



Busch Biomedical Grant

2024 Guidelines

[Submit Notice of Intent](#)

[Submit Proposal](#)

I. Program Overview

The Busch Biomedical Grant program is designed to enhance basic or fundamental biomedical research at the University and to strengthen the competitive position of faculty members who seek external research funds. The Busch Biomedical Grant Program is funded by the interest income from the Charles and Johanna Busch bequest to reflect the wishes of Charles Busch. The program has two funding tracks:

1. **Early Career Pilot Grants**, single investigator awards from early-career investigators (as defined below); and
2. **New Direction Pilot Grants**, single investigator awards for mid- and senior-career investigators (as defined below) to facilitate exploration of innovative new projects in basic or fundamental biomedical research that illustrate a significant departure from the applicant's previously funded work.

II. Award Information

The Busch Biomedical Grant program will support research projects up to a total of \$60,000 over two years.

III. Deadlines

Notice of Intent to Submit due May 1, 2024.
Full proposals due June 3, 2024 by 5pm EST.

IV. Eligibility

Who Can Apply

- Applicants must have a Full-Time Faculty appointment (Tenure Track Faculty and independent NTT Faculty).

- Current total annual extramural support (federal and private) as principal investigator cannot be greater than \$400,000 in direct costs as of June 1, 2024.
- *For Early Career Pilot Grants:* Open to investigators who:
 - Have not received tenure as of June 1, 2024 (tenure-track applicants)
 - or**
 - completed their terminal research degree or end of post-graduate clinical training (whichever date is later) *after* June 1, 2014 (non-tenure track applicants).
- *For New Direction Pilot Grants:* Open to investigators who:
 - Have received tenure as of June 1, 2024 (tenure track applicants)
 - or**
 - completed their terminal research degree or end of post-graduate clinical training (whichever date is later) *before* June 1, 2014 (non-tenure track applicants).

Not Eligible to Apply

- Postdoctoral associates, teaching and research assistants, coadjutant appointees, clinical and adjunct faculty defined as part time positions and visiting faculty members.
- Individuals who have received a Busch Biomedical Grant in the last five years.
- Individuals who have received concurrent internal grant funding from another Rutgers sponsor within the past 12 months for the same project, or have a pending internal grant application from another Rutgers sponsor for the same project.

Limitations

- Individuals are permitted to submit only one application per cycle in total.

V. Notice of Intent to Submit

Applicants should submit a Notice of Intent to Submit [here](#) via the application portal InfoReady. The notice will be used by the competition administrators to ensure that enough reviewers with relevant expertise are recruited.

The Notice asks for:

- Tentative project title
- 5-10 project keywords
- Name of PI and, if applicable, any collaborators

VI. Full Proposal Preparation and Submission

All Proposals

- All proposals must be submitted [here](#) via the application portal InfoReady.
- Format and order of documents must be strictly adhered to. Submissions that do not meet the following guidelines will be returned without review.
- 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. **Table of Key Personnel**
 - a. Please see provided [template](#).
 - b. Include Name, Title, Email, Role in the project, and Affiliation for each PI.
 2. **Biosketch for PI and Key Personnel**
 - a. Use format currently required by [NIH](#) or [NSF](#).
 3. **Current and Pending Support**
 - a. List all current external and internal research support for the lead PI, regardless of relevance to this application, including pending applications.
 - b. Provide grant number, title, duration, annual direct costs, total value of award, and source of support.
 4. **Research Narrative**
 - a. Limited to 5 pages (not including references).
 - b. Sections include:
 - i. Lay Abstract (250-word limit)
 - ii. Significance
 - iii. Innovation
 - iv. Approach
 - v. Career Advancement
 1. *For Early Career Pilot Grant applicants:* Statement on importance for early career success
 2. *For New Direction Pilot Grant applicants:* Statement of the new direction from previously funded work
 - c. See Appendix 1 for additional information about the content for each narrative section.
 5. **Literature Cited**

6. 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).

7. Additional Sections

Include the following sections as relevant to the proposed project. Please see Appendix 2 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**

VII. General Review Criteria

Proposals will be evaluated using the following criteria:

1. Significance of the proposed research and hypothesis.
2. Scientific evidence supporting the hypothesis to be tested.
3. Feasibility and adequacy of the procedures to be used in the research.
4. An explicit statement of the significance of the proposed study for human health.
5. Evidence of research experience of the PI and staff in the proposed research area.
6. Reasonableness of the budget in relation to the objectives, methods, approach, procedures, and data analysis proposed.
7. Likelihood of the project to significantly advance the career development of the PI's independent research program, including obtainment of future outside funding.

VIII. Review Process

Merit Reviews will be conducted by peer reviewers from the university's biomedical community. Please note, your application may not be reviewed by content-specific experts; therefore, please avoid the use of jargon or undefined abbreviations.

The top scoring applications will be reviewed by the Busch Advisory Committee. The committee will make evaluations and recommendations for funding based on the general review criteria listed above. The recommendations will be submitted for approval by the Senior Vice President for Research.

IX. Terms of Agreement

Busch Biomedical Grants will have two-year terms, commencing on October 1, 2024 through September 30, 2026. All awardees will be required to provide a final financial report and external funding submissions at the end of the grant term.

X. Questions

Contact Research Development staff at ufo@research.rutgers.edu.

Appendix 1

Pilot Grant Research Narrative Requirements

The Research Narrative is limited to 5 pages (not including references).

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.

Include the following sections:

- **Lay Abstract**
 - Limit to 250 words.
 - Make sure your abstract is understandable to a scientist not familiar with your specific field of investigation.
 - Please emphasize how your application aligns to the Busch Biomedical Grants goals to enhance biomedical research at the University and to strengthen the competitive position of faculty members who seek external research funds.
- **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.
- **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.
- **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.

- **Career Advancement**
 - *For Early Career Pilot Grants applicants:* Explain how the project outlined above is critical to the applicant's early career success and advancement of an independent research program.
 - *For New Direction Pilot Grant applicants:* Explain how the project outlined above illustrates a significant departure from the applicant's previously funded work, and how pilot funding through this grant would help advance the applicant's research through this new direction.
 - *For all applicants:* Discuss your future plans for this project (e.g., planned external submissions), including the promotion of a diverse, equitable, and inclusive environment in the project's future development.
- **Literature Cited**

Appendix 2

Additional Sections Requirements

Include the following sections as relevant to the proposed project.

A. Protection of Human Subjects

1. Risks to Human Subjects

a. 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.

b. 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

a. 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.

b. 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.

c. 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.