



**CardioPulmonary Vascular Biology**  
**Center for Biomedical Research Excellence (COBRE)**  
**2023 Pilot Projects Program**  
*Request for Applications (RFA)*

**Submission Deadline:**

5:00pm July 14, 2023

**Contact:**

Valeria Zarate, Program Administrator

[cpvb.pilot.projects@gmail.com](mailto:cpvb.pilot.projects@gmail.com)

**SUBMISSION DEADLINES AND AWARD ANNOUNCEMENTS**

*Application*

Interested applicants are **required to apply** through the [UFunds online portal](#) no later than **Friday, July 14, 2023 at 5pm ET**. The application must include the following:

1. Contact and academic information as requested via the UFunds application page.
2. Structured one-page overview of research aims, significance, and experimental approach.
3. References.
4. NIH-formatted [bio-sketch](#) for each investigator and mentor, *if applicable*
5. Letter from Department Chair(s) stating postdoctoral fellow or resident physician applicants will have a faculty appointment by July 1, 2023, *if applicable* (not required for current faculty).
6. A mentorship plan, *if applicable*.
7. **Established/senior investigators are eligible to apply for support of a new research direction in vascular biology.**

A Brown University ID is required to access UFunds. Non-Brown faculty should email [cpvb.pilot.projects@gmail.com](mailto:cpvb.pilot.projects@gmail.com) by July 1, 2023 to request a Brown University ID to use for this application.

Pilot Project award announcements are anticipated to be communicated by email to applicants by **September**.

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*Individuals from underrepresented minority groups are encouraged to apply..*

## AWARD CATEGORIES & ELIGIBILITY REQUIREMENTS

### Category 1

To be eligible for a Pilot Project award at \$37,500:

1. Applicants must possess health-professional or research doctoral degrees and be at a junior rank holding a faculty appointment as *Instructor or Assistant Professor* (or equivalent) or one who is at the rank of Associate Professor or above at a degree granting institution in Rhode Island at the time of pilot project funding.
2. Faculty at junior ranks must have mentors. Mentor(s) should be designated who are faculty at an affiliated health care system (Lifespan, Care New England, and Providence VAMC) or a degree-granting institution in Rhode Island. Mentor(s) should be researchers in the field related to the proposed project, have experience and demonstrated success as research supervisors, and be faculty at the *Associate Professor* level or above. Projects may have more than one mentor, such as one who is an expert in the content of the proposed research and another who is an expert in the proposed methodology (e.g., statistics, epidemiology, informatics, etc.).
3. A Pilot Project awardee cannot hold funding from a COBRE project or another IDeA mechanism of support at the same time as CPVB COBRE Pilot Project funding.
4. The proposed CPVB COBRE Pilot Project should not have significant scientific or budgetary overlap with another funded project.

### Category 2

To be eligible for a Pilot Project award at \$75,000:

1. Applicants must possess health-professional or research doctoral degrees and be at a junior rank holding a faculty appointment as *Instructor or Assistant Professor* (or equivalent) or one who is at the rank of Associate Professor or above at a degree granting institution in Rhode Island at the time of pilot project funding.
2. Faculty at junior ranks must have mentors. Mentor(s) should be designated who are faculty at an affiliated health care system (Lifespan, Care New England, and Providence VAMC) or a degree-granting institution in Rhode Island. Mentor(s) should be researchers in the field related to the proposed project, have experience and demonstrated success as research supervisors, and be faculty at the *Associate Professor* level or above. Projects may have more than one mentor, such as one who is an expert in the content of the proposed research and another who is an expert in the proposed methodology (e.g., statistics, epidemiology, informatics, etc.).
3. Project should be led by two or more Principal Investigators (Multi-PI) from different disciplines or training backgrounds. A Contact PI must be designated. Partnerships from different departments or institutions are encouraged. Trans-institutional collaborations among faculty at Brown University, University of Rhode Island, Rhode Island healthcare institutions, or other degree-granting institutions in Rhode Island are highly encouraged. Multi-PI's can be junior or senior investigators.
4. Pilot Project awardees cannot hold funding from a COBRE project or another IDeA mechanism of support at the same time as CPVB COBRE Pilot Project funding.
5. The proposed CPVB COBRE Pilot Project should not have significant scientific or budgetary overlap with another funded project.

