

RSNA Research & Education Foundation Request for Application (RFA)

OVERVIEW INFORMATION

RFA Posted Date	January 18, 2024
RFA Number	REI-2024-EIS
Funding Opportunity	RSNA Emerging Issues Grant
Funding Opportunity Topic	Environmental Impact and Sustainability of Radiology
Announcement Type	NEW
Funding Opportunity Purpose	<p>The RSNA Research & Education Foundation (R&E Foundation) is invested in ensuring that the current and next generation of radiologists are able to meet the needs of our continuously evolving profession.</p> <p>The RSNA R&E Foundation is seeking proposals to address the environmental impact of radiology. According to the Journal of Clinical Medicine, medical imaging is responsible for 1% of global greenhouse gas emissions. How can radiology spearhead addressing climate change and increasing our value in health care systems? What links exist or could be explored between addressing the environmental impact of radiology and healthcare disparities? What strategies can be explored to increase radiology sustainability while preserving quality and safety?</p> <p>This grant focuses on assessing radiology’s environmental impact and sustainability. While data gathering may require collaboration with institutional resource management departments, industry partners, and equipment/supply vendors, the Principal Investigator (PI) will solely lead the project. Industry involvement will be limited to collaborator and support roles, with the PI primarily responsible for research performance and project ownership. Grant applications should be designed to have an accelerated timeline relative to current Foundation research grants to enable funding for this urgent need.</p>
Application Deadline	March 22, 2024
Application Instructions	Full applications must be submitted through the RSNA R&E Foundation online grant site. Eligibility requirements, application instructions, and other details are in the RFA full text announcement. Applications that do not comply with the instructions will not be accepted for review.
Scientific Merit Review	April 2024
Applicant Notified of Funding Outcome and Earliest Start Date for Funding	May 2024 Applicants will be notified of the funding outcome by email communication. Awardees must comply with the grant policies and procedures.
Contact	Keshia Osley Assistant Director, Grant Administration grants@rsna.org 630-571-7816

FULL TEXT OF ANNOUNCEMENT

Funding Opportunity Description

Background

This RFA seeks to foster innovative research that addresses the critical intersection of sustainability, imaging value, and the future of radiology. As the healthcare industry strives to minimize its environmental impact, radiology departments need to understand their current carbon footprint in order to prioritize strategies to reduce environmental impact while maintaining clinical impact on patient care. This RFA will stimulate research that explores strategies for optimizing imaging value in a sustainable future.

Objectives

This RFA aims to stimulate research on radiology sustainability. Specific objectives include:

- Assessing current state environmental impact of radiology
- Raising awareness of sustainability issues among radiologists and healthcare providers
- Developing strategies to reduce the environmental impact of radiology practices

Scope

Research proposals should address one or more of the following areas:

- Energy efficiency: Develop innovative methods to reduce energy consumption in radiology practices, such as optimizing imaging protocols and utilizing energy-efficient equipment.
- Waste reduction: Implement strategies to minimize waste (e.g., supplies, equipment and medications) from diagnostic imaging and interventional radiology procedures, including increased use of reusable equipment and promotion of recycling programs.
- Imaging appropriateness: Establish measures that link sustainability and environmental impact to guidelines and decision support tools that promote value-driven imaging.
- Eco-friendly imaging techniques: Explore the use of imaging techniques modalities and/or utilization to address radiology's environmental footprint.
- Environmental healthcare disparities: Address patient access to radiology services while mitigating the environmental impacts of such access.

Significance

By promoting sustainable practices in radiology, we can address the significant impact of health care on the climate, reduce our environmental impact, conserve resources, and protect human health.

Award Information

Application Types Allowed Accepting new applications

Anticipated Number of Awards

To be determined, based on applications.

Award Budget

Application budgets with direct costs of up to \$100,000 will be considered.

Award Project Period

Grants of one year will be awarded. Funding for a subsequent year will be dependent upon successful completion of specific project milestones.

Selection Criteria

Applications will be reviewed on the following:

- Innovation
- Expected impact of the intervention on the investigators' institution/s patient population/s and on the general public
- Knowledge of and experience within the specific topic
- Investigators with affiliation or demonstrated collaborative efforts with community partners
- Well-defined and researched needs assessment that articulates current gaps
- Metric-based outcomes analyses that demonstrate achievement of objectives
- Scalability/expandability
- Content monitoring, update strategy and sustainability
- Timeline and Milestones to completion (will be used to determine if subsequent funding is merited)

Eligibility Information

Applicant (Principal Investigator) must be an RSNA Member (at any level) at the time of application and throughout the duration of the award. If the applicant is a non-dues paying member, one or more of the co-investigators must be a dues-paying member.

Applicants must hold a faculty or equivalent position in a department of radiology, radiation oncology, or nuclear medicine within an educational institution.

Other investigators may include:

- Co-PIs from the same or other institutions
- Individuals outside of radiology
- Community partners
- Other professionals as needed

Application Instructions

I. Summary of Proposed Research Plan

This section, when separated from the rest of the application, should serve as a succinct and accurate description of the proposed project. The summary should include the long-term goals of the proposed research to the radiologic community. Abstract not to exceed 500 words.

- A. Title
- B. Abstract
- C. Short Abstract

II. Applicant(s)

A. Professional Data:

- i) Institution
- ii) Department
- iii) Faculty position/rank
- iv) Time allocated to the proposed project, and to other duties. Specify percent and time frame.

B. Biosketch:

NIH-style biosketch, limited to 5 pages.

Please see <https://grants.nih.gov/grants/forms/biosketch.htm> for the NIH biosketch blank form, instructions, and sample. Please use the non-fellowship biosketch for all R&E grant applications.

