



Research Foundation of the ASCRS Career Development Award

I. Introduction

The primary mission of the Research Foundation of the American Society of Colon and Rectal Surgeons is to raise and award funds to support research and educational programs related to colon and rectal diseases. Over the past twenty years, the Research Foundation has awarded over 120 grants and \$4 million to colorectal surgeons and researchers to investigate a broad spectrum of colorectal diseases and to develop novel surgical techniques pertinent to the care of colorectal patients.

II. Career Development Award Overview

Purpose: The goal of the CDA is to provide young surgeons with the support necessary for the initiation and development of an academic career in colorectal surgery. As opposed to the LPG awards, the CDA focuses on career development and mentorship of the individual rather than solely on the research proposal. The award is intended for the academic investigator demonstrating significant creativity in research relevant to the pathophysiology or management of diseases of the small bowel, colon, rectum, or anus.

Funding: \$75,000 per year for 2 years. Second year funding dependent on satisfactory review of renewal request submitted 9 months after start of initial funding period (refer to Section VIII for renewal request)

- CDA may be used for supplies and salary support.
- CDA may not be used for overhead.

Application Deadline: March 1 and October 1

Funding: Spring and Fall

Application Process: Research project applications to the Research Foundation of ASCRS are made on Public Health Service grant application form PHS 398. The PHS grant application process has had a long history of satisfactory operation. By using PHS 398, the process of renewal or extension to subsequent Research Foundation or NIH funding, if applicable, will be facilitated. The Research Committee of the Research Foundation will make every effort to perform a comprehensive review of your application in an expeditious manner. This review may require assignment of appropriate expertise from the scientific community outside of the colon and rectal surgical field.

Mail and email 1 completed application and supporting documents to:

John Monson, MD, Chair, Research Committee
RESEARCH FOUNDATION OF ASCRS
85 West Algonquin Road, Suite 550
Arlington Heights, Illinois 60005-4460

rf@fascrs.org

If you have any questions, please contact the Research Foundation office at (847) 956-1846.

March 2016

III. Award Eligibility

- Within 5 years of first full-time faculty appointment in the United States or Canadian government, public or private not-for-profit medical institution.
- United States or Canadian citizen having completed an approved colorectal surgery training program; if foreign national, then must have valid working visa at time of application for colorectal department/institution where work is proposed.
- ASCRS members only
- Applicant must not currently have or have previously received a career development award from another external funding source. If the applicant receives the Career Development Award from the Research Foundation of the ASCRS and is subsequently awarded another career development award from another external funding source with overlapping funding period, the applicant must return the residual funds to the Research Foundation of the ASCRS, or decline the funding from another source. The exception is a career development award from the NIH K-series award or funding from the applicants own institution.

IV. Preparing Application Materials

Please use the NIH, PHS 398 forms available at: <http://grants1.nih.gov/grants/forms.htm>

Format: Use the NIH continuation pages on the ASCRS or NIH websites.

- Fill in your name on all pages.
- Number all pages
- Use Arial or Times New Roman font
- Minimum font 11pt
- Margins: top 1", sides 0.5", bottom, 0.75"
- Single spaced

Include only the following pages from the PHS 398 in sequential order:

Face page

Description, Performance Sites, and Personnel

Table of Contents

Detailed Budget for Initial Budget Period

Budget for Entire Proposed Period of Support

Budgets Pertaining to Consortium/Contractual Arrangements

Biographical Sketch: Biographical sketches are required from applicant, mentor, and all co-investigators. Use the NIH biosketch form and follow the instructions/format provided on the ASCRS [website](#) or the NIH [website](#). (Biographical sketches should be no greater than four (4) pages in length. Be sure the appropriate page numbers are at the bottom.)

Resources

Other Support: Please list support you will receive for this project from any other sources including government, non-government, and institutional. If none, state “none”. Include for each percent overlap with the current proposal. Use a continuation page for this and entitle it “Other Support.”

