



Hollings Cancer Center
An NCI-Designated Cancer Center

Request for Applications (RFA) for Development of American Cancer Society Research Grant

The Medical University of South Carolina/Hollings Cancer Center (HCC) is a recipient of the American Cancer Society Institutional Research Grant (ACS IRG). The ACS IRG is an institutional award that enables the HCC to provide small pilot research funding to beginning investigators who have not yet achieved independent funding at the national level. Since 2003, 95 awards have been made, and the goal for applications received is to likely fund five awards for 2022 (January 1 – December 31, 2022). **Awards will be up to \$35,000 each and upon competitive review can be renewed for a second year.**

The Principal Investigator of the ACS IRG award is Denis C. Guttridge, Ph.D. The review of applications and allocation of awards will be managed through the HCC using a peer-review process. **The award is exempt from indirect costs, so all funds are used for cancer research as direct costs.** IRB and/or IACUC approvals must be sent to HCC Administration before any funding will be released. If approvals are not applicable, an exemption letter will be required.

The HCC collaborates with the local ACS to promote ACS research opportunities and to disseminate information about research findings and benefits to public and professional groups. To learn more about the ACS IRG and other ACS research opportunities, visit the ACS website at <http://www.cancer.org>.

Purpose of American Cancer Society Institutional Research Grant (ACS IRG)

The goal is to attract beginning researchers into cancer research. The purpose of the ACS IRG is to support the initiation of promising new cancer research projects by junior faculty members so they can obtain results that will enable them to compete successfully for peer-reviewed extramural (R01 type) cancer research grants.

Eligibility Criteria

ACS IRG sub-awards are intended to support independent, self-directed, early career investigators for whom the institution must provide research facilities or space customary for an independent investigator.

Applicants for the individual awards:

- Must be within four years of their first independent research or faculty appointment.
(Although applicants may apply for multiple awards, a grantee may not be the principal investigator on more than one ACS Grant at any time.)
- Must not currently hold any national, non-developmental career, peer-reviewed project grant funding [e.g., R01, R03, R21, national ACS award, national DOD award]. Exceptions will be made for faculty members who hold national peer-reviewed grants in a non-cancer related area. Individuals with career development awards (NIH K, R00 awards and other career development awards from national foundations) are eligible.
- Must at the time of application have U.S. residency status or hold a visa that will allow time for full completion of the project.
- Must have a primary academic appointment at MUSC.
- **As part of the ACS Diversity, Equity, and Inclusion Strategy, special consideration will be given to underrepresented minority investigators.** The National Science Foundation reports that certain racial and ethnic groups are underrepresented at many career stages in health-related sciences, namely, African Americans (or Blacks), American Indians and Alaska Natives, Hispanics (or Latinos), Native Hawaiians and other Pacific Islanders. Collectively these groups are known as underrepresented minorities (URM) in science.

ACS IRG Application Workshop

Dr. Guttridge, Dr. Betsy Hill, Director of the HCC Biostatistics Shared Resource, and members of the HCC Administrative Team will lead a workshop detailing the ACS IRG application process and advice on submitting exceptional proposals. The event will take place on **Wednesday, September 15, 2021, from 1-3 pm, in HCC 120**. If you would like to take part in the meeting, please email Brett Bechtol (bechtolb@musc.edu) for information.

Timeline for Proposals for Sub-Grant Awards

Each applicant is strongly encouraged to include a biostatistician collaborator as part of the proposal to assist with design and statistical methods. If assistance is needed in identifying a biostatistician, please contact Dr. Betsy Hill, (hille@musc.edu), as soon as possible but no later than **Monday, September 20, 2021**. Please use the following link to submit your biostatistics requests: <https://redcap.musc.edu/surveys/?s=XM4NDAKRDM>.

