

# **REQUEST FOR PROPOSALS**

# **Faculty Programs**

Research Grants Seed Research Grants Research Collaboration Grant Curriculum Development Grant STEM Education Research Grant Travel Grants **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.

*Research infrastructure* includes all factors that promote the development and maintenance of research activity. These include, but are not limited to, faculty seed funds for research, development or revision of curricula, and travel to use NASA facilities, cultivate collaborative arrangements or proposal contacts, technical support, and dissemination of research results. Due to the relatively small size of awards, the applicant should be aware that the Consortium is interested in supporting scholars new to their fields, and those experienced researchers who are looking to redirect their research or refocus on NASA's objectives. These funds are seed money and not a replacement for other sponsored research funds or institutional funds.

**Contact Points:** 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 Consortium Office.

Dr. Hector Arce, Campus Director Yale University Department of Astronomy P.O. Box 208101 New Haven, CT 06520-8101 203-432-3018 hector.arce@yale.edu

Dr. Elizabeth A. Cowles, Campus Director Eastern Connecticut State University 354 Science Building 83 Windham Street Willimantic, CT 06226 860-465-4385 860-465-5213 (Fax) cowlese@easternct.edu

Dr. John DaPonte, Campus Director Southern Connecticut State University Computer Science Department 501 Crescent Street New Haven, CT 06515 203-392-5810 203-392-5898 (Fax) dapontej1@southernct.edu

Ms. Joy Erickson, Campus Director University of Connecticut School of Engineering. Bronwell 108 – Unit 2262 260 Glenbrook Road Storrs, CT 06269-2247 860-486-8115 860-486-5099 (fax) joy.erickson@huconn.edu Dr. Alfred Gates, Campus Director Central Connecticut State University School of Technology 1615 Stanley Street New Britain, CT 06050 860-832-1823 gatesa@ccsu.edu

Dr. Jean McGivney-Burelle, Campus Director University of Hartford ENHP, Department of Education 200 Bloomfield Avenue West Hartford, CT 06117 860-768-5921 860-768-5244 (fax) burelle@hartofrd.edu

Dr. John Mertens, Campus Director **Trinity College** Department of Engineering 300 Summit Street Hartford, CT 06106 860-297-2301 john.mertens@trincoll.edu

Dr. Jani Pallis, Campus Director University of Bridgeport Department of Mechanical Engineering 221 University Avenue Bridgeport, CT 06604 203-576-4579 203-576-4343 (Fax) jpallis@bridgeport.edu Dr. Donald Peterson, Campus Director **UConn Health Center** School of Medicine, Dental Medicine Science 263 Farmington Avenue Farmington, CT 06030-2017 860-679-4665 860-679-1989 (Fax) peterson@uchc.edu

Dr. Seth Redfield, Campus Director Wesleyan University Astronomy Department 96 Foss Hill Drive Middletown, CT 06059 860-685-3669 860-685-2131 (Fax) sredfield@wesleyan.edu

Dr. Dequan Xiao, Campus Director University of New Haven Dept. of Chemistry & Chemical Engineering 300 Orange Avenue West Haven, CT 06516 203-479-4189 dxiao@newhaven.edu

Dr. Bill Taylor, Campus Director **Fairfield University** School of Engineering 1073 N. Benson Road Fairfield, CT 06824 203-254-4000 x2501 203-254-4013 (Fax) htaylor@mail.fairfield.edu

Consortium Office: Janet Spatcher, Program Coordinator University of Hartford, 200 Bloomfield Avenue (Dana 203), West Hartford, CT 06117 www.ctspacegrant.org ctspgrant@hartford.edu 860/768-4813 860/768-5073 (fax)

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### NASA Connecticut Space Grant Consortium

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# **Proposal Development Considerations**

Each application requires that a contact is made with either NASA or other federal agencies with aerospace or space related interests. In some cases a contact with private industry may be appropriate. These contacts can be facilitated through the Consortium Office or Campus Director.

A proposal must demonstrate a link between the proposal work and one of NASA's strategic enterprises. They are Space Science, Mission to Planet Earth, Human Exploration and Development of Space, Space Technology and Aeronautics.