C. Other Investigators/collaborators:

Other investigators/collaborators who will contribute significantly to the project should be listed. Include a description of their background, experience and expertise, and the role(s) they will play in the proposed research project.

Biosketch: NIH-style biosketch, limited to 5 pages, or each investigator/collaborator with a major role in the project.

A. Research Plan

Detailed Research Plan:

Not to exceed 5 pages. Use 0.5" margin" and size 11 Arial font. Figures and tables are included in the five-page limit. Additional pages may be included for references. Appendices may be included; however, appendices should not be used as an extension of the detailed education plan.

The detailed research plan should consist of the following:

Introduction:

- Rationale and purpose: describe why the project should be undertaken.
- Specific Aims and Objectives
- What makes the proposal unique?
- What are the intended outcomes or expected results? Will the proposed project result in a deliverable product/intellectual property?
- Previous Experience: Relevant preliminary work/prior experience of investigator.

Project Plans:

- What specific activities will be done to achieve the project objectives?
- Present a specific timeline of events to detail measurable milestones toward success of the completed project.
- Outcomes
- Dissemination: Describe how the result / intervention will be made available to RSNA members.

Evaluation

- Evaluation is one of the most common areas of weakness in grant applications; considerable attention must be paid to this area in all successful applications. How will the outcomes of the project be assessed in terms of the purpose and objectives? Can the outcomes be quantitatively assessed? What are the data structures to support such quantitative measurements?

Research Assurances

- Research grant projects may involve human subjects and require Institutional Review Board (IRB) approval. It is the responsibility of the applicant to contact their institutional IRB office to inquire if IRB approval is required for the proposed project and to publish subsequent manuscripts. Provide the status of IRB for this project. Applicants do not need research assurance approvals at the time of application; however funded grant recipients will be required to submit appropriate approval notifications before grant funds are released.

References

B. Location of Study:

Specify the primary institution, department, and country where the education project will take place. List secondary institutions, departments, and countries if applicable.

C. Resources and Environment:

Describe the facilities, support services, educational resources and/or other services that will be available for this project.

IV. Budget

A. Detailed Budget:

Since plans differ, no specific format is required for this section. However, a complete description of the projected use of funds will assist the study section reviewers in determining the project's feasibility. The budget should be a complete and detailed listing of the costs associated with the proposed program, including part-time salary support, supplies and materials, etc. Specify the following:

- Total project budget (direct costs)
- Amount Requested
- Explanation of how costs not covered by this grant will be paid (departmental funds, other grants, etc.)
- Complete budget justification

Note: 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 by this grant.

B. Other Sources of Support (pending and received):

Other non-conflicting sources of support for the proposed activity are encouraged and should be identified.

C. Award Payment Information:

To facilitate fund disbursement if the grant is approved for funding, please supply the payee information and mailing address. This information is available through the institution's administration or grants and contracts office. The institution will serve as the fiscal agent.

V. Letters

Letters of chair and/or institutional support are required. If the project involves significant collaboration with individuals outside of the investigator's institution, letters of agreement may be included. Additional letters of support are not required or accepted.

VI. Signatures

- Department Chair
- Grant Administrator
- Grant Applicant and all Co-PIs Note: Digital signatures are allowable.

GRANT APPLICATION REVIEW INFORMATION

Applications are reviewed using an NIH-style study section and the NIH overall impact scoring system of 1 (exceptional) to 9 (poor). The RSNA Study Section is comprised of experts in the radiologic sciences with specific expertise and experience in health and healthcare disparities.

One primary and two secondary reviewers will be assigned to each grant application. After initial, individual review, the study section members will convene for group discussion of each meritorious grant application and assign a final overall impact score. Study Section members will use the following review criteria to assign an overall impact score for each application.

Overall Impact:

After considering all the scored review criteria, briefly summarize the significant strengths and weaknesses of the application and state the likelihood of the project to exert a sustained powerful influence on the field. Briefly summarize the significant strengths and weaknesses of the application.

Scored Review Criteria:

- **Significance and Innovation:**
Does the research address an important and relevant problem in which imaging may play an important role? What is the likely impact on health and healthcare disparities if successful? Is the research to be considered innovative? Innovation and significance are important parameters, but not to the same degree as might be expected for a Seed or Scholar Grant.
- **Approach**
Is the hypothesis clear and well developed? Are the experiments well designed and appropriate to test the hypothesis? Is the proposed statistical analysis of the data appropriate for the study design? Is there a reasonable chance of completion within the time frame of the grant? Is the budget realistic for the research proposed? Is there a suitable plan for the protection of human subjects as well as does the investigator address issues related to inclusion based on gender, minorities, and children?
- **Investigators**
Is the PI capable of providing both administrative and scientific leadership to the development and implementation of the proposed program? Is there evidence that an appropriate level of effort will be devoted by the program leadership to ensure successful execution? If the project is collaborative or multi-PI, do the investigators have complementary and integrated expertise?
- **Environment**
Evaluate the commitment of the institution, the department and individual to provide adequate support for the applicant. Is appropriate space and equipment available? Are the support faculties such as computer services and statistical assistance adequate?

Additional Review Criteria

- Protections for Human Subjects
- Vulnerable Populations

Payment Schedule

Grant funds will be paid to the institution in two installments: Ninety percent (90%) at the time of award. The remaining Ten percent (10%) of the total grant award will be withheld by the Foundation, to be released only upon receipt of an acceptable grant final report.

Reporting

Grant recipients must submit an **interim report 90 days before** the close of the project. This interim report will determine the effectiveness and success of the program and will be used to determine if an additional year of funding will be awarded.

The **final report** must be submitted to the Foundation within 90 days after completion of the project.