

# Research Medical Student Grant

Policies and Procedures
Revision Date: September 2022

#### **Purpose**

To increase the opportunities for medical students to have a research experience in medical imaging and to encourage them to consider academic radiology as an important option for their future. Recipients will gain experience in defining objectives, developing research skills and testing hypotheses before making their final choices for residency training programs. Students are expected to undertake a research project requiring full time efforts for at least 8-10 weeks under the guidance of a scientific advisor during personal/vacation time or during a research elective approved by their medical school.

#### **Nature of Projects**

Any area of research related to the radiologic sciences, from hypothesis-driven basic science and clinical investigations to topics such as drug, device, and therapy development; comparative effectiveness, evidence-based radiology, ethics and professionalism, quality improvement, clinical practice efficiency, and imaging informatics.

#### **Amount**

- RSNA will provide \$3,000 to be matched by the sponsoring department (\$6,000 total), as a stipend for the medical student.
- Funds are intended to secure protected time for the recipient and may not be used for non-personnel research expenses.
- The RSNA Research & Education Foundation does not pay institutional indirect costs or overhead costs.
- Travel expenses for the RSNA Scientific Assembly and Annual Meeting may not be paid for by this grant.
- Unexpended funds must be returned to the Foundation.

## **Award Terms and Payment**

- Grant payment will be made to the institution/department as one installment of \$3,000.
- The sponsoring department is responsible for providing \$3,000 matching funds.

#### **Deadline for Application**

Applications must be completed online and submitted with scanned signature page by end of day *February 3*. If the deadline date falls on a weekend or holiday, the deadline will be extended to the next business day. Applications will not be accepted after the deadline date. Applications that are not complete, do not comply with the instructions, or do not have properly executed signatures, will not be reviewed. See the Foundation's Website for details, RSNA.org/foundation.

#### **Eligibility**

- Applicant must be an RSNA Member (at any level) at the time of application, and throughout award duration. If the applicant's
  membership category is Member-in-Training or any other non-dues paying category, the scientific advisor or one of the coinvestigators must be a dues paying member.
- Applicant must be a full-time medical student at an accredited North American medical school.
- The research project must take place in a department of radiology, radiation oncology, or nuclear medicine in a North American educational institution; however, it is not required that the research take place in the same institution where the student is enrolled.
- Applicant must not have been principal investigator on external/extramural grant/contract amounts totaling more than \$60,000 in a single year. The restriction on prior funding includes support from single or combined grants or contracts from any source including government, private or industrial/commercial sources.
- Applicant/co-principal investigator(s) must not be agents of any for-profit, commercial company in the radiologic sciences.
- Applicant may not submit more than one research or education grant application to the RSNA R&E Foundation per year.
- Recipients may not have concurrent RSNA grants.
- Supplementation of funding from other grant sources must be approved by Foundation staff if not described in the original research plan. Awards from other sources may be approved by Foundation staff if the investigator submits a satisfactory plan to address any budgetary overlap.

## **Selection Criteria/Review Process**

A review panel consisting of members with expertise in diagnostic radiology, interventional radiology, radiation. Final selection will be based on the average scores of the applications and be subject to the approval of the Foundation Board of Trustees. Due to the large number of applications, the feedback to applicants will only indicate whether or not the application has been funded. Applicants will be notified of the outcome of their applications by e-mail. The following guidelines will be applied in the review process:

#### Research Project:

Is the hypothesis clear? Are methods for testing the hypothesis described? Is the proposed statistical analysis appropriate for the study design? Is there a reasonable chance of completion within the time frame of the grant? Will the results have scientific value?

#### Applicant

Will this experience enhance the applicant's investigative skills? Does the applicant show interest in the radiologic sciences and in the subject matter of the proposal?

#### Facilities and Advisors:

Is appropriate space and equipment available? Is the planned interaction between the scientific advisor and medical student substantive?

## CONDITIONS OF THE RSNA RESEARCH MEDICAL STUDENT GRANT

#### 1. Commercial Sponsorship

A portion of the total funds available for the RSNA R&E Foundation's grant programs is in the form of endowments from commercial companies or other sources; some recipients may have their grant named after a company. Grant awards are named only after funding decisions have been made. Company named awards do not imply commercial endorsement of the grant recipient, the research or the institution. Similarly, named awards do not imply endorsement of the commercial sponsor by the grant recipient or the institution. An institution's inability to accept endowed awards will not preclude the award.

# 2. Publicity of Award Recipients

The R&E Foundation will issue a press release and publicize the award in its print and electronic properties. Information submitted in the application and subsequent reports including the recipient's name, institution, likeness, project title and abstract can be utilized in the promotion of the award. Other external promotional opportunities are at the discretion of the individual recipient.

# 3. Progress Reports

A final report must be submitted to the Foundation's address within 60 days after completion of the project. Reports are distributed to the Foundation's Board of Trustees and cosponsoring entity if applicable, to determine the effectiveness and success of the program. Failure to comply with the final report requirement may negatively affect the home institution department's eligibility to receive future funds from the RSNA R&E Foundation.

