GUIDELINES FOR SUBMISSION

<> APPLICATIONS FOR RESEARCH SUPPORT

<> AMERICAN CANCER SOCIETY INSTITUTIONAL RESEARCH GRANT
GENERAL INFORMATION
AMERICAN CANCER SOCIETY
INSTITUTIONAL RESEARCH GRANT

PURPOSE:
The stated purpose of the Institutional Research Grant is "...to serve as 'seed' money to permit the initiation of promising new projects or novel ideas by junior investigators". PROJECTS MUST HAVE A DEFINABLE RELATIONSHIP TO CANCER AND THIS RELATIONSHIP MUST BE CLEARLY DOCUMENTED IN THE APPLICATION.

Eligibility
Assistant Professors or Assistant Research Professors in both the Graduate and Undergraduate Colleges of the University who do not already have extramural funding are eligible to apply for an award. NOTE: Research Career Development Awards which cover only salary are exempt from the extramural funding restriction, but the restriction applies to any project, whether it is cancer-related or not. Investigators who have not been previously funded by the ACS IRG may be given higher priority, but previously funded investigators are not excluded.

Successful applicants must have: 1. a proven research ability in the area of the proposed study; 2. a promising project in cancer research; and 3. realistic plans to generate preliminary data for applications to NIH or other extramural granting agencies.

Post-doctoral fellows, Research Associates, and senior faculty members (Associate or full Professors) are not eligible for this award program.

GENERAL NOTES

Funds are limited to a maximum of $30,000 per grant, 3 grants per year minimum. Approximately 35-40% of applications are funded in a given year.

The annual renewal of this grant to the University of Kentucky depends on the documentation of progress on all projects supported through this mechanism, as judged by the generation of independent extramural funding and peer-reviewed publications. Each investigator who receives an Institutional Research Award from the American Cancer Society is required to submit annual summary progress reports, including lists of publications and abstracts, as well as listings of any grant funds obtained as a result of the ACS funding.

Beginning in January 2009, a signed statement or letter of support from a designated mentor is required and applications will need to be submitted in electronic form, preferably in PDF or WORD format.
FORMAT OF APPLICATIONS

COVER SHEETS:

Internal Routing Form (UK): This two-page (front/back) form provides information necessary to activate the funding of proposals approved for award, and includes standard documentation required by the University of Kentucky Research Foundation. Pre-approval for uses of radiation, biohazards, animals, central computing resources, and human subjects must be properly documented and the signature of the appropriate department chair is needed. Signatures of the Dean, Chancellor and UKRF officials are not required until a decision to make an award is made. NOTE: The ACS IRG does not cover Indirect Costs. A policy statement of the ACS regarding indirect costs is attached to assist in routing.

APPLICATION FOR AN INDIVIDUAL ALLOCATION (Four-page form):

This four-page form identifies the principal investigator and basic project characteristics (i.e., project title, investigator, budget, other research support, and summary/abstract of project), and provides standard programmatic information in lay language for ACS publicity.

PROJECT DESCRIPTION (No Official Application Form):

Research Plan and Narrative - This section includes a description of the research objectives, a statement of the significance of the problem, a clear description of the project and its relationship to cancer, an outline of the methods and analytic procedures to be used, and a bibliography. This section must not exceed 12 single spaced, typewritten pages (8 ½ x 11). (See "SPECIFIC INSTRUCTIONS" and "STANDARDS FOR PREPARATION" appended.) If the applicant feels that additional information (e.g., charts, figures, or other supplemental material) is essential to the proposal, this material should be included in an Appendix and properly referenced.

BIOGRAPHICAL SKETCH:

A Biographical Sketch (Curriculum Vitae) for the principal investigator and for any key co-investigators must be included. The single-page form included with the application packet (with one additional page, if necessary) or a 2-page NIH application short-form BIOGRAPHICAL SKETCH should be used.

APPENDIX:

Supplementary/reference information (e.g., charts, figures, or other supplemental material) may be included in an Appendix with proper reference to the main body of the proposal. Also important to include in the Appendix is verification of implied commitments of key resource persons as well as evidence of IRB, Animal Care and Radiation Safety approvals as necessary.

An electronic submission of all above noted sections and appendices must be provided to the Office of Director, Lucille Parker Markey Cancer Center, by or before the announced deadline date. The recipient address is: carla.repass@uky.edu. Questions: 257-4500.
SPECIFIC INSTRUCTIONS

STANDARD APPLICATION FORM

"Application for an Individual Allocation from
American Cancer Society
Institutional Research Grant #IRG-85-001-22"

(Page 1 of 3 pages)

I. Fill in "Project Title", "Investigator", and "Amount Requested" as indicated.

II. "Term" for Spring review cycles is June 1 of the current year through May 31 of the succeeding year. "Term" for Fall review cycles is December 1 of the current year through November 30 of the succeeding year.

