized original receipts). Note: NASA CTSGC cannot award final payment until all postaward requirements are met.

Post award responsibilities

- **Reporting** A project report will be requested upon completion of the work. The required reporting format is available for download on the NASA CTSGC website. NASA CTSGC considers a successful project investment in the future of the researcher, their department and the institution, and therefore track these outcomes for reporting to NASA.
- **Poster Session** Students will be required to furnish a research poster for an annual forum following the completion of their research. Details will be communicated closer to the date. A template for the poster is available on the NASA CTSGC website.

Longitudinal Tracking – NASA CTSGC and NASA require tracking of all significant student awardees to their "next career step." Please be aware that you will be contacted by your Campus Director to follow up on your career path and/or progress.

Apply for this award

Submit the application and additional forms via the links at ctspacegrant.org.

Form 1. Applicant Contact/Demographic Information

* This information is utilized for NASA reporting only.

Form 2. Proposal Information

- a. **Proposal Abstract** (100 word maximum) includes information relating the proposed project to NASA's strategic enterprises.
- b. **Narrative** 2,500 word maximum
 - i. Purpose and objectives
 - ii. Relationship to NASA's strategic goals
 - iii. Methodology
 - iv. Feasibility and timeline (plan) of the project
 - v. Budget narrative
 - vi. Expected outcomes
 - vii. Career potential

* Consult the scoring rubric for more information on how proposals will be evaluated according to these criteria.

- c. **Budget** Please be sure to include a Budget Worksheet for each institution involved in collaborative grant projects.
- d. **One Letter of Recommendation** The letter must be from the research project supervisor/advisor. All recommendation letters need to be signed and on institutional letterhead. *Faculty who wish to submit confidential letters of recommendation may use the online system.*
- e. **Resume/Curriculum Vitae** One-page maximum. For team proposals please submit a resume/CV for each team member.
- f. **Student Transcript** Official is preferred; however, unofficial is acceptable if availability at the time of submission is a problem.

Evaluation rubric

Criteria	Evaluation	Max Score
Abstract	States a specific testable research question or objective	10
Relation to NASA's strategic goals	Clearly stated and directly related to the mission of NASA/ aerospace/STEM.	15
Methodology	Provides a clear explanation of the proposed experimental or theoretical methods/ hypothesis/prototype/ product.	15
Feasibility & timeline (planning)	Facilities are available, and the timeline is appropriate for conducting the proposed research.	15
Budget narrative and worksheet	There is a clear, detailed, budget plan, including a justification of expenditures for the proposed plan and a complete budgetary schedule for the length of the program.	15
Expected outcome	Deliverables are clear and innovative.	20
Career potential	Relationship to prior work and future plans is well documented.	5
Recent award	Student has never received a NASA CTSGC award.	5
		100

Scholarship: Undergraduate Scholarship, Community College Scholarship, Community College Transfer Scholarship

About this award

- **Awards** Refer to the NASA CTSGC website for the number and amounts of awards available each program year. A student is normally eligible for one scholarship or fellowship per academic year.
- Eligibility Undergraduate student applicants must be full-time students at the time of application at one of the Consortium Member Institutions with a minimum GPA of 3.0. Applicants are required to provide proof of U.S. Citizenship through the Grant Verification Form. Also, applicant may not have received a Scholarship, or Undergraduate Research award from NASA CTSGC during the prior academic year. Please note, NASA CTSGC defines an academic year as beginning on or about September 1st and ending on or about August 31st.

For Community College Transfer Scholarship applicants: Students must demonstrate they began their postsecondary education at a community college (typically through a student transcript) where they enrolled for a minimum of two terms and are currently enrolled (typically through a student transcript) in or have been admitted (typically through a letter of admission) to a 4-year Consortium Member postsecondary education institution. Students may only be awarded the Community College Transfer Scholarship once in their academic careers.

Fund Distribution – Full amount is paid directly to the student award recipient from their respective institution Financial Aid Office upon completion, submission and approval of a report.

Post award responsibilities

- **Reporting** Contact and demographic-related information is required prior to scholarship payment. The form is available on the NASA CTSGC website.
- Longitudinal Tracking NASA CTSGC and NASA require tracking of all significant student awardees to their "next career step." Please be aware that you will be contacted by your Campus Director to follow up on your career path and/or progress.