Final reports must are to be submitted electronically (MS-Word) by email attachment with CC to the department chair and scientific advisor(s), if applicable. Complete reports must address each of the following:

## Final Report:

- 1. Prepare an expanded abstract consisting of 1500 2000 words divided into Purpose, Methods, Results and Conclusions. Include appropriate tables, figures and references.
- 2. Restate the specific aims/goals of your research plan and indicate the progress made toward each aim/goal. **Include all supporting data as an appendix**.
- 3. 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.
- 4. 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.
- 5. Indicate if the results from your studies are being prepared for publication or will be prepared for publication within the next six months.
- 6. Indicate if the results from your studies will be used as preliminary data in a grant application to another granting agency.
- 7. Indicate the clinical significance and future clinical impact of the results of your study.
- 8. Indicate the strengths and weaknesses of the grant program in which you participated.
- 9. Indicate the influence or role that the grant from the RSNA Research & Education Foundation had on your career or will likely have in the future.

#### 4. Annual Survey

Recipients agree to participate in an annual survey that will help the Foundation's Board of Trustees track current contact information, additional grant monies received from other sources, scientific publications, and career advancements.

# 5. Publications

Scientific and educational manuscripts resulting from R&E Foundation-funded projects must be submitted first to the RSNA Scientific Assembly and Annual Meeting to be considered for presentation, and/or to *Radiology*, *RadioGraphics*, *Medical Physics*, or the *International Journal of Radiation Oncology*, *Biology and Physics* to be considered for publication (right of first refusal). Manuscripts that are not accepted for publication in one of the four listed journals may be submitted to the journal(s) of the authors' choice. Authors who wish to bypass the right of first refusal process must receive written permission from the Grant Program Committee/Board of Trustees. One reprint of each publication produced as a result of RSNA R&E Foundation-funded work should be sent to the Foundation's address for distribution to the Trustees. All posters, publications, and oral presentations of R&E Foundation-funded projects must contain appropriate acknowledgment of the Foundation's support and sponsoring commercial company (if applicable).

#### 6. Extension

A no-cost extension of the terms of this grant may be requested to extend the final budget period up to 12 months beyond the original ending date. Approval of an extension does not include the awarding of additional funds. A request for an extension along with a progress report must be made in writing to the chair of the Grant Program Committee at the Foundation's address before the expiration of the original grant period. The request must state the reason(s) for the extension, length of the extension requested, and an explanation of how the reason(s) for the delay has been rectified. Requests must be co-signed by the department chair. Interim reports must be submitted every six months during the extension period. Other requests for changes to the terms of an award should be addressed to the chair of the Grant Program Committee with similar documentation and institutional approvals.

# 7. Modification or Termination of Support

The Trustees reserve the right to modify or terminate the amount of any funds granted under the terms of the Research Medical Student Grant program. If the support level has to be modified by the RSNA R&E Foundation Board of Trustees for any reason, the grant recipient will be notified in writing at least 90 days prior, and the investigator will have the option to modify the research plan or terminate the grant.



# **Research Medical Student Grant**

# **Application Instructions**

Applications must be completed online and submitted with scanned signature page by end of day *February 3*. If the deadline date falls on a weekend or holiday, the deadline will be extended to the next business day. Applications will not be accepted after the deadline date. Applications that are not complete, do not comply with the instructions, or do not have properly executed signatures, will not be reviewed. See the Foundation's Website for details, RSNA.org/foundation.

#### **Application Instructions**

To enter a new applicatoin click "New" applicatoin button under the appropriate grant type.

## Section I: Proposed Research Title

Enter proposed research title, click save and continue to proceed to the application.

#### Section II: Abstract

Click "Enter Abstract Text" link to enter text into the abstract box.

Abstract should serve as a succinct and accurate description of the proposed plan.

The abstract should include the long-term goals of the proposed work and the methods to be used. Data collection and analysis should be summarized along with the potential clinical significance and future clinical impact of this work. **Abstract not to exceed 300 words.** 

#### **Section III: Project Short Summary**

Click "Enter Project Short Summary Text" link to enter text into the project short summary box.

# Project Summary, maximum 3 sentences

Communicate the public health relevance of the project to donors and the general public. Using plain language understandable by a general audience.

#### Section IV: Research Profile

Select up to two research categories that align with your proposal. The information selected will be used to help match your proposal with study section members that have compatible interests, expertise and experience.

#### **Section V: Additional Project Details**

- A. Please enter the total dollar amount requested from RSNA to support this project (across all years of the project): Note: You will need to include a budget and justification at the end of the application.
- B. Research Assurances.

Will the project involve any of the following? Funded applicants are required to submit approvals <u>before</u> grant funds are released Human Subjects?

Vertebrate Animals?

Ionizing Radiation/Radioactive Isotopes?

Other, requiring institutional research assurance approvals? (recombinant DNA, etc)?

