Research Incubator in Climate and Health
Seed Funding Initiative

As a component of the Research Incubator in Climate and Health, the Seed Funding Initiative is open to all teams and early-career investigators who presented project idea pitches at the Research Incubator's Symposium in October 2022.

Deadline for proposals: Wednesday, December 7, 2022.

What is the Research Incubator's Seed Funding Initiative?

The Seed Funding Initiative is a major component within the Research Incubator in Climate and Health, a new initiative sponsored by the Office for Research that aims to support Rutgers researchers developing novel projects at the nexus of climate and health.

The purpose of the Seed Funding Initiative is to provide pilot funding to faculty teams and early-stage investigators to build new and novel research projects aligned with the incubator's theme and to strengthen the competitive position of faculty members who seek external research funds to further support these projects. The Seed Funding Initiative is open to faculty who present their research project concepts at the Research Incubator's Symposium in October 2022.

Interested individuals can apply for funding through one of two tracks:

- Team pilot grants are intended for groups of three or more faculty from different disciplines. Awards will be up to $150,000 for one-year terms beginning by March 1, 2023 (2 to 3 awards in total).
- Early-career pilot grants are intended for single-PI projects from early career investigators (as defined below). Awards will be up to $50,000 for one-year terms beginning by March 1, 2023 (3 to 4 awards in total).

Funds for the Research Incubator's Seed Funding Initiative are made possible through interest income from the Charles and Johanna Busch Memorial Fund.

Seed Funding Initiative eligibility

Team pilot grants:

- Open to all tenured, tenure-track, and non-tenure track faculty across all Rutgers units and from all disciplines, insofar that the concepts proposed are relevant to the incubator's theme.
- Teams must include at least three core faculty from different disciplines. Team members from other institutions are welcome, so long as the lead applicant is an eligible applicant from Rutgers.
- At least two of the faculty on the team, including the lead applicant, must have participated in the Research Incubator's Symposium.
- Individuals can only be identified as lead or core faculty on only one application.

Early-career pilot grants:

- Open to investigators who completed their terminal research degree or end of post-graduate clinical training—whichever date is later—within the past 10 years and who has not previously competed successfully as a Principal Investigator for a substantial, independent research award.
- Co-PIs are not allowed on early-career pilot grants.
- Applicants who submit an early career proposal are ineligible to be listed as lead or core faculty on a team pilot proposal.

Seed Funding Initiative application guidelines

Eligible applicants must apply through the InfoReady application portal. Applications for the seed funding initiative will open in October 2022 upon the conclusion of the Research Incubator's Symposium. Applications for both team and early-career pilot grants must follow the guidelines below.

Click here to apply

Format Requirements:

- Font: Arial 11 point or larger. A smaller type size may be used for figures and graphs but must be legible.
- Line Spacing: must be no more than six lines per vertical inch.
- Margins: use at least one-half inch margins (top, bottom, left and right) for all pages.
- Hyperlinks and URLs may not be used to provide information necessary to application review.

Section and Page Requirements:

1. *For team pilot grants:* Table of Key Personnel (Including name, title, email, role in the project, and affiliation for lead and core faculty on team.)
2. Biosketch for lead PI (and other core faculty for team pilot grants)
   a. Use format currently required by NIH or NSF.
3. Current and Pending Support
   a. List all current external and internal research support regardless of relevance to this application, including pending applications.
4. Lay Abstract (250-word limit)
   a. This should be understandable to a scientist not familiar with the specific field of investigation. Please emphasize how the application aligns to the goals of the Research Incubator in Climate and Health.
5. Research Narrative
   a. Limited to 5 pages (not including references).
   b. Sections include:

i. Significance

State concisely the goals of the proposed research. Explain the importance of the problem or critical barrier to progress that the proposed project addresses. Describe the strengths and weaknesses in the rigor of the prior research that serves as the key support for the proposed project. Explain how the proposed project will improve scientific knowledge, technical capability, and/or clinical practice in one or more broad fields.

ii. Innovation

Explain how the application challenges and seeks to shift current research or clinical practice paradigms. Describe any novel theoretical concepts, approaches or methodologies, instrumentation, or interventions to be developed or used, and any advantage over existing methodologies, instrumentation, or interventions. Explain any refinements, improvements, or new applications of theoretical concepts, approaches or methodologies, instrumentation, or interventions.

iii. Approach

Describe the overall strategy, methodology, and analyses to be used to accomplish the goals of the project. Discuss expected outcomes, potential problems, alternative strategies, and benchmarks for success anticipated to achieve the aims.

iv. Alignment

Describe how pilot funding through the Research Incubator's Seed Funding Initiative would help advance the goals of the proposed research. Discuss the applicant's (or team's) future plans for this project (including projected external submissions), including the promotion of a diverse, equitable, and inclusive environment as part of the project's overall development.