- Active support
- Applications or proposals pending review of funding
- Applications and proposals planned on being prepared for submission

Career Development Plan – Describe the following (limit 2 pages), use continuation pages:

- Discuss your background and describe why you are prepared to undertake a career in academic surgery
- Discuss your career goals
- Discuss how you will use this award to achieve these goals

Research Plan (Sections A – J)

Include sufficient information in this section to facilitate an effective review without reference to any previous application. Be specific, informative, and avoid redundancies. Brevity and clarity are encouraged.

Organize the following sections A-D to answer these questions:

- What do you intend to do?
- Why is the work important?
- What has already been done on this subject?
- How are you going to do the work?

A. Specific Aims/Hypothesis:

- Concisely in one page outline what the research described in this application is intended to accomplish and/or why hypothesis is to be tested.

B. Significance:

- Briefly outline background material to the present proposal, critically evaluate existing knowledge. State concisely the importance of the research by relating it to specific long-term objectives.
- Do not exceed three (3) pages.

C. Preliminary Studies:

- Briefly outline any preliminary studies you or your mentor has performed that support your hypothesis and/or demonstrate your ability to perform the methods described below.
- Do not exceed two (2) pages.

D. Experimental/Project Design and Methods:

- Discuss in detail the experimental design or outline of your research and the procedures to be used to accomplish the specific aims of the project. Describe protocols to be used and provide a tentative sequence or timetable. Include means of data analysis and interpretation.
- Describe any new methodology and its advantage over existing methodologies. Discuss potential difficulties and limitations of your project, and possible alternatives to achieve your aims. Make every attempt to be succinct in this section.
- Do not exceed eight (8) pages.

E. Human Subjects – If you intend to use human subjects during your project follow only instructions as outlined below. Be sure to include certification by the institutional review board from your institution with this application, and describe the following:

- Describe the characteristics of the subject population, e.g. anticipated number, age ranges, sex, ethnic backgrounds and health status. Identify criteria for inclusion or exclusion. Explain the rationale for the use of special classes of subjects.
- Identify sources of research material obtained from individually identifiable living human subjects in the form of specimens, records, or data. Indicate whether the material will be obtained specifically for research purposes or whether use will be made of existing specimens, records or data.
- Describe plans for recruitment of subjects and the consent procedures to be followed, including the circumstances under which consent will be sought and obtained, who will seek it, the nature of information to be provided to prospective subjects and the method of documenting consent. The consent form must have institutional review board approval.
- Describe any potential risks – physical, psychological, social, legal, or other – and assess their likelihood and seriousness. Where appropriate, describe alternative treatments and procedures that might be advantageous to the subjects.
- Describe procedures for protecting against, or minimizing any potential risks, including risks of confidentiality, and assess their likely effectiveness. Where appropriate, discuss provisions for insuring necessary medical or professional intervention in the event of adverse effects to the subjects. Also, where appropriate, describe the

provisions for monitoring data collected to insure the safety of subjects.

- Discuss why the risks to subjects are reasonable in relation to anticipated benefits to subjects and in relation to the importance of the knowledge that may reasonably be expected to result.

F. Vertebrate Animals:

- If vertebrate animals have been identified on page 2 of the application, justify their use, state the species, strains, ages, and numbers of animals involved. Describe procedures for adequate maintenance and veterinary care of any animals. Describe procedures to avoid unnecessary discomfort, pain, or injury to the animals, such as surgical anesthesia, post-trauma analgesia, tranquilizing drugs, and comfortable restraining devices. Provide evidence of Animal Welfare Assurance.

G. Literature Sited

- Please list all citations of literature at the end of the research plan, in the order in which they are cited in the proposal. Each complete citation must include the names of all authors, the complete title of any article, the name of the book or journal, volume number, page numbers, and year of publication. Please compile a relevant and current bibliography. It need not be exhaustive.