Faculty who respond must show a 1:1 Non-Federal cost match ratio within their budgets. For example, if you are responding to a \$20,000 research grant, your budget needs to show \$40,000 with a \$20,000 match (funds not supplied by the federal government) and \$20,000 supplied by the Consortium. Evidence of your institution's agreement to this match should be included within your proposal. **Please be sure to contact the appropriate grants office within your institution before submitting your proposal.** 

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

### **Eligibility Requirements**

Recipients of Space Grant money must provide proof of U.S. Citizenship in the form of one of the following (photocopy is acceptable):

- U. S. Passport (may be currently valid or expired)
- Citizenship Certificate
- Naturalization Certificate
- Birth Certificate
- Voter's Registration Card
- US Citizen Identification Card
- American Indian Card
- Military or Company ID Card (Must show citizenship)
- Certified letter from some other organization that has verified citizenship

### **Review of Proposals**

The proposal review committee is composed of at least fifteen individual members, including one representative from each member institution. The reviewers are normally selected from but not limited to the Academic Advisory Board. Reviews are performed a few weeks after the submission of proposals. The reviewers may request additional information, if needed. The request will be made through the Consortium Office. Decisions are anticipated within six weeks.

### Selection Criteria – Faculty Research/Faculty Seed Research/Collaboration

Abstract	5pts.
Degree to which this proposal is relevant to aerospace research, space science or	10pts.
technology research and development, and/or training in these fields	
Plan of the research: goals, objectives, methodology, and budget	15pts.
Interdisciplinary approach to the problem	10pts.
Expected outcome: innovative potential and milestones, grant likely to seed future	15pts.
non-space grant financial support for the continuation of this research	
Career potential: relationship to prior work and future plans	10pts.
Research contact: agency or corporation, extent of contact	10pts.
Non-tenured applicant	10pts.
Collaboration (within CT Consortium)	5pts.
Student involvement (Student involvement is best demonstrated by including	10pts.
student funding in the budget.)	
Total	100pts.

### Selection Criteria - Curriculum Development/STEM Education Research

Abstract	5pts.
Degree to which this proposal is relevant to aerospace research, space science or	15pts.
technology research and development, and/or training in these fields	
Plan of the research: goals, objectives, methodology, and budget	20pts.
Interdisciplinary approach to the problem	10pts.
Expected outcome: innovative potential and milestones, grant likely to seed future	15pts.
non-space grant financial support for the continuation of this research	
Career potential: relationship to prior work and future plans	10pts.
Non-tenured applicant	10pts.
Collaboration (within CT Consortium)	5pts.
Student involvement (Student involvement is best demonstrated by including	10pts.
student funding in the budget.)	
Total	100pts.

### Selection Criteria - Travel Grant

Purpose (Travel to NASA Center, or visit by NASA scientists/engineers to campus	30pts.
for collaboration, or presenting NASA STEM-related research)	
Description	25pts.
Plan: goals, objectives, methodology, and budget	25pts.
Potential Impact (Career potential – relationship to prior work and future plans)	20pts.
Total	100pts.

### Application Submission

*The CT* Space Grant College Consortium only accepts materials submitted via email, following the specified format requirements. Individual application cover sheets (organized by grant award type) can be found on the Consortium website under Faculty Applications on www.ctspacegrant.org. (Application checklists can be found on the pages that follow.)

### **Project Periods**

Awards may be for the single semester, full academic year, and/or summer time periods. The applicant <u>must include specific beginning and ending dates</u> on the Application Cover Sheet.

\* *Please Note:* Award decisions will be made approximately 6 weeks following the application deadline.

### **Evaluation of Funded Projects and Reporting Requirements**

<u>Report</u>: A project report is due immediately upon completion of the project. The required reporting format can be found on the Consortium website at <u>www.ctspacegrant.org/forms</u>. The Consortium considers a successful project an investment in the future of the researcher, their department and the institution. Therefore the following outcomes represent success: patents and published papers, increased institutional collaboration, and an increase in the number of proposal submissions. Each researcher is to inform the Consortium office of publications, patents and proposals that result from their receiving Space Grant funding.

<u>Longitudinal Tracking</u>: Tracking of all graduate and undergraduate student participants involved in the supported research is required.

<u>Forms</u>: The forms required for these reporting responsibilities can be found under Forms on the CT Space Grant website (<u>www.ctspacegrant.org/forms</u>).

<u>Poster Session</u>: Faculty will be required to furnish a research poster for an annual forum following the completion of their project. Details will be communicated closer to the date.

### **Funds Distribution**

Prior to awarding of the funds, each recipient must meet with their campus director to complete the following paperwork:

- CT Space Grant Awardee Verification Form
- Proof of Citizenship (see above)

<u>Research Collaboration, Curriculum Development & Faculty Research Grants</u>: Funds will be available upon successful completion of an 'Amendment' to the master 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 faculty grants. Details will be conveyed within the award agreement.