Questions regarding applicant eligibility should be emailed to [cpvb.pilot.projects@gmail.com](mailto:cpvb.pilot.projects@gmail.com)

## Overview

The CardioPulmonary Vascular Biology (CPVB) COBRE has the goal of increasing the quantity and quality of cardiovascular, pulmonary, and vascular biology research in Rhode Island. One means of attaining this goal is the identification and nurturing of talented investigators. Therefore, the CPVB COBRE announces the availability of \$37,500 or \$75,000 pilot projects for research related to cardiovascular, pulmonary, and vascular diseases. The goal of these pilot projects is to enable investigators to develop preliminary data that can be used to support successful applications for independent research funding in vascular biology. In addition, pilot project investigators are expected to participate in COBRE meetings and activities and in career development activities to enhance skills for academic and research success.

### *Funding Available*

The 2023 Pilot Projects Program will fund \$37,500 or \$75,000 pilot projects for one-year research grants. Indirect costs will not be provided to the applicants' home institutions.

### *Performance Period*

The anticipated performance period is 9/1/2023 to 5/31/2024 (i.e., 9 months).

### *Available Services for Applicants*

All applicants are strongly encouraged to schedule a consultation with Cell Isolation and Organ Function (CIOF) Core or the Mitochondrial Function and In Vivo Imaging (MF-II) Core to enhance their responsiveness to this RFA. Applicants are encouraged to review available services on the [CPVB CORE lab-request-form](#) for any inquiries. Please contact [elizabeth\\_harrington@brown.edu](mailto:elizabeth_harrington@brown.edu) for CIOF core or [peng\\_zhang@brown.edu](mailto:peng_zhang@brown.edu) for MF-II core.

## **AWARDEE AND MENTOR RESPONSIBILITIES**

Investigators and mentor(s) will be expected to meet on a regular, pre-specified basis to review progress in the goals of the application. A mentorship plan must be established and submitted with the mentor(s) letter of support at the time of application. Junior faculty are expected to have at least one mentor. The mentorship plan should address:

- A communications strategy that fosters consistent and intensive interactions to ensure completion of the project and any relevant training.
- The nature and frequency of the interaction between the mentor(s) and investigators for the duration of the award.
- Describe how the training plan supports the proposed research.

### *Awardee Responsibilities*

Investigators selected for a Pilot Project award will be required to:

1. Obtain IRB and/ or IACUC approval, as applicable, before funding can be awarded, no later than August 1, 2023. Applicants are strongly encouraged to have these processes underway at the time of application.
2. Present at CPVB COBRE bi-weekly seminar and if invited, at the CardioPulmonary Vascular Biology External Advisory Committee Meeting.
3. Present a poster at the RI NIH IDeA and NERIC Symposiums, if invited.
4. Attend all required program-related seminars and conferences (to be specified).

5. Complete annual progress report.
6. Acknowledge sponsorship from CardioPulmonary Vascular Biology (CPVB) supported by the IDeA-COBRE grant (P30GM149398) in all research publications during the performance period. Future publications related to this research must also [CPVB COBRE acknowledgement](#)
7. Report all presentations, publications, and extramural funding that arise from this award to CPVB COBRE administrator.
8. Maintain updated VIVO profiles if Brown University-affiliated.

#### *Mentor Responsibilities*

Mentors will be required to provide the awarded investigators with research guidance toward an independent research career through a planned series of meetings and activities as well as frequent discussions and guidance as needed.

