



RADIOLOGY RESIDENT RESEARCH GRANT

PURPOSE

To foster an interest in research among young investigators by funding a research project conducted by a radiology resident in an area identified by SIR Foundation as important to advancing interventional radiology and patient care. SIR and SIR Foundation believe in promoting a culture of inclusion and strengthening the specialty of interventional radiology (IR) through different perspectives.

AWARD

Award Budget: Up to \$20,000 for 12 months

Recipients will devote a minimum of 20% of their time in the approved research project under the guidance of a scientific advisor.

NATURE OF PROJECTS

This funding mechanism is intended to provide support for project-related supplies and equipment for radiology residents conducting summer research projects that test a new idea or help support a new area or direction of research in interventional radiology.

EXAMPLES OF RESEARCH TOPICS

Projects may include but are not limited to topics such as

- Explore the role of IVUS or other intravascular imaging in determining endpoints in chronic limb ischemia
- Explore the role of ultrasound imaging in arteriovenous lesion identification pre-procedure to improve interventions
- Investigating the role of SVC stenting in oncologic patients
- Defining the best interventions for superficial vein disease (thermal vs. non-thermal)
- Comparing IR for spine interventions for pain to external beam radiation with a particular focus on the length of stay
- Review patient outcomes of adenomyosis treatment for all patients through the development of a quality-of-life questionnaire
- Evaluate imaging criteria of adenomyosis and correlate with pathology and symptoms to establish a non-invasive imaging classification system

ELIGIBILITY

- Applicant must be citizens of the United States or Canada or have permanent resident status. Permanent residents must submit documentation of their status.
- Applicants must be currently enrolled in an accredited radiology residency training program in a medical institution within the U.S. and Canada.
- The applicant must designate a project advisor who will mentor the resident for the duration of the research project. The applicant must also receive a three-month time commitment from their residency program to



perform the research project.

- Grant recipients will not be eligible for concurrent support through other SIR Foundation research grant programs.

APPLICATION DEADLINE

Applications are due by close of business day on January 15, 2023. The deadline remains whether or not the date falls on a weekend and/or holiday. Applications that are incomplete or do not comply with the guidelines, will be withdrawn from the review process.

Applicants are to submit their completed application via the online form found at:
apply.sirfoundation.org.

REVIEW PROCESS

After preliminary review and scores are submitted for each application, reviewers will convene during Study Section held at the SIR Annual Scientific Meeting, where applications will be discussed for a second level of review and funding recommendations will be made to the SIR Foundation Board.

Post-Review

The SIR Foundation Board will review SIR Foundation's Grant Review Study Section funding recommendations and will make the final funding decisions. Grant applicants will be notified of final funding decisions after the SIR Annual Scientific Meeting.

Funding decisions are based on the overall impact/priority score which reflect assessment of the likelihood that the project will exert a sustained, collaborative influence on the field of interventional radiology through basic science or translational research.

Applicants will receive reviewer scores and comments after final funding decisions have been made and recipients are notified. If the application is not funded, applicants will have the opportunity to resubmit their application and make the necessary changes that addresses the reviewers' concerns.

PAYMENT SCHEDULE

Upon submission of a fully executed grant agreement, grant funds will be transmitted to the institution for support of the grant recipient and the project. Funds for this grant will be distributed in one installment.

Please provide the following information to SIR Foundation's Manager of Research and Grants:

- 1) Grant Official or Grant Administrator's name, phone number, and email address
- 2) Check made payable to:
- 3) Mailing address (where payment should be mailed)

APPLICATION PROCEDURES

Applicants should propose research that advances the field of interventional radiology. The application must contain a detailed research plan and a project budget for the planned research with all available funding to support the project indicated. Failure to describe completely the sources and use of other funds available to the investigator will result in deferral or disapproval of the application.



A letter is required from the department residency director that must indicate:

- Approval of application
- Comments on the merit of the project and its relevance to interventional radiology
- Explains the extent to which the department is supporting the applicant's research in terms of funding and/or available facilities.
- Letter must also state the department's commitment to provide the resident with three months of dedicated time to perform the research project. It is important that the letter indicate the institution's commitment to provide the necessary time, space, equipment, and facilities to the applicant during the research period.

In addition, a letter from the resident's designated advisor should accompany the application. This letter should indicate the advisor's willingness to mentor the resident, detail the scope of the resident's project and comment on its merit and relevance to interventional radiology, and outline the educational value of the research experience towards developing the resident's research education.