H. Consortium/contractual arrangements.

I. Consultants.

J. Appendix.

Letter from Research Mentor: Review proposal and provide a summary of applicant's qualifications as well as anticipated role mentor will play in assuring a successful completion of the proposal. A specific plan for mentorship should be included demonstrating commitment to career development of the applicant. The letter should cover the following;

- His or her qualification in the research area proposed by the applicant
- Previous experience as a research mentor
- Address the candidate's potential and his/her strengths and areas needing improvement
- Nature and extent of supervision that will occur during the award period:
 - Include a detailed mentorship plan that describes how the mentor will monitor and evaluate the applicant's progress toward independence
 - Include specific milestones during the award (completion of coursework and submission of manuscript)
 - Provision of annual evaluation of the candidate's progress
- Resources the mentor will make available to the applicant in support of their training

*Co-mentors should provide letters with similar information outlining the respective areas of expertise and how the shared mentoring of the candidate will be coordinated. External mentors should document the mechanism of communication with the candidate including the frequency of remote and face-to-face meetings.

Letter from an ASCRS Fellow: Preferably from someone that has a personal and/or professional familiarity with the applicant and can speak to applicant's ability to successfully perform and complete the proposed research.

Letter from Chairman of the applicant's department or responsible superior: Provide evidence for departmental and institutional support for applicant's research proposal. This should include a specific description of proposed protected time, lab space, and necessary support personnel as may reasonably be required to pursue and/or complete the research proposal

V. Submitting Application Materials

Applications must be submitted in ONE PDF file including all components listed in the table of contents.

**Mail 1 completed application and related documentation and
Email complete application and documentation as one PDF to:**

John Monson, MD, Chair, Research Committee
RESEARCH FOUNDATION OF ASCRS
85 West Algonquin Road, Suite 550
Arlington Heights, Illinois 60005-4460
rf@fascrs.org

VI. Application Review

The Research Foundation of the ASCRS Research Committee reviews all completed applications received by the deadline through a peer review process. The committee is composed of funded researchers who are members of the ASCRS. Members of the committee serve pro bono and do not participate in evaluation of applications from applicants or institutions in which there is a conflict of interest. The committee uses a weighted scoring system that takes into account the applicant's background and potential, the mentorship and training environment, and the research proposal. Applicants are encouraged to consider the committee's scoring process when developing their application materials. Scoring sheets are listed below:

Award Criteria	(A) Weighted Value X	(B) Reviewer's Score	(C) = Weighted Score
Candidate – <i>Potential to become leader in colon and rectal surgery</i> <ul style="list-style-type: none"> • Potential for independent research career • Research experience (publications, grants, presentations) • Adequate training for the project 	45%		
Mentor and Environment - <i>Mentor, quality of department or plans, and environment</i> <ul style="list-style-type: none"> • Able to mentor on the project • Track record of mentorship • Other resources • Facilities for project • Environment • Department background • Plan for career development • Commitment of chair 	25%		
Project – <i>Description and significance</i> <ul style="list-style-type: none"> • Clinical relevance • Quality of grant application • Scientific Merit • Feasibility • Innovation • Potential for independent funding • Appropriateness of budget 	30%		
Overall Preliminary Score:			

VII. Expectations of Awardees

The purpose of the CDA is to promote the academic development of the awardee. This represents a significant investment by the ASCRS Research Foundation. In return, CDA recipients are expected to:

- Submit funded research to ASCRS annual meeting for presentation
- Submit funded research to DC&R for consideration of publication (include a statement acknowledging that the work was funded by a Career Development Award through the Research

Foundation of the American Society of Colon and Rectal Surgeons in all published manuscripts pertaining to work outlined in the proposal.)

- Attend grant workshop sponsored by the Association for Academic Surgery (AAS)
- Provide a progress report nine (9) months after initiation of the award.
- Provide a research report within six (6) months of completion of the funding period.
- Ultimately become active members of ASCRS (serve on committee, journal reviewer, etc.)