6. Literature Cited
7. Budget and Budget Justification
   a. Use the provided Busch Biomedical Budget Template.
   b. Funds cannot be used for faculty salary, memberships, travel to meetings of professional societies, food, drink, or lodging.
   c. Funds cannot be used to purchase major equipment (items over $5,000).
8. Additional Sections

Include the following sections as relevant to the proposed project. Please see Appendix 1 for instructions for each section.

   a. Protection of Human Subjects
   b. Vertebrate Animals
   c. Select Agent Research
   d. Authentication of Key Biological and/or Chemical Resources

Seed Funding Initiative application review criteria and process

Proposals will be evaluated using the following criteria:

- Significance of the proposed research and hypothesis.
- Scientific evidence supporting the hypothesis to be tested.
- Feasibility and adequacy of the procedures to be used in the research.
- An explicit statement of the significance of the proposed study towards the health-related aspects of climate change.
- Evidence of research experience of the lead faculty (and team, for team pilot grants) in the proposed research area.
- Reasonableness of the budget in relation to the objectives, methods, approach, procedures, and data analysis proposed.
- Likelihood that the project will lead to future outside funding.

Review Process

Merit Reviews will be conducted by peer reviewers with expertise aligned with the Research Incubator's theme. Please note, your application may not be reviewed by content-specific experts; therefore, please avoid the use of jargon or undefined abbreviations.

Seed Funding Initiative terms of award

Both tracks through the Seed Funding Initiative will have one-year terms, commencing by March 1, 2023. All awardees will be required to provide a final financial report and external funding submissions at the end of the grant term.

As a part of the Research Incubator, all awardees through the Seed Funding Initiative will be eligible for additional support throughout their grant term, including research-in-progress sessions, proposal development support, funding intelligence scoping sessions, and other related benefits.

Appendix 1

Additional Sections Requirements

Include the following sections as relevant to the proposed project.

A. Protection of Human Subjects

1. **Risks to Human Subjects**
    1. **Human Subjects Involvement, Characteristics, and Design**
        1. Describe the subject population(s) to be included; the procedures for assignment to a study group, if relevant; and the anticipated numbers of subjects for each study group.
        2. List any collaborating sites where human subjects research will be performed and describe the role of those sites.
    2. **Study Procedures, Materials, and Potential Risks**
        1. Describe all planned research procedures (interventions and interactions) involving study subjects; how research material, including biospecimens, data, and/or records, will be obtained; and whether any private identifiable information will be collected.
        2. For studies that will include the use of previously collected biospecimens, data or records, describe the source of these materials, whether these can be linked with living individuals, and who will be able to link the materials.
        3. Describe all the potential risks to subjects associated with each study intervention, procedure, or interaction. Discuss the risk level and the likely impact to subjects.
        4. Where appropriate, describe alternative treatments and procedures, including their risks and potential benefits. When alternative treatments or procedures are possible, make the rationale for the proposed approach clear.
2. **Adequacy of Protection Against Risks**
    1. **Informed Consent and Assent**
        1. Describe the process for obtaining informed consent. Include a description of the circumstances under which consent will be sought and obtained, who will seek it, the nature of the information to be provided to prospective subjects, and the method of documenting consent.
        2. When appropriate, describe how potential adult subjects' capacity to consent will be determined and the plans for obtaining consent from a legally authorized representative for adult subjects not able to consent.
    2. **Protections Against Risk**
        1. Describe planned strategies for protecting against or minimizing all potential risks identified, including strategies to

manage and protect the privacy of participants and confidentiality of research data.
2. Where appropriate, discuss plans for ensuring necessary medical or professional intervention in the event of adverse effects on participants.
3. Describe plans for handling incidental findings, such as those from research imaging, screening tests, or paternity tests.

3. **Vulnerable Subjects, if relevant**
    1. Explain the rationale for the involvement of special vulnerable populations, such as fetuses, neonates, pregnant women, children, prisoners, institutionalized individuals, or others who may be considered vulnerable populations.

B. Vertebrate Animals

1. **Description of Procedures**: Provide a concise description of the proposed procedures to be used that involve live vertebrate animals in the work outlined in the "Research Strategy" attachment. The description must include sufficient detail to allow evaluation of the procedures. Identify the species, strains, ages, sex, and total numbers of animals by species, to be used in the proposed work. If dogs or cats are proposed, provide the source of the animals.
2. **Minimization of Pain and Distress**: Describe the interventions including analgesia, anesthesia, sedation, palliative care, and humane endpoints that will be used to minimize discomfort, distress, pain, and injury.
3. **Justifications**: Provide justification that the species are appropriate for the proposed research. Explain why the research goals cannot be accomplished using an alternative model (e.g., computational, human, invertebrate, in vitro).

C. Select Agent Research

1. Identify the select agent(s) to be used in the proposed research.
2. Provide the registration status of all entities where select agent(s) will be used.
3. Provide a description of all facilities where the select agent(s) will be used.
    1. Describe the procedures that will be used to monitor possession, use, and transfer of select agent(s).
    2. Describe plans for appropriate biosafety, biocontainment, and security of the select agent(s).
    3. Describe the biocontainment resources available at all performance sites.

D. Authentication of Key Biological and/or Chemical Resources

Briefly describe methods to ensure the identity and validity of key biological and/or chemical resources used in the proposed studies.