## APPLICATION INSTRUCTIONS

#### *Proposal Submission Instructions*

Proposals are due through [UFunds](#) no later than **Wednesday, July 14, 2023 at 5pm ET**. CPVB COBRE will not consider applications that are incomplete. Complete applications must include the following sections:

#### Proposal Content

##### **Face Page:** ([PHS 398 Form Page 1](#))

The Face Page should include Contact PI name, academic title, institution, address, title of project, and the name of the institutional grant management official.

##### **Project Summary, NIH Page 2:** ([PHS 398 Form Page 2](#))

The Project Summary should be a succinct and accurate description of the proposed work. State the application's broad, long-term objectives and specific aims. Concisely describe the research design and methods for achieving the stated goals. The summary should be informative to other persons working in the same or related fields and, insofar as possible, understandable to a scientifically or technically literate reader. Avoid describing past accomplishments and the use of first person.

Additionally, the following sections of the Project Summary form should be completed:

- *Relevance:* Describe the relevance of this research to public health. Be succinct (using no more than two or three sentences) and use plain language that can be understood by a general, lay audience.
- *Project/Performance Site Primary Location:* Include the information pertinent to the contact PI's home institution.
- *Additional Project/Performance Site Location:* Include the information pertaining to any additional performance sites. If more than two performance sites will be used, list additional sites on the [PHS 398 Project/Performance Site Format Page](#).
- *Senior Key Personnel:* Include the Contact PI and mentor(s) for the project. Anyone listed in Senior Key Personnel must include a [biosketch](#) in the application.

##### **Budget:** ([PHS 398 Form Page 4](#))

The anticipated budget period is 9/1/2023 to 5/31/2024.

PI salary is allowed but will be reviewed carefully considering the scope of PI roles. Investigators providing effort without salary support are considered cost shared and must obtain a letter from an

authorized organizational official (e.g., Director of Sponsored Projects Office) approving the cost share. Please reference the [Letters of Support](#) section below.

The below guidelines should be used to complete the PHS 398 budget form for each institution involved:

- **Personnel:** Indicate the investigator's name on the "PD/PI" line, number of calendar months dedicated to the proposed research, institutional base salary, requested salary, and associated fringe benefits. Investigators not receiving salary support should still be listed in the budget with effort indicated.
- **Equipment:** Equipment is *not allowed* for this award.
- **Supplies:** Allowable supply costs include computer software necessary for the project, laboratory supplies and services, animal and per diem housing expenses, publication costs, and participant stipends. General office supplies are *not allowed* for this award.
- **Travel:** Up to \$2,000 can be budgeted for travel related to research performance or dissemination of results.
- **Inpatient Care Costs:** Indicate costs related to proposed research, if any.
- **Outpatient Care Costs:** Indicate costs related to proposed research, if any.
- **Other Expenses:** List any other costs itemized by category, if any.
- **Consortium/Contractual Costs:** Include consortium or contractual costs required to accomplish the proposed research, if any.

Salary support for mentors is not allowed.

**Budget Justification:** ([PHS 398 Continuation Format Page](#))

Provide detailed justifications for all items requested in the budget(s).

**Biographical Sketch (5-page maximum):** ([Biographical Sketch Format Page](#), [Instructions](#) and [Sample](#))

A NIH-formatted biosketch is required for each investigator and mentor. If you do not have an eRA Commons user name, you must obtain one to include in the biosketch. Biosketches should not exceed 5 pages.

The personal statement in the biosketch should briefly describe why your experience and qualifications make you particularly well-suited for a Pilot Project award. In the Research Funding section, include other grant support and explain the relationship of each grant to the proposed project, including any scientific or budgetary overlap. Please adhere to the NIH guidelines for your biographical sketch.

**Resources:** ([PHS 398 Resources Format page](#))

Describe space, equipment, and other facilities available for the applicants to accomplish this research project. The Resources Format page must be completed for each Performance Site listed on PHS 398 Form Page 2.