<u>Travel Grants</u>: Reimbursement will require the completion of an 'Amendment' to the master sub-award agreement between the grant awardee's institution and the University of Hartford. Reimbursement usually requires the submission of receipts to the appropriate office at the affiliate Consortium campus. No travel advances will be allowed from Consortium funds. **International travel will not be supported from this grant.** 

#### **IMPORTANT NOTES:**

The CT Space Grant Consortium is one of 52 state-based, university-led Space Grant Consortia funded by NASA Education 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 the state'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. The Connecticut Space Grant Consortium is a Capability Enhancement Consortium.

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 Circular A-21: <u>http://www.whitehouse.gov/omb/circulars a021 2004/</u>.

(\*Note to University of Hartford faculty applicants: Even though the Consortium accounting is handled through the University of Hartford, an internal subcontract will still be needed to ensure clarity of understanding of all the pass-through NASA grant requirements by all parties involved in CT Space Grant research.)

# **Award Details**

### **Curriculum Development Grant and STEM Education Research Grant Program**

The Science and Engineering Community has advocated that curriculum reform must occur on a variety of levels if the United States is to remain internationally competitive. Areas requiring enhancement to address the needs of the Science, Technology, Engineering and Mathematics (STEM) community include: the topics of the curriculum, the development of a problem-solving learning style, the methods of delivery of instruction, and active student participation in a research environment.

The NASA National Space Grant College and Fellowship Program has actively encouraged educators to make those curriculum enhancements, which will more effectively prepare students to become successful students and professionals in STEM disciplines.

**Award Details** – **Curriculum Development**: Successful applicants will show a plan to develop or revise an undergraduate or graduate level college course. While proposals of creative and innovative merit are actively sought, applicants should be aware that a body of previously developed models exists, and may only need adaptation to a local setting. There are serious obstacles to curricular reform. Please be sure to address the following in your proposal:

- $\Box$  Institutional implementation support,
- □ Faculty support, and
- □ Availability of equipment or facilities.

**Award Details – STEM Education Research**: Successful applicants will show a plan to carry out research in the STEM Education field. This research may include, but is not limited to, k-12 curriculum development, k-12 or higher education STEM education outcomes, or STEM education outreach programs.

**Eligible Applicants** – Full-time Faculty at Consortium Member Institutions who are U.S. Citizens are eligible to apply.

**Award Information** –Refer to <u>www.ctspacegrant.org/fellowships-and-grants/faculty-</u> <u>information#</u> for the award amount and number of awards available each program year.

**Eligible Budget Items** – The budget may include items such as technician and support staff salaries, summer salaries, student stipends, fringe benefits, supplies, and materials. No indirect costs may be charged to the NASA Grant, however indirect charges may be included within the matching contributions, but are limited. Refer to OMB Circular A-21 for details. To avoid duplication with other Consortium Grant programs, travel may not be charged to a Curriculum Development/Enhancement Grant. *Reminder: Faculty who respond must show a 1:1 cost match ratio. For example, if you are responding to a \$20,000 research grant, your budget needs to show \$40,000 with a \$20,000 match and \$20,000 supplied by the Consortium.* 

**Proposal Format** – See: Faculty Application Checklist.

**Reporting** - A short project report is due upon completion of the work. The required report format can be downloaded at <u>www.ctspacegrant.org/forms</u>.

**Poster Session** – Faculty will be required to furnish a research poster for an annual form following the completion of their research.

### **Research Collaboration Grant Program**

Following the lead of the National Space Grant College and Fellowship Program, the Connecticut Space Grant Consortium has established a diverse and vital network of colleges, industries, and research facilities to encourage faculty at Consortium institutions to use individual strengths to enhance the capabilities of two or more institutions. Through our Research Collaboration Program our goal is to share intellectual capital, leveraging resources to enhance national capability and accomplish research goals which fit NASA's mission and/or the needs of the local corporate community.

**Eligibility and Activity Guidelines** – Applications must come from at least two or more fulltime faculty members of separate colleges within the same institution, or, at two separate Consortium institutions (CT affiliates or other state Consortium affiliates). Evidence of contact with a NASA field center or NASA contractor must be included in the proposal.

- Preference will be given to applicants who 1) are non-tenured faculty, 2) who use these funds as seed money, and 3) whose research involves/supports students.
- Reminder: Space Grant awards may only be distributed to US Citizens. Evidence of citizenship will be required from awarded grantees.