Notification of intent to submit is due Monday, September 27, 2021, by 4:00 pm. This notification allows us to better prepare for the review. Please send Brett Bechtol (bechtolb@musc.edu) a brief email stating that you plan to submit an application. The email should contain a preliminary title, notice of any collaborators, your academic title and department, and an abstract of your intended project. Also, please include a list of all Current, Recent, and Pending grant applications that you may have. This will allow us to identify any potential eligibility issues. If your list of collaborators, the nature of the proposed research, or your funding status changes at any time, you must notify Brett Bechtol as soon as possible.

Applications are due Monday, October 25, 2021, by 4:00 pm. Please send one PDF file of the application packet via email to Brett Bechtol (bechtolb@musc.edu).

Applications received by the deadline will be scientifically reviewed by the ACS IRG Committee in December, and all applicants will be notified soon after. Every effort will be made to have awards allocated by January 1, 2022. Please notify your departmental business manager about your submission.

Grant awards are for a 12-month period, from January 1, 2022 through December 31, 2022. All awards should be completed and spent by December 31, 2022. No cost extensions will only be granted under special circumstances.

Instructions for Submitting Proposal

If you are submitting a renewal application, you must include a progress report. The form can be found attached at the end of the RFA. Please do not exceed the two-page limit for the progress report. If you are resubmitting an application (you may resubmit up to two times), you must include a one-page introduction detailing your responses to the critiques from the previous application. *Note that this only applies to resubmitted applications, not projects being submitted for the first time.*

1. Application Format

Use standard 11-point font, single space, and half-inch margins throughout the application. Consecutively number all pages.

2. Face Page

Complete the Face Page form attached at the end of the RFA.

3. Table of Contents

Provide page number for each category listed in the Table of Contents. Number pages consecutively at the bottom of each page throughout the application.

4. Detailed Budget

Use attached Budget Form to complete the 12-month budget. Budget cap is \$35,000, direct costs. ***Include direct costs only; there are no indirect costs associated with this grant.*** No faculty salaries should be included; however the appropriate amount of effort you and your collaborators will contribute to this project should be indicated. Principal Investigators must attribute at least 5% effort to this project. Please follow these guidelines as you prepare your budget:

Expenditures Allowed:

- Research supplies and animal maintenance
- Technical assistance
- Domestic travel when necessary to carry out the proposed research program
- Publication costs, including reprints
- Costs of computer time
- Special fees (pathology, photography, etc.)

- Stipends for graduate students and postdoctoral assistants if their role is to promote and sustain the project presented by the junior faculty member
- Equipment costing less than \$2,000 (special justification is necessary for items exceeding this amount)
- Registration fees at scientific meetings

Expenditures Not Allowed:

- Secretarial/administrative personnel
- Salary of principal investigator
- Tuition
- Foreign travel (special consideration will be given for attendance at scientific meetings held in Canada)
- Honoraria and travel expenses for visiting lecturers
- Per Diem charges for hospital beds
- Non-medical services to patients (travel to a clinical site or patient incentives are allowable expenses)
- Construction, renovation, or building/laboratory maintenance
- Purchasing and binding of periodicals and books
- Office and laboratory furniture
- Office equipment and supplies
- Rental of office or laboratory space
- Recruiting and relocation expenses
- Dues and membership fees in scientific societies

5. Budget Justification

On a separate page, clearly justify each item requested in the budget. Describe mentors and collaborators and their roles on the project.

6. Biographical Sketch

Use NIH Biosketch. If using the newest NIH biosketch form, please ensure that all relevant present or recently completed research support are listed. Include biosketches of collaborators and mentors. Guidelines can be found on the NIH website (<http://grants.nih.gov/grants/forms/biosketch.htm>).

7. Facilities and Resources

Using form attached, describe resources and facilities available to support proposed research.

8. Letters of Support

Research Assistant Professors must include a letter of support from their Department Chair or Division Director confirming their independent research status. In addition, all applicants must include a letter of support from their Chairperson and primary mentors indicating their endorsement of the proposed research and their commitment to mentoring the applicant through the award year. If the applicant's research is thematically similar to that of his or her primary mentor, the mentor must clarify the distinction between the mentor's research and the applicant's proposal.