**Checklist:** ([PHS 398 Checklist Form Page](#))

Complete **Section 3 only**, "Facilities and Administrative Costs" using the home institution's F&A rate.

**Research Plan (6-page maximum):** ([PHS 398 Continuation Format Page](#))

The format of the Research Plan should follow the outline below exactly. Begin each section of the Research Plan with a section header (e.g., Specific Aims, Significance, etc.).

- **Specific aims:** Describe the goals and objectives of the research project (up to ½ page).
- **Significance** Include overall significance of the project, including relevance to goals of the CPVB COBRE, and plans for use of data from pilot project for subsequent independent funding. (up to ½ page).

- *Innovation*: Describe both the conceptual and technical innovation of the proposed project (up to 1/2 page).
- *Approach*: Describe the experimental design and methods, including an appropriate analysis plan. Present preliminary data if available (up to 4 pages).
  - Up to 1/2 page of the 4-page approach should focus on detailing the statistical analysis plan for the proposed project.
- *Timeline*: Include approximate completion dates for the defined specific aims and [above outlined awardee responsibilities](#) (up to 1/2 page).

## References

Provide a bibliography of any references cited in the Research Plan. Not included in 6-page limit.

## Future Funding Plans (500-word maximum, submitted in UFunds)

Describe plans to submit applications for future funding. This response should not be uploaded but submitted via the appropriate UFunds query field.

The below table summarizes required proposal content outlined in this section:

Section	Description	Limits
<b>Face Page</b>	Provide the requested administrative information.	n/a
<b>Project Summary</b>	Complete the Project Summary, Relevance, Project/Performance Site Primary Location, and Senior Key Personnel.	n/a
<b>Budget</b>	Complete Page 4 of the NIH 398 form for each institution requesting support.	n/a
<b>Budget Justification</b>	Provide clear, succinct justification for each requested budget item for each institution requesting support.	n/a
<b>Biographical Sketches</b>	Include for all proposed key personnel, including mentors.	5 pages (each)
<b>Resources</b>	Detail space, equipment, and other resources available for research.	n/a
<b>Checklist</b>	Complete Section 3 of PHS 398 Resources Format page.	n/a
<b>Research Plan</b>		6 pages
Specific Aims	Project specific aims.	1/2 page
Significance & Innovation	Include overall significance of the project, including relevance to goals of the CPVB COBRE, and plans for use of data from pilot project for subsequent independent funding. (up to 1/2 page).	1/2 page
Innovation	Outline both conceptual and technical innovation.	1/2 page
Approach	Preliminary data* and research plan, including expected results, alternative approaches, and analysis plan. Include discussion of scientific rigor and biological variables. (Note: up to 1/2 page should focus on detailing the statistical analysis plan for the proposed project.)	4 pages
Timeline	Indicate dates for completion of Specific Aims, manuscript submission, and extramural grant applications submission.	1/2 page
<b>References</b>	Provide citations for any references used in the Research Plan.	n/a
<b>Future Funding Plans</b>	Describe plans to submit application for future funding.	500 words

\*Preliminary data are encouraged, but not required.

### Regulatory Information

If Human Subjects, Vertebrate Animals, or Biosafety/Safety Agents are used in the proposed research, be sure to address these sections as described below. Be sure to indicate the IRB and IACUC approvals or status as applicable to your proposed research. Human Subjects education certification must be up-to-date and available upon request for Key Personnel.

If you answered "Yes" to the question "Are Human Subjects Involved?" on the R&R Other Project Information form, then complete the [PHS Human Subjects and Clinical Trials Information Form](#). Per PHS Form 398. Provide IRB and/or IACUC approval(s). Provide Human Subjects education certification and Target/Planned Enrollment Table (if applicable). Applicants should complete the Study Record Form as outlined by the [G.500 – PHS Human Subjects and Clinical Trials Information instructions](#).