**Award Information** – Refer to <u>www.ctspacegrant.org/fellowships-and-grants/faculty-</u> <u>information#</u> for the amount and number of awards available each program year. Since this is an institutional award, a subcontract for each institution will be executed.

**Eligible Budget Items** – The budget may include items such as (but not limited to) technician and support staff salaries, summer salaries, student stipends, fringe benefits, supplies, and materials. No indirect costs may be charged to the NASA Grant, however indirect charges may be included within the matching contributions, but are limited. Refer to OMB Circular A-21 for details. To avoid duplication with other Consortium Grant programs, travel may not be charged to a Faculty Research Grant. *Reminder: Faculty who respond must show a 1:1 cost match ratio. For example, if you are responding to a \$20,000 research grant, your budget needs to show \$40,000 with a \$20,000 match and \$20,000 supplied by the Consortium.* 

Proposal Format – See: Faculty Application Checklist.

**Reporting** - A short project report is due upon completion of the work. The required report format can be downloaded at <u>www.ctspacegrant.org/forms</u>.

**Poster Session** – Faculty will be required to furnish a research poster for an annual form following the completion of their research.

### Faculty Research & Seed Research Grant

To encourage faculty participation in research in areas related to the mission of NASA at Connecticut Space Grant Consortium member institutions, the Consortium will award faculty research grants during the program year. Research Grants may be awarded for up to \$20,000, and Seed Research Grants for up to \$6,000. Refer to <u>www.ctspacegrant.org/fellowships-and-</u> <u>grants/faculty-information#</u> for the number of awards available each program year.

**Eligible Activities** – Research in any area related to the mission of NASA as illustrated by its strategic enterprises.

**Eligible Applicants** – Full-time Faculty at Consortium Member Institutions who are U.S. Citizens are eligible to apply.

- Preference will be given to applicants who 1) are non-tenured faculty, 2) who use these funds as seed money, 3) who collaborate with other Consortium faculty (within CT), and 4) whose research involves/supports students.
- Reminder: Space Grant awards may only be distributed to US Citizens. Evidence of citizenship will be required from awarded grantees.

**Eligible Budget Items** – The budget may include items such as technician and support staff salaries, summer salaries, student stipends, fringe benefits, supplies, and materials. No indirect costs may be charged to the NASA Grant, however indirect charges may be included within the matching contributions, but are limited. Refer to OMB Circular A-21 for details. To avoid duplication with other Consortium Grant programs, travel may not be charged to a Faculty Research Grant. *Reminder: Faculty who respond must show a 1:1 cost match ratio. For example, if you are responding to a \$20,000 research grant, your budget needs to show \$40,000 with a \$20,000 match and \$20,000 supplied by the Consortium.* 

Proposal Format – See: Faculty Application Checklist.

**Reporting** - A short project report is due upon completion of the work. The required report format can be downloaded at <u>www.ctspacegrant.org/forms</u>.

**Poster Session** – Faculty will be required to furnish a research poster for an annual form following the completion of their research.

### **Travel Grants**

To encourage travel to NASA facilities to use their unique resources, and present Space Grant and NASA funded research at Conferences, the Connecticut Space Grant Consortium awards travel grants. During the Space Grant program year, the Consortium expects to award multiple travel grants, based upon available funding.

**Eligible Travel** – Domestic 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, giving plenary or invited papers at conferences, visits by NASA scientists/engineers to campuses for research collaboration. The Connecticut Space Grant Consortium only supports domestic travel.

**Eligible Applicants** – Full-time Faculty at Consortium Member Institutions who are U.S. Citizens are eligible to apply.

**Budget** – Travel may be funded up to a maximum of \$1,000 (the Consortium reserves the right to adjust funding requests based upon the number and quality of applications). Funds will be paid to the grant awardees' institution at the conclusion of the trip on a reimbursement basis after submission of receipts to the awardee's affiliate office. No travel advances are allowed. *Reminder: Faculty who respond must show a 1:1 cost match ratio. For example, if you are responding to a \$1,000 travel grant, your budget needs to show \$2,000 with a \$1,000 match and \$1,000 supplied by the Consortium.* 

**Proposal Format** – See: Faculty Application Checklist.

**Reporting** - A short project report is due upon completion of the travel, and prior to reimbursement. The required report format can be downloaded at <u>www.ctspacegrant.org/forms</u>.