The application must be submitted electronically through the online application by **January 15, 2023**. Applications must be submitted in PDF format. Incomplete applications and those submitted after the deadline of **January 15, 2023**, will not be reviewed.

REPORTS

A final written report must be submitted within sixty (60) days of the project's completion.

The Final Progress Report must be submitted electronically through the online forms found at apply.sirfoundation.org. This report should be a synopsis of the project's progress, unforeseen problems, and results.

Included with the report should be a detailed description of the project that:

1. States the specific aims/goals of the research project(s) and summarizes the results relating to each specific aim/goal (all supporting data should be included);
2. Indicates the significance/possible clinical impact of the results;
3. Describes any unforeseen issues that were encountered and how they were resolved;
4. Indicates whether data from the project(s) has been or will be submitted for presentation at the
 - a. SIR Annual Scientific Meeting;
5. States whether the results will be submitted for possible publication, and if so, to what journal;
6. Indicates whether results will be used to apply for additional funding from other sources, and if so, the funding agency and date of application should be included;
7. States what impact the SIR Foundation Radiology Resident Research Grant had on the recipient's future research/career goals;
8. Has this project resulted in any new discoveries (e.g. Inventions, patents, copyrights, trademarks, etc.)? If, yes, please explain.
9. An account of any unexpended funds and/or major modifications of the budget. If the unobligated balance is greater than 25% of the total approved budget, the recipient must provide an explanation.
10. Include Signature of Principal Investigator/Program Director's name, Signature of Authorized Institutional Official, and Date.
11. When uploading your Final Progress Report (FPR) to our online forms, you must save your Final Progress Report using the naming convention below. The year should be the year that you were



awarded.

- a. 2023_FPR_Resident Grant_Mary Johnson

PRESENTATIONS/PUBLICATIONS

It is suggested that recipients submit their work primarily to JVIR or to the SIR Annual Scientific Meeting. All posters, oral presentations, and publications must contain appropriate acknowledgement of SIR Foundation's support.

NO-COST EXTENSION

One extension of the term of the grant may be requested for up to two (2) months beyond the original ending date of the grant. The approval of an extension does not include the award of additional funds.

The request for a no-cost extension must be made in writing to the Grant Review Committee at SIR Foundation's address before the expiration of the original grant period. The request must include the reason for the extension, the length of the extension (not to exceed two [2] months), and a brief project progress report, including to-date findings and problems encountered. The request must be co-signed by the Department Chair, designated advisor, and an authorized institutional official.

Other requests for changes to the terms of an award should also be addressed to the Grant Review Committee with similar documentation and institutional approvals.

MODIFICATION OR TERMINATION OF SUPPORT

The SIR Foundation reserves the right to modify or terminate the amount of any funds granted under the terms of the Radiology Resident Research Grant. Generally, such action would be based on the awardee's receipt of support from sources other than SIR Foundation which might (1) limit the ability of the recipient to successfully complete the terms of the award or (2) obviate the recipient's need for funding from SIR Foundation.

AWARD EXPENSES

This grant is intended to provide support for project-related supplies and equipment during the period that the research will be conducted. A detailed budget should describe anticipated expenses for materials and supplies, equipment, and service function charges (e.g., pathology costs or reasonable imaging machine time charges).

The award may not be used for any purpose other than project-related supplies and equipment. This award does not provide salary support. Institutional indirect costs, construction expenses, and secretarial or office expenses will not be funded.

If the project involves the use of human subjects, animals, radioisotopes, or biohazards, documentation of approval from the appropriate institutional review board(s) (IRB) or the Institutional Animal Care and Use Committee (IACUC) must be provided before release of funds.

All unexpended funds must be returned to SIR Foundation.

PUBLICITY OF GRANT RECIPIENTS

After funding decisions have been made, SIR Foundation will publicize the grants and recipients through



various communications methods such as press releases, the webpage, and other electronic sources. Such information that will be used to publicize will include the recipient's name, institution, and project title.

GRANT APPLICATION FORMAT

When uploading your grant application to our online form, you must save your grant application using the naming convention below.

Year_Grant Mechanism_ _Applicant Name
i.e., 2023_Resident Grant_Mary Johnson

If you have a resubmission you must save your grant application using the naming convention below.

