Purpose
The CRBM is seeking proposals for projects in need of support to advance research in redox biology and medicine aligned with the strategic areas of emphasis of our institution. Specific criteria considered include:

- Building of new collaborations between members and among researchers from other centers at the Medical School or with Reynolda Campus faculty and centers.
- Fostering clinical connections with research in redox biology and medicine
- Providing a high potential to inspire new multi-investigator extramural grants (P01s, R01s, U01s, etc).

We anticipate funding 2-5 projects. Successful pilots will receive up to $20,000, to be spent within a 12-month project period.

Successful proposals will:

- Consider and outline how the proposed project moves research in a particular field forward to address health care needs within the population.
- Identify translational roadblocks that the proposed project will address and the anticipated benefits of overcoming them.
- Lay out a reasonable project plan that is feasible to complete in the 12-month project period; this includes having IACUC and IRB approvals, if required.

Eligibility
These awards are open to investigators with faculty rank across the Southeast region of Advocate Health. This includes Atrium Health, Atrium Health Navicent, and Atrium Health Wake Forest Baptist, including Wake Forest University School of Medicine. Collaborative projects involving other institutions such as Wake Forest University must include as PI or co-PI investigators at Advocate Health and/or Wake Forest University School of Medicine with a substantial, direct role on the project.

Key Dates

<table>
<thead>
<tr>
<th>Date</th>
<th>Detail</th>
</tr>
</thead>
<tbody>
<tr>
<td>11/27/23, 11:59 pm</td>
<td>Application Deadline</td>
</tr>
<tr>
<td>01/01/24</td>
<td>Project Start Date</td>
</tr>
<tr>
<td>12/31/24</td>
<td>Project End Date</td>
</tr>
</tbody>
</table>

Funding
As stated above, the CRBM will fund up to $20,000 in direct costs per project. See section on Budget Guidelines for more details on allowable and non-allowable budget items.

Application Procedure

Full Application Deadline: 11/27/2023
Investigators can submit their application through the ePilot electronic submission system, by the deadline noted above. Application instructions are summarized below.

Format Specifications

- Arial font and no smaller than 11 point
- Margins at least 0.5 inches (sides, top and bottom)
- Single-spaced lines
- Consecutively numbered pages

Submission/Applicant Information

- Project Title
- Submitting Investigator, Co-Investigator(s), and other Key Personnel information

Abstract (200 words max)
Specific Aims (1 page)

Research Plan (5 pages max)

- **Significance** – Explain how the project addresses an important problem, how it will improve scientific knowledge, technical capability and/or clinical practice. Emphasize how and when this project is anticipated to yield extramural funding and/or new translational opportunities.

- **For those who have held previous CRBM pilot awards**, describe how those funds led to publications, grant applications and/or other important outcomes, and provide strong justification for this new request, including how the present project is a **new direction** requiring seed funding.

- **Investigator(s)** – Describe how each member of the team will contribute to the project. Include their expertise and experience that will be utilized on this project.

- **Innovation** – Explain how this project uses novel concepts, approaches or methodologies, instrumentation or interventions.

- **Approach** – Describe the overall strategy for this project, including potential problems, alternative strategies and benchmarks for success.

- Quarterly Milestones (*refer to Appendix I*)

References (no page limit)

**Information Regarding Human Subjects**, if applicable
Address the following if the project **involves human subjects**:  
- Provide a one-page document addressing the Protection of Human Subjects document, if applicable.
- IRB Approval Status (please note: IRB approval is **not required** for full application submission, but is required at the start of the project and plans to achieve this must be included in the application).

**Information Regarding Live Vertebrates**, if applicable
- IACUC Approval Status (please note: IACUC approval is **not required** for full application submission, but is required at the start of the project and plans to achieve this must be included in the application).

**Budget and Justification** (budget template plus 1 page justification)
- Complete the [budget template form](#) provided along with a brief justification for the funds requested for this RFA. Please include an explanation of other resources that may be leveraged to support the project. If this is a WFUSOM-WFU collaboration requiring funding on both sides, provide separate budgets for the two components.

- Sub-awards to other institutions to carry out work on a project are not allowed but collaborations that include external center members or others are encouraged.