# **Faculty Application Checklists**

### Checklist: Collaboration, Research, and Seed Research Grant Applications

Submit the application via email (<u>csgcinfo@hartford.edu</u>). The email must include two attachments, the Contact and Demographic Info form and a single PDF containing the appropriate cover sheet, abstract, proposal narrative, budget worksheet, and CV. Proposals must be typed in no smaller than 10 point font, double spaced with margins of at least 1" on 8 1/2" x 11" paper. **Page limits are strictly observed. Proposals exceeding the page limits will be rejected as non-compliant.** 

Important: All required components of the application must be saved as a single file and attached to the application email. Be sure to allow time for your institution's Sponsored Research department's review/approval of your proposal before the deadline

□ Applicant Contact/Demographic Information - Typed into the 'Contact/Demographic Information' form, and saved as a .doc, .docx, or .pdf file. This file should be added as an attachment to the application email, with a document title using the following format: LASTNAME\_ContactInfo.doc. This form is available on the CT Space Grant website. (Note: this information is used separately for blind reporting to NASA.) (For team proposals, please attach a separate sheet for each team member as addendums to the proposal narrative pdf file.)

### ATTACH THE FOLLOWING PROPOSAL COMPONENTS AS A SINGLE PDF FILE:

- □ **Faculty Application Cover Sheet:** Download the form from the CT Space Grant website and obtain the signatures of your institution's Department Chair and Campus Director before scanning along with the other application materials into a single file for uploading into the online application.
- □ **Proposal Abstract:** One page maximum include a paragraph on relevance to NASA's strategic enterprises.
- □ **Proposal Narrative:** Page maximum six double-spaced pages Proposal Narratives should include the following sections within the page limits (supporting data, graphs, charts may be included as Appendix to the narrative):
  - 1. Project Plan, goals, objectives & methodology
  - 2. Interdisciplinary approach to the problem
  - 3. Expected outcomes
  - 4. Career potential
  - 5. Budget explanation (in narrative form)
- □ **Budget Worksheet:** Download the Budget Worksheet from the CT Space Grant website. Please be sure to include a Budget Worksheet for each institution involved in collaboration grant proposals. *Reminder: Faculty who respond must show a 1:1 cost match ratio. For*

example, if you are responding to a \$20,000 research grant, your budget needs to show \$40,000 with a \$20,000 match and \$20,000 supplied by the Consortium.

□ **Curriculum Vitae:** One page maximum. (Please include a CV for each collaborator.)

#### **Reminder:**

- All forms are available on the CT Space Grant Consortium website (www.ctspacegrant.org/forms).
- All proposals and attachments must be submitted together in a single email.

### IMPORTANT REMINDER

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 Circular A-21: <u>http://www.whitehouse.gov/omb/circulars a021 2004/</u>.

(\*Note to University of Hartford faculty applicants: Even though the Consortium accounting is handled through the University of Hartford, an internal subcontract will still be needed to ensure clarity of understanding of all the pass-through NASA grant requirements by all parties involved in CT Space Grant research.)

### Checklist: Curriculum Development and STEM Education Research Grant Applications

Submit the application via email (<u>csgcinfo@hartford.edu</u>). The email must include two attachments, the Contact and Demographic Info form and a single PDF containing the appropriate cover sheet, abstract, proposal narrative, budget worksheet, and CV. Proposals must be typed in no smaller than 10 point font, double spaced with margins of at least 1" on 8 1/2" x 11" paper. **Page limits are strictly observed. Proposals exceeding the page limits will be rejected as non-compliant.** 

Important: All required components of the application must be saved as a single file and attached to the application email. Be sure to allow time for your institution's Sponsored Research department's review/approval of your proposal before the deadline

□ Applicant Contact/Demographic Information - Typed into the 'Contact/Demographic Information' form, and saved as a .doc,.docx, or .pdf file. This file should be added as an attachment to the application email, with a document title using the following format: LASTNAME\_ContactInfo.doc. This form is available on the CT Space Grant website. (Note: this information is used separately for blind reporting to NASA.) (For team proposals, please attach a separate sheet for each team member as addendums to the proposal narrative pdf file.)