Resubmission Year_Resubmission #_Grant Mechanism_Applicant Name
i.e., 2023_Resubmission 1_Resident Grant_Mary Johnson
2023_Resubmission 2_Resident Grant_Mary Johnson

All the items detailed below must be included in the application before it will be considered. Incomplete applications will be rejected or deferred until the requested information is provided. The format should follow the guidelines used for NIH applications found on the [NIH website](#).

I. Title Page:

- A. Title of research project;
- B. Lay statement of the proposed research project and its relevance to interventional radiology;
- C. Name, faculty position, and department of resident's designated advisor and any other professional personnel collaborating in the research project;
- D. Brief abstract (ten [10] to twenty [20] lines), with keywords underlined;
- E. Proposed project start and end dates;
- F. Signatures of resident, advisor, and residency program director.

II. Description of Research Plan:

The applicant must present his/her research logically and clearly and show that the proposed research is meaningful. (LIMIT—FIVE (5) PAGES FOR SECTIONS A-D)

A. Specific Aims:

State in a concise and explicit manner what is/are the goals and objectives of the research project. Provide specific aims and hypotheses being tested to meet these goals and objectives (approximately ½ page);

B. Background and Significance:

State why the work proposed is important. Briefly identify what others have done and what gaps in existing knowledge will be filled by the results of the proposed research (approximately 1 page);



C. Preliminary Studies:

Applicants should provide any data they have generated relevant to the application in a concise format (including references to published works by the applicant and co-investigators) to support the specific aims and convince the reviewers that the applicant is competent to conduct the proposed research; (approximately ½ to 1 page)

D. Research Design:

Discuss the experimental design and procedures to be used to test the hypothesis or accomplish the specific aims of the project. Be complete with your descriptions and relate individual methods and approaches to the specific aims previously described. While the applicant may safely assume that the reviewers are familiar with current methodology, reviewers will not make the same assumption about the applicant. The reviewers will want to know specific details of techniques / devices that will be employed, as well as the rationale for using them. The burden of proof is on the applicant to show, through a succinct explanation, that he or she understands and is capable of handling the research methodology. If new procedures and protocols are proposed, describe advantages over existing methodologies. Indicate what quantitative measures will be used to record and analyze the data. Indicate whether statistical considerations have been employed in designing the studies and/or analyzing the data, and provide the specific statistical method(s) Include a discussion of the potential difficulties, limitations, and alternative approaches. (approximately 2 pages);

E. Human or Animal Subjects, Radioisotopes, and Biohazards:

Indicate whether the proposed project will involve human subjects, animal subjects, ionizing radioisotopes, or use of biohazards. Funded projects must submit appropriate documentation of institutional approval before funds are disbursed. Such documentation includes an IRB approval for human subjects, IACUC approval for animal subjects, or institutional review committee approval for radioisotope and/or biohazard use.

F. Budget Proposal:

List budget items in the following main categories and give details and justification of the items in each category;

- a. Consumable supplies including animal purchase costs;
- b. Equipment: Identify each item, show unit cost, and explain why it cannot be borrowed;
- c. Other expenses (only those service costs essential to the conduct or reporting of the research);
- d. Total budget.

Please be reminded that the detailed budget should describe anticipated expenses for materials and supplies, equipment, and service function charges (e.g., pathology costs or reasonable imaging machine time charges) and the award may not be used for any purpose other than project-related supplies and equipment. This award does not provide salary support. Institutional indirect costs, construction expenses, and secretarial or office expenses will not be funded.

G. Other Support:

Describe all funding currently available and pending to support the proposed research;



H. Literature Cited

III. Supporting Materials:

- A. Resources: Describe the facilities available for conduct of the proposed research including lab space, equipment, computers, technical/statistical support, etc.;
- B. An updated copy of the medical student's CV;
- C. Brief biographical sketch of resident's designated advisor and all other investigators in NIH biographical sketch format (To view a template, go to: <https://grants.nih.gov/grants/forms/biosketch.htm>)
- D. A letter from the department's residency director that:
 1. Indicates approval of application;
 2. Comments on the merit of the project and its relevance to interventional radiology;
 3. Explains the extent to which the department is supporting the applicant's research in terms of time, funding, technical support, and available facilities.
- E. A letter from the resident's designated project advisor that indicates the advisor's willingness to mentor the resident for the duration of the research project and comments on the project's merit and relevance to interventional radiology;
- F. Letter(s) of confirmation from the company(s) providing materials needed to complete the proposed research.