### Vertebrate Animals Section

If vertebrate animals are involved, address each point below. Provide a concise, complete description of the animals and proposed procedures. While additional details may be included in the Research Plan, the responses to the four required points must be cohesive and include enough detail.

If all or part of the proposed research involving vertebrate animals will take place at alternate sites (such as project/performance or collaborating site(s)), identify those sites and describe the activities at those locations.

Although no specific page limitation applies to this section, be succinct. Failure to address the following four points will result in the application being designated as incomplete and will be grounds for NIGMS to defer approval of the application. The three points are as follows:

1. Description of Procedures: Provide a concise description of the proposed procedures to be used that involve vertebrate animals in the work outlined in the "Research Plan" attachment. 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. 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).
3. 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.

Do not use the vertebrate animal section to circumvent the page limits of the Research Plan.

### Biosafety/Select Agents

Refer to [Section 5.5.11 PHS 398 Instructions](#). Indicate Institutional Safety Committee approvals.

### Letters of Support

1. Department Chair(s): Letter(s) from the Department Chair(s) and/or supervisor(s) **for each investigator** documenting the availability of protected time for research must be included. If a Brown University PI is not receiving salary support, the letter must explicitly approve cost share.

2. Mentor(s): Letter(s) from the mentor(s) agreeing to advise on the conduct of the proposed research and describing plans for mentoring the junior investigator(s) must be included with the application.

## APPLICATION FORMAT

Applications should follow an abbreviated NIH format with minor modifications. This application requires the use of the most recent version of the [PHS 398 Forms](#).

**Font:** Arial, Helvetica, Palatino Linotype or Georgia typeface and a font size of 11 points or larger must be used. A Symbol font may be used to insert Greek letters or special characters; the font size requirement still applies. A smaller font size may be used for figures, graphs, diagrams, charts, tables, figure legends, and footnotes, but this type must follow the font typeface requirement and be readily legible.

**Margins:** Margins should be ½ inch.

## REVIEW PROCESS AND SELECTION CRITERIA

Reviews of Preliminary Applications will be conducted by the Cardiopulmonary Vascular Biology (CPVB) Pilot Projects review Committee. Reviewers of the full applications will include current mentors and others who have content area or methods expertise relevant to the individual proposals. All reviewers will be highly qualified faculty from Brown University, Rhode Island Hospital, and/or affiliated hospitals and universities. Final selections will be made by a CPVB leadership with approval of the CPVB External Advisory Committee.

Applications will be reviewed using the following criteria:

1. Responsiveness to the RFA.
2. Scientific impact and soundness of the experimental design, including plans for data analysis.
3. Technical and conceptual innovation.
4. Training and expertise of the PI's and their ability to perform the proposed research.
5. Scientific and mentoring expertise of the mentor(s).
6. Project environment, including facilities and adequacy of the patient population, if applicable.
7. Reasonable and justified budget that is appropriate for the proposed research.
8. Use of the CPVB COBRE Cell Isolation/Organ Function Lab
9. Likelihood that the project will lead to external funding.

Funding is dependent upon final review and approval by the CPVB COBRE External Advisory Committee and by NIGMS. **Since NIGMS requires IACUC and IRB approval PRIOR to funding, applicants are strongly urged to have obtained or commenced the regulatory approval process (es) at the time of submission of the application.** IRB and IACUC approvals must be obtained by August 1, 2023 or applicants risk loss of funding.

## DATES AND DEADLINES

July 14, 2023:	Full Proposal due
Early-August 2023:	Pilot Awards announced (anticipated)
September 1, 2023:	Pilot funding begins (anticipated)

**QUESTIONS**

Address inquiries regarding the CPVB COBRE Pilot Projects Program to Valeria Zarate, Program Administrator, at [cpvb.pilot.projects@gmail.com](mailto:cpvb.pilot.projects@gmail.com)