### ATTACH THE FOLLOWING PROPOSAL COMPONENTS AS A SINGLE PDF FILE:

- □ **Faculty Application Cover Sheet:** Download the form from the CT Space Grant website and obtain the signatures of your institution's Department Chair and Campus Director before scanning along with the other application materials into a single file for uploading into the online application.
- □ **Proposal Abstract:** One page maximum include a paragraph on relevance to NASA's strategic enterprises. (*Please remember to include the course number and name in the abstract.*)
- □ **Proposal Narrative:** Page maximum six double-spaced pages Proposal Narratives should include the following sections within the page limits (supporting data, graphs, charts may be included as Appendix to the narrative):
  - 1. Project Plan, goals, objectives & methodology
  - 2. Interdisciplinary approach to the problem
  - 3. Expected outcomes
  - 4. Career potential
  - 5. Budget explanation (in narrative form)
- □ **Budget Worksheet:** Download the Budget Worksheet from the CT Space Grant website. Please be sure to include a Budget Worksheet for each institution involved in collaboration grant proposals. *Reminder: Faculty who respond must show a 1:1 cost match ratio. For example, if you are responding to a \$20,000 research grant, your budget needs to show \$40,000 with a \$20,000 match and \$20,000 supplied by the Consortium.*

□ **Curriculum Vitae:** One page maximum. (Please include a CV for each collaborator.)

### **Reminder:**

- All forms are available on the CT Space Grant Consortium website (<u>www.ctspacegrant.org/froms</u>).
- All proposals and attachments must be submitted together in a single email.

### IMPORTANT REMINDER

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 Circular A-21: <u>http://www.whitehouse.gov/omb/circulars\_a021\_2004/</u>.

(\*Note to University of Hartford faculty applicants: Even though the Consortium accounting is handled through the University of Hartford, an internal subcontract will still be needed to ensure clarity of understanding of all the pass-through NASA grant requirements by all parties involved in CT Space Grant research.)

### Checklist: Travel Grant

Submit the application via email (<u>csgcinfo@hartford.edu</u>). The email must include two attachments, the Contact/Demographic Info form and a single PDF containing the appropriate cover sheet, abstract, trip proposal narrative, supporting material, budget worksheet, and CV. Proposals must be typed in no smaller than 10 point font, double spaced with margins of at least 1" on 8 1/2" x 11" paper. Page limits are strictly observed. Proposals exceeding the page limits will be rejected as non-compliant.

Important: All required components of the application must be saved as a single file and attached to the application email. Be sure to allow time for your institution's Sponsored Research department's review/approval of your proposal before the deadline

□ Applicant Contact/Demographic Information - Typed into the 'Contact/Demographic Information' form, and saved as a .doc,.docx, or .pdf file. This file should be added as an attachment to the application email, with a document title using the following format: LASTNAME\_ContactInfo.doc. This form is available on the CT Space Grant website. (Note: this information is used separately for blind reporting to NASA.) (For team proposals, please attach a separate sheet for each team member as addendums to the proposal narrative pdf file.)

### ATTACH THE FOLLOWING PROPOSAL COMPONENTS AS A SINGLE PDF FILE:

- □ **Faculty Application Cover Sheet:** Download the form from the CT Space Grant website and obtain the signatures of your institution's Department Chair and Campus Director before scanning along with the other application materials into a single file for uploading into the online application.
- □ **Abstract:** One page maximum.
- □ **Narrative** Two single spaced pages maximum. Outline description and rationale for the travel and how you will fund the travel if you do not receive full Space Grant funding.
- □ **Invitation/Other Supporting Materials** Scan and Attach with the other application materials as a file into the on-line application. *Other examples: Letter or Conference paper acceptance notice (copy of email or WEB page of program acceptable).*
- □ **Budget Worksheet:** Worksheets can be downloaded from the CT Space Grant website. *Reminder: Faculty who respond must show a 1:1 cost match ratio.*
- □ **Curriculum Vitae:** One page maximum. (Please include a CV for each collaborator.)

### **Reminder:**

- All forms are available on the CT Space Grant Consortium website (www.ctspacegrant.org/forms).
- All proposals and attachments must be submitted together in a single email.



### 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 Education Program Performance Measures (Goals): http://www.pc.spacegrant.org/NASA\_Education\_Metrics.pdf

GUIDING FEDERAL CIRCULARS:

A-110 – Uniform Administrative Requirements for Grants and Agreements
With Institutions of Higher Education, Hospitals, and Other Non-Profit
Organizations

http://www.whitehouse.gov/omb/circulars\_a110/

□ **A-21** - Cost Principles for Educational Institutions <u>http://www.whitehouse.gov/omb/circulars a021 2004/</u>

### CT Higher Education Student Enrollment Figures:

- 23% Students from Racial Groups Underrepresented in STEM
- 40% Female Students (Source: NCES Digest of Education Statistics: http://nces.ed.gov/programs/digest/d09/tables/dt09\_229.asp