**NIH-style biographical sketch for all Key Personnel (new style)**

**Budget Guidelines**
The budget period is for 12 months ending no later than 12/31/24. Up to $20,000 in direct costs may be requested.

Grant funds may be budgeted for:
- Research support personnel (including undergraduate and graduate students)
- Travel necessary to perform the research
- Small equipment, research supplies and core lab costs, and/or
- Other purposes deemed necessary for the successful execution of the proposed project

Grant funds may **not** be budgeted for:
- Office supplies or communication costs, including printing
- Meals or travel, including to conferences, except as required to collect data
- Professional education or training
- Computers or audiovisual equipment, unless fully justified as a need for the research
- Indirect costs
Awarded funds must be used to conduct the work proposed.

**Review Criteria and Process**

CRBM proposals are competitive and peer reviewed based on NIH review criteria. Final award approval will be at the recommendation of CRBM Leadership. Funding decisions will be made based on the reviews of an evaluation of the projects’ connection with the goals of the CRBM. Any required IACUC and/or IRB protocols must be approved prior to funding.

Reviewers will score applications based on:

1. Significance of the problem to be addressed;
2. Innovation in the proposed solutions;
3. Strength and breadth of the investigative team;
4. Methodological rigor and feasibility with clear milestones;
5. Likelihood the innovation will be broadly applicable and have impact on translational or clinical research;
6. A reporting plan regardless of whether the study yields positive or negative results;
7. Other elements to be considered in the review include: the likelihood that the investment will lead to external funding or a licensable innovation, early-career faculty involvement, race/gender inclusiveness of the research team and inclusion of women, minorities, older adults and children as potential participants.

**Program Expectations**

If any significant issues arise, the study team will be required to work with the CRBM to define an intervention strategy for the study to be successfully completed (or in rare cases, terminated).

Specific Deliverables Include:

- Disclosure of implementation/dissemination of results and efforts to seek extramural funding beyond the pilot grant and subsequent notification of any funds obtained and/or related publications or significant collaborations from the project for a minimum of 4 years.

**Other Guidelines**

1. CRBM Leadership will work closely with funded teams throughout the grant period to monitor progress and, when necessary, provide assistance. Mid-term and final progress reports will be required. We expect PIs to report over the lifetime of the work the outcomes achieved due to the pilot award, e.g., subsequent external funding, publications, presentations, and patents.
2. Prior to receiving funds, research involving human subjects must have appropriate approvals from the IRB. An IRB approval letter or an IRB response to a “Determination Whether Research or Similar Activities Require IRB Approval” must be submitted to the CRBM before funds are released. Human subjects must be reviewed in accordance with the institution’s general assurances and HIPAA. All key personnel must have certification of training in the protection of human subjects before starting the grant period.
3. Prior to receiving funds, research involving live vertebrates must have appropriate approvals from IACUC. Either an IACUC approval letter or documentation on why activity does not require IACUC approval must be submitted to the WFIRM prior to funds being released.
4. All publications that are the direct result of this funding must reference the support, using a statement such as: “Research reported in this publication was supported by the Center for Redox Biology and Medicine at Wake Forest University School of Medicine.” Publications must also be registered in PubMed Central.
5. Any awardee who leaves his or her position should contact the CRBM to discuss future plans for the project.

**Grant Administration**

The Principal Investigator is responsible for the administration of grant funds. Projects will be for a 12-month period of time.
Contacts
Questions about your research project should be directed to Cristina M. Furdui (cfurdui@wakehealth.edu) and Leslie B. Poole (lbpoole@wakehealth.edu), and questions about the ePilot electronic submission system should be directed to Misty Allen (mkallen@wakehealth.edu).
Appendix I
Below are examples to show different methods to provide study milestones, outcomes, and timeline. However, these formats are not required.

Example 1:

- **Milestone 1 (0-1.5 months):** Milestone 1 Details **Outcome:** Outcome 1 Details
- **Milestone 2 (1.5-4 months):** Milestone 2 Details **Outcome:** Outcome 2 Details
- ...

Example 2:

<table>
<thead>
<tr>
<th>Timeline and Milestones</th>
<th>Quarters</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activity/Aim/Milestone 1</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Activity/Aim/Milestone 2</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Activity/Aim/Milestone 3</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>