VIII. Renewing a Career Development Award

All career development awards may be renewed for two years of total support. To be considered for a second year of funding, you must complete and submit a progress report nine (9) months after the award is funded. Approval of your renewal application is dependent upon availability of funds, evidence of significant progress on the research project, continued commitment to career development and the pursuit of additional funding.

A. Preparing Your Renewal Request

Your renewal package must include the following items:

- *Articles, Chapters and Abstracts* - Prepare a list of your articles, chapters and abstracts that have resulted from your project. Please separate abstracts, peer-reviewed manuscripts, reviews and presentations. Indicate “published, in press, submitted, or presented” for each item and *enclose copies*.
- *Interim Research Report* - Restate your original specific aims, and summarize your results and conclusions thus far. Indicate any deviation you have made from the original research plan and justify these changes. Indicate the present and potential significance to the field of colon and rectal surgery. Indicate the expenditures you have made to date and how they relate to the project. Indicate any problems or delays that you have encountered; for example, problems in obtaining protected time to do research, slow patient accrual in the study, etc. Restate your project goals for the coming year. **Do not exceed two pages.**
- *Career Development Update* - Describe what other projects, academic pursuits, etc. resulted from receipt of the CDA during the funding period (other research projects, clinical trials, coursework, etc.).

IX. Preparing a Final Report

Please send a final report within six (6) months of award completion including the following elements:

- Restate the specific aims/goals of your research plan and demonstrate the result toward each aim/goal. Include all supporting data.
- Indicate any deviations you have made from the original research plan and justify these changes. If you did not reach one or more of your initial goals, explain why.
- Indicate any problems or delays that you have encountered; for example, problems in obtaining protected time to do research, slow patient accrual in the study, etc.

- Prepare a list of your articles, chapters and abstracts that have resulted from your project. Please separate abstracts, peer-reviewed manuscripts, reviews and presentations. Indicate “published, in press, submitted, or presented” for each item and *enclose copies*.
- Indicate if the result from your studies will be used as preliminary data in a grant application to another granting agency.
- Indicate the clinical significance and future clinical impact of the results of your study. Indicate if you received adequate institutional support.
- A one-page statement as to the significance of the support in terms of its contribution to the training of the applicant for a career in colon and rectal surgery, including future plans.
- A financial report must be submitted at the same time as the final report with a complete financial accounting of all ASCRS funds expended over the entire life of the project including a list of assets and any equipment purchased with these funds and any travel expenses associated with the award. Please indicate how the expenditures relate to the project.

Please submit Renewal requests and Final Reports to:

John Monson, MD, Chair, Research Committee
 RESEARCH FOUNDATION OF THE ASCRS
 85 West Algonquin Road, Suite 550
 Arlington Heights, Illinois 60005-4460
rf@fascrs.org

X. Grant Writing Suggestions

The following bullet points provide some helpful suggestions for grant applicants. The comments are based on many years of experience reviewing grant applications by the members of the Research Committee.

The Research Committee is anxious to provide funds for researchers but is very clear that its mandate is to only support the best quality applications. The members of the committee are all experienced grant reviewers, recognized independent investigators, or both. All applications will receive a thorough and critical review and applicants will receive the verbatim review comments whether or not the application is funded.

Planning and Writing the Grant Request:

- Start early and meet the deadlines. Allow plenty of time to put the application together.
- Read the instructions.
- Follow the instructions.
- ***The Research Committee likes to see thoughtful writing and planning. Grants that are hastily put together, have grammar/spelling errors, or don't make sense are not funded.***
- A common rule of thumb for many experienced grant writers is to have a final draft of the grant completed at least a month prior to its deadline. Ask for a respected colleague not involved in the work to critically review and proof the grant prior to submitting.