9. Research Plan

(6 pages maximum plus an additional 300 (or fewer) words to describe statistical considerations)

The research plan should include sufficient information needed for evaluation of the project, independent of any other document. No appendices allowed.

○ **Specific Aims**

List the broad, long-term objectives and what the specific research proposed in this application is intended to accomplish. State the hypotheses to be tested.

○ **Background and Significance**

Briefly sketch the background leading to the present application; critically evaluate existing knowledge, and specifically identify the gaps which the project is intended to fill. State concisely the importance and health relevance of the research described in the application by relating the specific aims to the broad long-term objectives.

○ **Preliminary Studies**

For new applications, use this section to provide an account of the principal investigator's preliminary studies

pertinent to the application information that will help establish the experience and competence of the investigator to pursue the proposed project.

- **Research Design and Methods**

Describe how you will do the research. Describe the research design and the procedures to be used to accomplish the specific aims of the project. Include how the data will be collected, analyzed and interpreted. Describe any new methodology and its advantage over existing methodologies. Discuss potential difficulties and limitations of the proposed procedures and alternative approaches to achieve the aims. Provide a tentative sequence or timetable for the project. Point out any procedures, situations, or materials that may be hazardous to personnel and the precautions to be exercised.

- **Statistical Considerations**

Describe how the data will be analyzed and used to make inferences regarding the Specific Aims. A justification of sample size should be included for animal studies and any aims that include human tissue samples, patients, or healthy volunteers. **An additional 300 words (approximately a half page) is allowed for this section beyond the 6-page limit. If more than 300 words are needed, the statistical considerations section can extend into the 6-page proposal.**

- **Literature Cited (not included in the page limitation)**

List all references. Each reference must include the title, names of all authors, book or journal, volume number, page numbers, and year of publication. The reference should be limited to relevant and current literature. Select only those references pertinent to the proposed research.

Review Criteria

Review criteria include:

- Proposed research has direct cancer relevance and addresses an important problem in cancer.
- There is high probability that the pilot project supported by this sub-award will form the basis for major peer-reviewed funding.

Review Process

Each proposal will be reviewed by two or more HCC members including a biostatistician and scored by each committee member using the NIH scoring system and process. Written evaluations of the projects will be provided to individual applicants after the funding decisions have been made.

Administration

Please contact Hollings Cancer Center administration if you have any questions. The team includes:

- Brett Bechtol at bechtolb@musc.edu
- Julia Singleton at singleju@musc.edu
- Toni Smith at smithto@musc.edu

Medical University of South Carolina/Hollings Cancer Center
AMERICAN CANCER SOCIETY INSTITUTIONAL RESEARCH GRANT
SUB-AWARD APPLICATION

TITLE OF PROJECT	
<u>PRINCIPAL INVESTIGATOR</u>	
NAME (<i>Last, First, Middle</i>)	DEGREE(S)
ACADEMIC TITLE	COLLEGE AND DEPARTMENT
YEAR LAST DEGREE CONFERRED	YEAR OF FIRST INDEPENDENT POSITION
COLLABORATOR NAME(S) (<i>Last, First, Middle</i>)	DEGREE(S)
IRB/IBC/IACUC APPROVAL Type of APPROVAL _____ APPROVAL # _____ <input type="checkbox"/> PENDING <input type="checkbox"/> TO BE SUBMITTED <input type="checkbox"/> Not applicable* *If approval is not applicable, an exemption letter will be required before funding is released.	CITIZEN STATUS <input type="checkbox"/> U.S. CITIZEN OR NONCITIZEN NATIONAL <input type="checkbox"/> PERMANENT RESIDENT OF U.S. <input type="checkbox"/> VISA with duration allowing full completion of the research project (attach notarized evidence)
Is this project part of a current pending submission for a federally funded grant? <input type="checkbox"/> YES <input type="checkbox"/> NO	
I certify that the proposal is complete and the above list includes all MUSC contributors to the proposed project. <input type="checkbox"/> YES <input type="checkbox"/> NO I understand that all non-MUSC contributors (consultants, contributors, <i>etc.</i>) to this proposed project must complete and submit, prior to award of funds, the required External Contributor Financial Conflict of Interest (FCOI) Certification Form located at the following link: http://academicdepartments.musc.edu/research/orsp/orsp_coi.html . <input type="checkbox"/> YES <input type="checkbox"/> NO	
TELEPHONE:	EMAIL:
VERIFICATION OF APPLICANT ELIGIBILITY BY DEPARTMENT CHAIR (<i>Applicants must be within 6 years of their first independent research or faculty appointment, must be salaried faculty with appropriate committed research facilities, and may not have competitive national funding active at the start date of the proposed application</i>)	VERIFICATION OF BUDGET APPROVAL BY DEPARTMENTAL BUSINESS MANAGER
DATE:	DATE:
SIGNATURE OF PRINCIPAL INVESTIGATOR (<i>"Per" signature not acceptable</i>)	
DATE:	
<input type="checkbox"/> Please check box if this application is a renewal. (Progress Reports must be submitted with renewal applications.) <input type="checkbox"/> Please check box if this application is a resubmission of a previous ACS IRG application. Note that a one-page response to the reviewers' critiques must be included with the application.	