III. BUDGET PROPOSED

General Guidelines

Funds from the American Cancer Society Institutional Research Grant may be used to support the following:

a. Research supplies and animal maintenance
b. Technical assistance
c. Domestic travel when necessary to carry out the proposed research
d. Publication costs, including costs of reprints
e. Costs for computer time
f. Special fees (pathology, photography, etc.)
g. Stipends for graduate students and postdoctoral assistants if their role is to promote and sustain the project presented by the junior faculty member.
h. Equipment costing less than $2,000 (Special justification is necessary for items exceeding this amount)
i. Registration fees for scientific meetings

The funds may not be used for:

a. Per diem charges for hospital beds and/or ordinary medical care
b. Non-medical services to patients
c. Tuition
d. Foreign travel
e. Secretarial and administrative salaries
f. Rental of office or laboratory space
g. Construction, renovation or building maintenance
h. Books and periodicals
i. Office and laboratory furniture
j. Office equipment and supplies
k. Salary for the PI
l. Recruiting and relocation expenses
m. Dues and memberships in scientific societies
n. Honoraria and travel expenses for visiting lecturers

NOTE: This grant mechanism does not permit indirect cost assessments (policy attached).

Specific Budget Categories
A. PERSONNEL

Individual allocations through the ACS-IRG mechanism are limited in size and are not designed to provide full-time technical help. The junior investigator may need occasional technical support (for items such as the preparation of pathological specimens, photographic expertise, setting up extensive experiments, etc.) and in such instances limited technical support may be included. Support of a full-time technician for a brief period of time is usually unrewarding in terms of accomplishment, and has been viewed in the past as subsidization of other ongoing activities. An Institutional Research Grant is not to be used as a general purpose fund to compensate for errors in budgeting and overspending or unexpected losses of funds from established research programs.

Personnel and co-investigator roles in the research project must be clearly defined in the budget justification section. If student support is requested, the name of the student should be identified, his/her activities should be clearly specified, and it should be stated whether or not this work will be part of a dissertation project.

B. PERMANENT EQUIPMENT

Equipment items costing in excess of $300 should be addressed in the "Budget Justification" section and should be clearly necessary for the project, as identified in the project narrative and/or "Materials and Methods" sections.

C. SUPPLIES

A listing of supplies and other materials and their associated costs should be outlined in as much detail as possible in the limited space provided. Specific chemicals should be clearly labeled (e.g., radioactive isotope $^{14}$C-5-hydroxyindoleacetic acid rather than "isotopes"). Chemicals requiring custom synthesis should be designated as such, and an approximate cost indicated.

D. MISCELLANEOUS

1. Services

Charges for computer time, duplicating/printing, publication, core facility use, and other services should be listed in this budget category. Note that proposed uses of central computing services must have signed approval from an authorized staff member of the computing facility to be used.

2. Animal Care

Costs for the purchase and maintenance of animals should be given, including the numbers and species of animals to be purchased, composite daily maintenance charges, and costs for any special procedures to be commissioned.

3. Other

Specify any other costs proposed, and justify as needed.

BUDGET JUSTIFICATION

Outline in this section the justification for all major cost items. Note their specific relationship to the project and any relationship to other resources available for this project through departmental
or other sources. If additional space is needed, a separate page may be added immediately following the two page form for this purpose.  
(End of page 1 of 4 pages)

**OTHER RESEARCH SUPPORT** (Page 2 of 3 pages, part one)

List all Current or Pending Projects and associated funding, including:

a. Source (sponsoring agency)
b. Project Title
c. Agency Identifying Number
d. Amount of funding
e. Project Period

**DESCRIPTION OF RESEARCH PROPOSED** (Page 2 of 3 pages, part two)

This section should contain a short summary or abstract of the project being proposed. It should include the objectives and specific aims as well as the experimental design, model systems, etc., to be used for achieving the stated goals. The relationship to cancer should be clearly stated. This abstract is meant to serve as a succinct and accurate description of the proposed work when separated from the rest of the application.

**RESEARCH PROMOTION FORM** (Page 3 of 3 pages)

This form is self-explanatory and is for ACS program promotion purposes. It provides an opportunity for anyone so inclined to participate actively in ACS programs and fund-raising activities.

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**RESEARCH PLAN**

There is no specific form for the Research Plan. The Research Plan narrative must not exceed 12 pages in length. This section should be typewritten with a character size of 12 point and single-spaced on 8 ½ X 11 inch paper, according to the outline given below.

A. Specific Aims

A realistic and concise statement of research objectives should be provided, outlining the work to be accomplished and what hypothesis(es) is(are) to be tested.

B. Background and Significance

A brief summary and critical evaluation of existing knowledge relevant to the subject area should be presented. Specific extensions of knowledge which the proposed research is intended to provide should be identified. The relationship to cancer should clearly be spelled out here.

C. Preliminary Studies

This section should be used to document the feasibility of the experimental approach and the experience and competence of the Principal Investigator in areas related to the
proposed investigations. The presentation of data previously generated by the Principal Investigator relevant to this project, and, in particular, any preliminary data supporting the hypothesis and approach, is extremely important.

D. Experimental Design and Methods

Discuss in detail the experimental design and the procedures to be used to accomplish the specific aims of the project. Describe the protocols to be used and provide a tentative sequence or timetable for the investigation, keeping in mind the one year limitation on funding. Include the means by which the data will be analyzed and interpreted. Describe any new methodology and its advantage over existing methodologies. Discuss the potential difficulties and limitations of the proposed procedures and alternative approaches to achieve the aims. Point out any procedures, situations, or materials that may be hazardous to personnel and the precautions to be exercised.

E. Ethical & Safety Aspects of the Proposed Research

1. Human Subjects
2. Vertebrate Animals
3. Biohazards

F. Literature Cited

References for all cited work should be included in a single listing in this section. Format is optional, but each citation should include the names of all authors, the title of the article cited, the name of the book or journal, the volume number, page numbers, and the year of publication.

APPENDIX

This section may include graphs/charts, reprints, letters of support or collaboration and any other reference material directly impacting the proposed project.

MENTOR DOCUMENTATION

As noted in the preface to application instructions, a signed statement or letter from a designated mentor is a required element of the application process, beginning January 2009. This statement should serve as documentation that the mentor has read the application and offered constructive guidance on both the project proposed and the proposal itself.

STANDARDS FOR PREPARATION OF RESEARCH PROPOSAL

FOR INSTITUTIONAL RESEARCH FUNDS

It is not infrequent that worthwhile studies fail to achieve a sufficient priority for funding or that
they experience funding delays due to inadequate proposal preparation. It is the intention of the Institutional Research Review Committee to foster approaches to proposal preparation which will lead to more competitive reviews in both the intramural and extramural funding environments.

The following suggestions are offered to facilitate the preparation and review of proposals:

1. A proposal should be readable and well organized and should follow the proscribed format;

2. The relationship of the proposed study to a cancer-related problem should be clearly stated; anything left to the imagination of the reviewer is at risk of being missed or misinterpreted.

3. The scope of the problem, the rationale for proposed approaches and the feasibility of proposed methodologies must be well documented, with appropriate references and preliminary data where possible;

4. The scientific questions should be clearly focused and experiments must be carefully and realistically designed to yield specific new information within the specified time frame;

5. Methods of analyzing data and of evaluating results should be discussed;

6. The budget request must match the scope and specific aims of the project. Where other sources of materials, equipment or expertise are to be made available which will contribute to or directly impact the studies, these should be clearly documented (e.g., "Biochemical studies of alkaline phosphatase will utilize tissues extracted for histologic investigations supported by NIH grant #HD-45672-04, entitled "Development of Hyperplastic Lesions in the Urothelium of the African Horned Newt");

7. Collaborations proposed and directly impacting the study must be documented by letters of commitment to support the project;

8. Evidence of official clearance for human subjects, animal usage, hazardous materials, controlled substances and radioactive materials must be submitted;

NOTE: Failure to submit a complete application or to submit necessary supporting documentation may result in administrative withdrawal of the application.

**American Cancer Society Institutional Research Grant Policy**

**Special Interest Awards:** An institution may also request up to $30,000 to support research in areas of special interest to the American Cancer Society, such as psychosocial and behavioral research, health policy or services research, cancer in the poor and underserved, or childhood cancer. If such a request is made, specific justification, including the number of faculty engaged in this type of research, the pool of potential applicants, and the suitability of the institution to support such a program,
Indirect Costs: Indirect costs are not allowed on Institutional Research Grants.

New applications must include the following two sections. If this is a renewal application, these sections should be deleted from the Table of Contents and their templates will not be used:

11 DOCUMENTATION OF APPLICANT POOL SIZE (NEW APPLICATIONS ONLY) (PAGE 11 .I)
List all junior faculty who are interested in cancer-related research, excluding those who already hold national competitive research grants. (Information about the latter group is requested under DESCRIPTION OF PROGRAM.) Refer to the POLICIES: REQUIREMENTS FOR APPLICANTS FOR IRG PILOT PROJECT GRANTS, for specific eligibility guidelines.

12. EXAMPLES OF RESEARCH TO BE SUPPORTED (NEW APPLICATIONS ONLY). (PAGE 12.1)
Include approximately five examples of research to be supported if funds are awarded. Provide information about the investigator and the proposed pilot project. Limit each individual project description to one page.

Applications for competitive renewal of an IRG must include the following sections. If this is a new application, these sections should be deleted from the Table of Contents and their templates will not be used:

13. SUMMARY TABLES (PAGES 11 .I - 16.1)
Using the templates for Tables I through VI, please provide the requested information for the past five award years, or for the number of years in effect for grants of less than five years duration. Note: Supplemental materials will be accepted after the April 1 deadline through May 15. However, these items should be limited to updated information about past awardees, i.e., additional grants received, articles published, or information about the recent activities of the institution’s IRG Review Committee.

TABLE I. SUMMARY OF IRG PILOT PROJECT GRANTS
Starting with the just completed grant year (January - December) and working backward, please provide a summary of pilot project grants to individuals for last five years. (For first time renewals, the number of years will be less.) Give the academic title of the investigator at the time of the award, and also the current title and institution, if different from the awarding institution.