- Write the grant so that it is readable. Make the font large enough to be comfortably read. Make the content understandable for someone who is not an expert on your topic. The more understandable the grant, the better the review will be, and if everything else is equal, it will more likely be funded. If you take excerpts from a paper, make sure the tenses match. Make sure the separate excerpts flow well.
- Read carefully and avoid typos, these create concerns that your work is sloppy.
- Don't copy another person's grant. It usually shows. If you must take excerpts from another grant, make sure the fonts match.
- Tell us why this work is important and what it might lead to.
- Have a specific overall hypothesis that asks a specific question. There should also be a hypothesis for each specific aim. Be very clear about what your hypothesis is.
- Provide preliminary data if allowed. Preliminary data can be of 2 types: data that supports the hypothesis or data that may not be relevant to the grant but shows that you can perform a technique (especially a difficult one). Tell the reader how the preliminary data supports your application, and don't make the reviewers figure it out.

Letters of Support:

- ***Read your letters of support if possible. Make sure that you get the pertinent letters of support from the colleagues involved in the study and appropriate mentors as required.***
- Make sure the letters have your name and the title of your project correctly identified.
- Make sure the writer knows something about the project and that the letter reflects that understanding.

Timeline, Resources, Budget, and Results:

- Make a timeline of the study grant to go along with the proposal.
- Make sure the project is feasible, including the funds, the time period, and the personnel. The methods section is very important in this regard.
- Make us believe that you can actually do the work you say (show us how you have the resources, the track record, the expertise, and the time).
- Make sure the budget is appropriate for the grant.
- If your proposal will cost \$40,000 and the grant is only for \$30,000, explain where you are going to get the extra \$10,000 (department funds for example) if you are funded.
- Make sure the budget is reasonable. The review committee has an idea of what things cost – so embellishing the figures is not wise.
- Tell the reader what you expect the results to be.

Helping the Reviewers Understand Your Grant Request:

- Don't assume reviewers are thoroughly familiar with the literature in your specialized field.
- Don't assume reviewers are familiar with the validity of all of your experimental techniques as they pertain to the area being studied. Cite literature that supports that your technique will reliably answer your question.
- Help the grant reviewers understand the significance of the grant proposal. Why is your project so important to fund? Do not assume the reviewer will understand. Make it crystal clear.

- Think like a reviewer. Identify the challenges, limitations, biases, and then address them as best as possible. The more these issues are addressed, the better. Tell the reader what alternatives you will try if your proposed experiments don't work.

Animal Subjects and IRB Approval:

- When using animals in experiments, a chart that shows the animal groups is often helpful.
- When using animals make sure that you accurately count how many you will need based on the experiments proposed.
- Have the appropriate animal or IRB approval that the instructions request (some grants require approval; some grants accept "pending approval").
- Don't forget that animals have housing and shipping costs in addition to purchase.

Resubmission of Your Grant Request:

- ***When submitting a revised grant, make sure the changes that are made in response to the critiques are absolutely clear. Use the comments of the reviewers to strengthen your rejected grant for the next application cycle.***
- Note on the revised grant that it is a resubmission.

Finding the Right Grant-giving Organization:

- Do a thorough check of granting organizations to arrive at one likely to be interested in funding you.
- The Research Committee is anxious to help applicants succeed, however all decisions are final. Applicants are welcome to resubmit their applications for the next CDA application review.

Suggested Reading:

Consult the book "Grant Application Writer's Handbook" by Liane Reif-Lehrer, Jones and Bartlett Publishers, International, Boston, London. This is a well-written, clear and concise guide to grant writing.

"*The Grant Application Writer's Workbook - Guide to a Successful Proposal*" for the NIH (and any other public health service agency for the PHS SF424 application guide (04/2006). The authors are Stephen W. Russell and David C. Morrison, of Grant Writers' Seminars and Workshops, LLC. The URL is <http://www.grantcentral.com>. While this won't help with the subject choice or the hypothesis, per se, perhaps it will help with the level of content, organization, and structure.

Sincerely,
John Monson, MD
Chair Research Committee

March 2016