Abstract (200 words or less):

Principal Investigator (Last, First, Middle):

<u>DETAILED BUDGET FOR INITIAL BUDGET PERIOD</u> <u>DIRECT COSTS ONLY</u>						FROM	THROUGH	
PERSONNEL <i>(Applicant organization only)</i>		Months Devoted to Project			INST.BASE SALARY	DOLLAR AMOUNT REQUESTED <i>(omit cents)</i>		
NAME	ROLE ON PROJECT	Cal. Mnths	Acad. Mnths	Summer Mnths		SALARY REQUESTED	FRINGE BENEFITS	TOTAL
SUBTOTALS →								
CONSULTANT COSTS								
EQUIPMENT <i>(Itemize)</i>								
SUPPLIES <i>(Itemize by category)</i>								
TRAVEL								
PATIENT CARE COSTS		INPATIENT						
		OUTPATIENT						
OTHER EXPENSES <i>(Itemize by category)</i>								
DIRECT COSTS FOR INITIAL BUDGET PERIOD								\$

Budget Justification *(continue on additional page):*

Principal Investigator/Program Director (Last, First, Middle):

RESOURCES

FACILITIES: Specify the facilities to be used for the conduct of the proposed research. Indicate the performance sites and describe capacities, pertinent capabilities, relative proximity, and extent of availability to the project. If research involving Select Agent(s) will occur at any performance site(s), the biocontainment resources available at each site should be described. Under "Other," identify support services such as machine shop, electronics shop, and specify the extent to which they will be available to the project. Use continuation pages if necessary.

Laboratory:

Clinical:

Animal:

Computer:

Office:

Other:

MAJOR EQUIPMENT: List the most important equipment items already available for this project, noting the location and pertinent capabilities of each.

INSTITUTIONAL RESEARCH GRANT #IRG –
PILOT PROJECT PROGRESS REPORT (Revision date: _____)

Amount _____ Term: from _____ to _____
Investigator (Name with degree(s), Title, Department, School)
Project Title
<p>Results: provide a clear, concise overview of the work accomplished under the grant, including the relevance of the proposed work to the American Cancer Society's mission of eliminating cancer as a major health problem. Please use the outline below.</p> <ol style="list-style-type: none">1. Background: Provide a brief statement of the ideas and reasoning behind the research project.2. Objective/hypothesis: State the objective of the project.3. Study results: Describe the progress that was made toward each of the original specific aims, justifying any departure from the original aim.4. Cancer relevance: Explain the relevance of the work to cancer.

Continued on next page

Pilot Project Progress Report

(2 of 2 pages)

Investigator:
Peer reviewed publications resulting from this support (published or in press only)
Abstracts, book chapters, and other publications (published or in press only) during or after this support
National grants obtained or pending as a result of this support, or currently pending
Other grants obtained during or after this support
Patents granted or applied for:
Interactions with the local American Cancer Society: