

Arkansas Space Grant Consortium

University of Arkansas at Little Rock

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Collaborative Research Program Preparation Guidelines

Program Summary

The Arkansas Space Grant Consortium (ASGC), a participant in the National Space Grant College and Fellowship Program (NSGCFP), invites applicants to apply for the Arkansas NASA Collaborative Research Program. This program provides seed funding in aerospace related fields of interest to NASA Centers or aerospace related industry. We are particularly interested in encouraging faculty from traditionally underrepresented groups.

The purpose of this grant program is to support the expansion and diversification of Arkansas's aerospace industry by addressing workforce development and increasing statewide academic involvement in space research, technology development, engineering, education, and training programs that are consistent with the state's priorities. This is a collaborative grant between at least two (2) affiliate campuses in the State of Arkansas.

Funding is intended to support research that will:

1. Compete for larger sponsored research awards
2. Attract and leverage other federal or industry funding
3. Produce technologies that lead to commercial opportunities
4. Address workforce development issues
5. Enhance the technological competitiveness of Arkansas universities and industry

Space related fields include any academic discipline or field of study (including, but not limited to: physical, natural, behavioral, computer, and biological sciences, engineering, instrumentation, sociology, and nanotechnology) that is concerned with or likely to improve the understanding, assessment, development, and utilization of aerospace related fields.

A significant goal of the NSGCFP is to encourage interdisciplinary collaboration and research, to train professionals for careers in aerospace science, technology, and allied fields. The value of this award is for up to three (3) years and at a funding level of \$15,000 per year. Please talk to your campus representative for further information in funding for travel with the use of ASGC Campus funds. It is required that applicants for the Collaborative Research Program have at least two (2) campuses and at least one (1) or more students per campus. The students are expected to travel with their mentor, perform research under the mentor's direction, and assist their mentor in outreach activities.

General Information

Award Level

The Collaborative Research Program (CRP) awards are made for up to three (3) years. A report, including updated goals and milestones, will be required at the end of each granting cycle. Based upon the previous year report, a renewal for the following year will be voted by the

ASGC board. The award is limited to a maximum of \$15,000 per granting year with a Cost Share requirement on these awards at a 1:1 ratio. Awards are subject to availability of NASA funding.

Eligibility Requirements

Collaborative Research Program grants are intended for faculty researchers and students from ASGC affiliated universities and colleges.

ASGC is funded by NASA under a Training Grant. As required under the Terms and Conditions for a Training Grant the following conditions apply:

- Research proposals from Principal Investigator's (PI) who are US citizens may include direct support funds (e.g. salary, travel etc.)
- PIs who are non-US citizens may be selected for funding (based on reviews) provided that NO salary, stipend, travel or any other form of direct support is proposed
- Non-US citizens may receive support from their universities.
- Students supported and funded by PIs under this program have to be US citizens only – no exceptions are allowed. Permanent residents are not considered as US citizens for the purposes of this program.
- Requests for faculty summer salary will be considered. Use of Collaborative Research funds for faculty summer salary will be limited to 6% of base salary. Fringe benefits will be limited to approximately 20%. **Each faculty salary-plus-fringe request must be matched 1:1 in cash** to work on the proposed project, and must not be contingent on summer teaching or participation in summer workshops.
- No more than one faculty stipend request per campus and no more than three total faculty stipend requests per proposal will be funded from the ASGC Collaborative Research Fund. However, additional stipend requests using the Campus Fund allocation will be considered.
- Cost Share is required on these awards at a 1:1 ratio
- No Indirect Costs (IDC) are allowed on this award. All waived IDC's may be used as Cost Share.
- PI's are allowed to submit only one proposal per award type.

A submitted proposal that falls into any of the following categories must provide the documentation requested to be considered for funding:

- Any PI who is required to submit a ASGC final report for a previously funded program but has not done so is ineligible for funding until a complete final report is received by ASGC.
- Any PI who has received previous funding from ASGC under the RI or Collaborative Research Program (CRP) but is not yet required to submit a final report must include a brief progress report in the proposal citing the current status of the previously funded project.
- If human or animal subjects are involved in the proposed work, the proper IRB and/or IACUC documentation must be provided. Working with human subjects is not limited to the subjects themselves, but may include any information involving the subjects. Researchers should receive an approval/exemption number that must be listed on the proposal. Funding will not be released until this process has been completed and the number turned into the ASGC Program Office. If your campus does not have an IRB or IACUC office, further information may be obtained at:
 - IRB: URL: ualr.edu/irb/ Contact: (501-569-8657; irb@ualr.edu)
 - IACUC: URL: ualr.edu/orsp/index.php/home/animal-subjects/ Contact: (Dr. William Baltosser, Chair, IACUC; 501-569-3521 or whbaltosser@ualr.edu).

Once a grant has been awarded the recipient will be expected to make interim reports, as requested, and a final report at the end of the project when requesting the final payment.

Requests for reimbursements may be made on a monthly or quarterly basis by the respective campus business office. The recipient and their campus business office are responsible for maintaining copies of all receipts. These receipts are to be made available upon request in case of audit.

Collaborative Research Program Application

Interested researchers must complete an application. Please read all program guidelines, including applicant eligibility and reporting requirements, before submitting your application. The application must be submitted to your Campus Representative and all information must be completed or the application will not be reviewed. All applications will be reviewed by the ASGC Board, and successful applicants will be announced by the Program Office. Starting dates for new awards will generally be expected to coincide with the granting cycle or the State’s fiscal year. The key components of the application are discussed in more detail below.

The full proposal should be typed, single-spaced and not be over 18 pages in length (not including CVs). It should include the following:

Application Form/Cover Sheet

The CRP application form should be filled out in full and used as a Cover Sheet for your proposal. Under Project Summary give a brief summary of the items as described in your full proposal along with its NASA relevance.

Project Description

The Project Description should include a narrative of the activities to be undertaken and presented under the following section headings for the full 3 year project:

- **Goals and Objectives for the Project**
There should be at least one (1) goal and at least one (1) objective per goal
- **Relevance of the Project to NASA**
Describe how your project relates to NASA interests, objectives, programs and/or research efforts. Note: The NASA researchers whom you list are people you should plan to visit (to be described in the Budget Justification).
- **Description of Research to be Accomplished**
This is where you discuss the “science” of you research project. It should correspond closely to your Goals and Objectives. It should be written after you have prepared your Gantt chart (Timeline, Schedule) so it will correspond closely to the description of activities.

Gantt Chart Example

Task	Months after Expected Start of 12/1/00								
	1	2	3	4	5	6	7	8	9
Visit NASA	XXXXXX								
Visit to Michoud Facility				XXXXXXXXXXXX					
Study Lathe Operation		XXXXXX							
Define Weld Implementation		XXXXXX							
Design Concepts for Fixture	XXXX								
Design Selection for Fixture				XXXXX					
Detail Design of Fixture					XXXXX				
Fixture Fabrication							XXXX		
Welding Implemented							XXXXXXXXXXXX		
NASA Presentations		X			X			X	

- ***Roles of Faculty and Student Participation***

Describe the role that each proposed participant will play in accomplishing the Goals and Objectives, both for faculty and students. If you can't name students, refer to them as "Student A", Student "B", etc. Distinguish between Graduates and Undergraduates.

- ***Description of Activities***

In this section, list each numbered activity shown on your Gantt Chart and give a brief description of what is to be accomplished, and who will do the work.

NASA Research or Space Center to be visited

List the NASA Center(s) that you will visit. List the names of your NASA contacts, along with their postal address, telephone number, and email address. (**Note:** Contacts are to be made before submitting your application.)

Outreach Activity Plan

- When traveling to NASA Centers or other aerospace facilities, you are expected to take a camera and capture your experience (pictures and video at NASA sites are permitted, but there are some restricted areas. Please be sure to ask before taking pictures/video.) It's all for the outreach activities at your campus, other campuses, and local elementary and secondary schools. The program office would greatly appreciate photos/videos from your visits as well.
- List names and telephone numbers of K-12 contact whom you have already contacted and made preliminary arrangements to give talks/demonstrations/lectures to.
- Please be sure to have all students fill out the NASA Media Release form that is located on our website.

Written Output Products of This Project

Describe the written output products of the project. Typically, these will be: unsolicited proposals, new teaching materials, outreach materials, journals, conference proceedings, or other publications.

Student Mentoring

Describe the number of students to be mentored and their fields/background. A Student Applicant Data Sheet and Curriculum Vitae must be attached for each student. *Please note that if a student is not named at the time of approval, funding for student will not be released until all required documents have been submitted and approved by the program office.

Course Content Enhancement

Describe what new aerospace-oriented course(s) you expect to develop, and/or what aerospace-related materials you expect to incorporate in existing courses. Identify each course by faculty member and school

Detailed Budget Justification

Describe in detail all stipends, travel, materials and other costs that you summarized on the Cover Page. All funds must be matched 1:1 by your campus in cash or in-kind. A budget matrix is attached and should be filled out according to individuals and campus.

Restrictions

Under NASA's Terms and Conditions for a Training Grant, the following conditions apply:

- Funds may not be used to fund research carried out by non-U.S. institutions. U.S. research award recipients may, however, directly purchase supplies and/or services that do not constitute research from non-U.S. sources.
- Travel is allowed for the meaningful completion of the proposed investigation, as well as for reporting results at appropriate professional meetings. **All travel funds must be funded through ASGC Campus funds.** Be sure to talk to your campus representative for funding amount.
- The construction of facilities is not an allowable cost.

- No more than one faculty stipend request per campus and no more than three total faculty stipend requests per proposal will be funded from the ASGC Collaborative Research Fund. However, additional stipend requests using Campus Fund allocation will be considered.
- Cost Share is required on these awards at a 1:1 ratio (all faculty salary must be matched in cash).
- **Funding cannot be used to purchase general purpose equipment, e.g. desktop workstations/laptops, office furnishings, reproduction and printing equipment, etc. as a direct charge regardless of cost.** Special purpose equipment purchases (i.e., equipment that is used only for research, scientific, and technical activities directly related to the proposed research activities under \$5000) are allowed. Software is not considered equipment and can be purchased even if cost exceeds \$5,000.

Curriculum Vitae

Each researcher should provide their most current CV. PI is limited to two (2) pages and all Co-PI's and students are limited to one (1) page.

Proposal Check List

Completed	Item
	Cover Page
	Project Description
	NASA Center Contact
	Outreach Activities
	Written Output
	Student Mentoring
	Course Content Enhancement
	Gantt Chart
	Detailed Budget Justification
	Curriculum Vitae

Awardee Requirements

Awardees are required to submit a final report (via email) to the ASGC Program Office (asgc@ualr.edu) at the end of the award period. The final report must consist of information on the aerospace related research that was conducted on campus. Scholars must participate in an outreach activity under the guidance of their mentor. A poster or oral presentation must be presented at the Annual Space Grant Symposium held in April the year of the award. Dates and location will be announced in January.

Collaborative Research Program Renewal Application

Project Description

The Project Description should include a narrative of the activities to be undertaken and presented under the following section headings for the next year of the project:

- **Description of Research Accomplished in Past Year**
This is where you discuss the “science” of you research project. It should correspond closely to your Goals and Objectives from the last funded year. If there were any major accomplishments or failures, list them in this section.
- **Goals and Objectives for the Project**
There should be at least one (1) goal and at least one (1) objective per goal for the project next year.
- **Relevance of the Project to NASA**
Describe how your project relates to NASA interests, objectives, programs and/or research efforts. Note: The NASA researchers whom you list are people you should plan to visit or have already visited.

- ***Roles of Faculty and Student Participation***

This page describes the role that each proposed participant will play in accomplishing the Goals and Objectives, both for faculty and students. If you can't name students, refer to them as "Student A", Student "B", etc. Distinguish between Graduates and Undergraduates.

- ***Description of Activities***

In this section, list each numbered activity shown on your Gantt Chart and give a brief description of what is to be accomplished and who will do the work (see example on page 4).

NASA Research or Space Center to be visited

List the NASA Center(s) that you will visit. List the names of your NASA contacts, along with their postal address, telephone number, and email address. A NASA visit only needs to be made once in the 3 year period.

Outreach Activity Plan

- When traveling to NASA Centers or other aerospace facilities, you are expected to take a camera and capture your experience (pictures and video at NASA sites are permitted, but there are some restricted area. Please be sure to ask before taking pictures/video.) It's all for the outreach activities at your campus, other campuses, and local elementary and secondary schools. The program office would greatly appreciate photos/videos from your visits as well.
- List names and telephone numbers of K-12 contact whom you have already contacted and made preliminary arrangements to give talks/demonstrations/lectures to.
- Please be sure to have all students fill out the NASA Media Release form that is located on our website.

Written Output Products of This Project

Describe the written output products of the project. Typically, these will be: unsolicited proposals, new teaching materials, outreach materials, journals, conference proceedings, or other publications. In order to receive Year 2 funding, the research team will be expected to have submitted a proposal for external funding by the end of the first year. In addition, to receive Year 3 funding the research team is expected to submit a proposal to at least two external funding sources by the end of Year 2.

Student Mentoring

Describe the number of students to be mentored and their fields/background. A Student Applicant Data Sheet and Curriculum Vitae must be attached for each student. *Please note that if a student is not named at the time of approval, funding for student will not be released until all required documents have been submitted and approved by the program office.

Course Content Enhancement

Describe what new aerospace-oriented course(s) you expect to develop, and/or what aerospace-related materials you expect to incorporate in existing courses. Identify each course by faculty member and school.

Detailed Budget Justification

Describe in detail all stipends, travel, materials and other costs that you summarized on the Cover Page. For the renewal the Budget will reflect one (1) year only. All funds must be matched 1:1 by your campus in cash or in-kind. A budget matrix is attached and should be filled out according to individuals and campus.

Awardee Requirements

Awardees are required to submit a final report (via email) to the Consortium Program Office (asgc@ualr.edu) at the end of the award period. The final report must consist of information on the aerospace related research that was conducted on campus. Scholars must participate in an outreach activity under the guidance of their mentor. Poster or oral presentation must be presented at the Annual Space Grant Symposium held in April the year of the award. Dates and location will be announced in January.

Inquiries

Questions concerning the preparation and submission of applications or inquiries regarding the administration of this program may be directed to the campus representative at your institution.

Equal Opportunity

Applicants for the Collaborative Research Program will be considered for funding as NASA Faculty Researcher without regard to race, creed, color, age or handicap.

Acknowledgement

Any written materials supported in part from this award shall acknowledge the ASGC NASA Training Grant #NNX10AL28H. All logos can be found on our website: asgc.ualr.edu

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