Apply for this award

Submit the application and additional forms via the links at ctspacegrant.org.

Form 1. Applicant Contact/Demographic Information

* This information is utilized for NASA reporting only.

Form 2. **Proposal Information**

- a. Narrative 1,500 word maximum. Please include the following sections:
 - i. Describe your academic and career goals.

- ii. Describe information on any research experiences or other relevant experiences you have had and how you believe they have influenced your career in STEM.
- iii. Describe your community service, extra-curricular activities, work experience awards and/or honors.
- iv. Briefly explain the benefits that you expect to derive from a NASA CTSGC Scholarship.

* Consult the scoring rubric for more information on how proposals will be evaluated according to these criteria.

- b. **One Letter of Recommendation** All recommendation letters need to be signed and on institutional letterhead. *Faculty who wish to submit confidential letters of recommendation may use the online system.*
- c. **Resume/Curriculum Vitae** One-page maximum.
- d. **Student Transcript** Official is preferred; however, unofficial is acceptable if availability at the time of submission is a problem.

Evaluation Rubric

Criteria	Max Score
Academic and career goals relate to NASA CTSGC mission	20
Student demonstrates and/or describes interest in science and technology subject matter and careers	
Student academic performance	20
Student demonstrates and describes community service, extracurricular, work and/or academic honors, experiences, and awards that support his or her application to the award	20
Student describes benefits from receiving the scholarship and/or articulates reasons for deserving the scholarship	20
	100

NOTICE: Prior NASA CTSGC Award Recipients: Six points will be subtracted if the applicant received an award two academic years ago; four points will be subtracted if the applicant received an award three academic years ago; two points will be subtracted if the applicant received an award four or more academic years ago.

Travel Grant

About this award

- Award To encourage travel to NASA facilities to use their unique resources and/or present Space Grant and NASA funded research at conferences the NASA CTSGC awards travel grants. Refer to the NASA CTSGC website for the number of awards available each program year.
- **Eligible Travel** Travel supported by travel grants may include, but is not limited to, trips to NASA facilities to use specialized research equipment, trips to NASA Centers to discuss collaborations with NASA scientists and engineers, attendance at pre-proposal conferences sponsored by NASA, presentation of Space Grant funded research at conferences, participation in NASA or Space Grant programs/workshops/competitions, or invited papers at conferences, visits by NASA scientists/engineers to campuses for research collaboration. *NASA CTSGC only supports domestic travel.*
- **Eligible Applicants** Full-time students at Consortium Member Institutions are eligible. All applicants must be US Citizens. Applicants must provide proof of U.S. Citizenship through the Grant Verification Form. Student applicants should have a minimum of 3.0 GPA.
- **Budget** Funds will be paid to the student or groups' institution upon submission of a completed budget form at the conclusion of the trip. **No travel advances are allowed.**
- Fund Distribution Funds will be paid to the student's institution on a reimbursement basis. NASA CTSGC will pay detailed invoices from the affiliate upon completion of a sub-award to the master agreement. Most affiliate institutions will require detailed, itemized receipts. Contact your Campus Director for details. No travel advances will be allowed from NASA CTSGC funds. International travel is not allowed to be funded with Space Grant dollars. Note: NASA CTSGC cannot award final payment until all post-award requirements are met.

Post award responsibilities

- **Reporting** A project report will be requested upon completion of the travel. The required reporting format is available for download on the NASA CTSGC website. NASA CTSGC considers a successful project investment in the future of the researcher, their department and the institution, and therefore track these outcomes for reporting to NASA.
- **Poster Session** Students will be required to furnish a research poster for an annual forum following the completion of their research. Details will be communicated closer to the date. A template for the poster is available on the NASA CTSGC website.

Revised 10/22/2019

Longitudinal Tracking – NASA CTSGC and NASA require tracking of all significant student awardees to their "next career step." Please be aware that you will be contacted by your Campus Director to follow up on your career path and/or progress.

Apply for this award

Submit the application and additional forms via the links at ctspacegrant.org.

Form 1. Applicant Contact/Demographic Information

* This information is utilized for NASA reporting only.

Form 2. **Proposal Information**

- a. **Proposal Abstract** (100 word maximum) includes information relating the proposed project to NASA's strategic enterprises.
- b. Narrative 1,000 word maximum. Please include the following sections:
 - i. Purpose of Travel and Invitation: provide a copy of any supporting materials related to the travel, i.e., letter or conference paper acceptance notice (copy of email or webpage of the program is acceptable). Please remember that Space Grant can only support domestic travel.
 - ii. Relevance to NASA's strategic goals
 - iii. Goals and Objectives
 - iv. Timetable
 - v. Budget Narrative: Please provide a description of how you will fund the travel if you do not receive full Space Grant funding for the total coast of the trip. (*Ex. If the total trip will cost \$1,500, describe how* you will fund the remaining \$500 after the Space Grant award of \$1,000.)

* Consult the scoring rubric for more information on how proposals will be evaluated according to these criteria.

- c. **Budget Justification** Please be sure to include a Budget Worksheet for each institution involved in collaboration grant proposals.
- d. **One Letter of Recommendation** Must be from a faculty member familiar with the travel purpose. Applicants may submit additional letters of support. All recommendation letters must be submitted on the space grant website. *Faculty who wish to submit confidential letters of recommendation may use the online system.*

- e. **Resume/Curriculum Vitae** One-page maximum. (For a team or group, please include a resume for each member.)
- f. **Student Transcript** Official is preferred; however, unofficial is acceptable if availability at the time of submission is a problem.

Evaluation Rubric

Criteria	Evaluation	Max
		Score
Abstract	Abstract is clear, concise and gives reader an excellent sense of the	5
	scope of travel.	
Purpose of travel	Clear and detailed description of and rationale for travel, including	25
and invitation	invitation to participate and/or other supporting material.	
Relevance to	Purpose of travel is very relevant to one or more of NASA's strategic	15
NASA's strategic	goals.	
goals		
Goals and	Goals and objectives of travel are clearly stated. There are compelling	30
objectives	reasons offered to pursue travel.	
Timetable	Includes a clear and detailed timeline of travel, which is aligned with	5
	goals and objectives.	
Budget narrative	There is a clear, detailed, budget plan, including a justification of	15
and worksheet	expenditures for the proposed travel and a complete budgetary	
	schedule for the length of the travel.	
Recent award	Maximum points will be given to students who have never received a	5
	NASA CTSGC award.	
		100

National Space Grant Program Goal and Objectives



Goal

Contribute to the nation's science enterprise by funding education, research, and public service projects through a national network of university-based Space Grant consortia.

Objectives

- Establish and maintain a national network of universities with interests and capabilities in aeronautics, space and related fields.
- Encourage cooperative programs among universities, aerospace industry, and Federal, state and local governments.
- Encourage interdisciplinary training, research and public service programs related to aerospace.
- Recruit and train U.S. citizens, especially women, underrepresented minorities, and persons with disabilities, for careers in aerospace science and technology.
- Promote a strong science, mathematics, and technology education base from elementary through secondary levels.

IMPORTANT RESOURCES

NASA Education – Outcomes: <u>http://www.pc.spacegrant.org/Outcomes.pdf</u>

NASA Strategic Goals and Objectives relevant to education are outlined by the 2015-2017 NASA Education Implementation Plan:

http://www.nasa.gov/sites/default/files/atoms/files/nasa_education_implementation_plan_ve4_2015-2017.pdf

For information on all of NASA's missions, please visit: <u>http://www.nasa.gov/missions/index.html</u> NASA <u>http://www.nasa.gov</u>

NASA Office of Education: <u>http://www.nasa.gov/offices/education/about/index.html</u> NASA Space Grant Program Office:

http://www.nasa.gov/offices/education/programs/national/spacegrant/home/index.html National Center for Education Statistics (NCES) enrollment for your state: http://nces.ed.gov/programs/digest/d14/

Vision for Space Exploration <u>http://www.nasa.gov/missions/solarsystem/explore_main.html</u> NASA Centers & Facilities: <u>http://www.nasa.gov/offices/education/centers/index.html</u> Guidebook for Proposers Responding to a NASA Research Announcement

http://www.hq.nasa.gov/office/procurement/nraguidebook

FEDERAL UNIFORM GUIDANCE: All federal requirements pass through from the CT Space Grant Consortium's lead institution, University of Hartford, to all awarded faculty grants. When preparing budget proposals, it may be helpful to reference the Office of Management and Budget Uniform Guidance link: <u>https://www.nssc.nasa.gov/grants</u>.