C. Location of Study:

Specify the institution, department and country where the research/education project will take place

D. Investigator Additional Details

Are you currently certified by the American Board of Radiology (ABR) or equivalent?

Enter name of certifying agency.

Select specialty.

Key Training Dates (degrees, completion of residency and fellowship training)

Current year of training, or faculty position/rank

Time allocated to the proposed project, and to other duties. Specify a percent and time.

# E. Priority Statement:

Describe your area of professional/scientific interest(s) and long-term career goals and objectives. Explain how the opportunity of a Research Scholar Grant relates to the personal plans and ambitions of the applicant, and to the priorities of the nominating institution. Describe the applicant's potential for advancement in faculty rank during or shortly after the proposed program, any other information that might be helpful in the evaluation of the application. **Not to exceed 1000 words.** 

#### F. Resubmission Information:

Is this applicatoin based on a proposal previously submitted to the RSNA R&E Foundation within the past two years?

Please provide brief details of the previous submission. If you cannot recall the details, contact the R&E Foundation grants@rsna.org

The following details are needed:

- Grant Program:
- Year of Submission:
- Grant Title:
- Grant ID:
- Funding Outcome:
- Summary of the reviewer comments and explanation of how each issue has been addressed in the current application:

## Section VI: Radiation Oncology Applicants Only

To support the Foundation's fundamental objective of supporting imaging science(s) along with a desire to promote team science with radiology collaborations, the R&E Foundation requires a multi-disciplinary approach for all radiation oncology grant applications. To achieve this, radiation oncology grant applications are required to have (1) an imaging component or (2) partnership with a mentor/advisor or co-investigator in a radiology department.

## **Section VII: Investigators**

Other Investigators: (if any) Other investigators/scientific advisors/consultants who will contribute significantly to the project should be listed.

Please upload biosketches as ONE file at the end of the application. When uploading biosketches, include a description of the role they will play in the proposed research project within each personal statement.

#### Section VIII: Scientific Advisor

To be completed by the scientific advisor

- A. Name, degrees, title/faculty rank
- B. Percent of time that will be devoted to the proposed research project and brief description of the advisor's role as mentor for the applicant (an Advisor must be designated to provide advice on all aspects of the project, including the performance and interpretation of the data, and preparation of any publication, presentation or additional grant submissions arising from the grant). Not to exceed 1000 words
- C. Describe the extent to which the applicant was responsible for developing and writing the research proposal. Relationship and overlap with existing research programs should be specified in detail. **Not to exceed 500 words.**

# Section VIII: Uploads

**Font, Page Formatting, and Figures:** Conventional font types (Arial, Times New Roman, Helvetica, etc.) and a font size no smaller than 11-point should be used. Page margins should be no less than 0.5 inch. Embedded figures should adhere to the page margins and should have descriptive figure legends. Figure legends can be smaller than 11-point but must be legible.

# Required files: SUBMIT ONE PDF IN THE FOLLOWING ORDER:

- **1. Biosketches** For all key personnel, an NIH-style biosketch must be provided. When uploading biosketches, include a description of the role key personnel will play in the proposed research project within each personal statement. Biosketch page limits to be followed as those outlined by the NIH.
- 2. Resources and Environment: Describe major equipment, laboratory, clinical, animal, office/computer, support services, education resources, and other facilities (simulation centers, survey cores, etc) that will be available for this project.

# 3. Detailed Research/Training Plan:

Provide a concise description of the research study and training program, including details of the experimental design, methods to be used, data collection and analysis. The significance of the work in the radiologic sciences and to the applicant's future in academic radiology should be emphasized. The research/training plan should be thorough but focused and as brief as possible. Not to exceed two pages, including figures, tables, etc. Use 0.5" margins and size 11 Arial font. Additional pages may be included for the bibliography.

#### 4. Budget & Other Sources of Support

Detailed Budget & Justification. *The RSNA Research & Education Foundation does not pay institutional overhead costs or indirect costs.* Travel expenses for the RSNA Scientific Assembly and Annual Meeting may not be paid for by this grant.

Please use the provided budget template and include a budget justification along with detailed information on other sources of support (pending and received).

#### 5. Letters of Support (if applicable)

Letters of recommendation/support are not required or accepted; however, if equipment or supplies for the proposed study will be provided by a source other than the applicant's department (such as a commercial company), include a letter of intent/agreement from that source. Similarly, if the study involves significant collaboration with individuals other than the scientific advisor, include appropriate letters of agreement.

## 6. Signatures

Enter names and contact information for your department chair, scientific advisor (if applicable) and grant administrator. Download the signature page (PDF), obtain signatures, and upload the signed document into the application.

# **Submit the Application Online**

When all sections of the application have been completed, click the "Review My Work" button, to submit and view the compiled grant application. Make sure the data and uploaded documents have been formatted correctly. You may download a print-friendly version of your submission from this page and opt to have an emailed confirmation of your submission emailed to you.

#### Questions?

Keshia Osley, Assistant Director, Grant Administration Radiological Society of North America, Research & Education Foundation 1-630-571-7816, grants@rsna.org