Purpose
The CRBM is seeking proposals for projects in need of support to advance research in the area of 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 the area of 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 as there may be no opportunity to request carryover; this includes having IACUC and IRB approvals if required.

Eligibility
These awards are open to all faculty with a rank of Assistant Professor or higher from Wake Forest (Health Sciences & University). Proposals from WFU faculty must include a co-PI at the medical center with a substantial, direct role on the project.

Key Dates

<table>
<thead>
<tr>
<th>Date</th>
<th>Detail</th>
</tr>
</thead>
<tbody>
<tr>
<td>11/15/21, 11:59 pm</td>
<td>Application Deadline</td>
</tr>
<tr>
<td>1/1/21</td>
<td>Project Start Date</td>
</tr>
<tr>
<td>12/31/22</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: 11/15/21
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 (250 words max)

Research Plan (6 pages max)

- Specific Aims
- 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.
- Plan for Future Grant Application(s) Related to the Proposal
- Quarterly Milestones (refer to Appendix I)

References (no page limit)

Information Regarding Human Subjects
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)

Information Regarding Live Vertebrates
- IACUC Approval Status (please note: IACUC approval is not required for full application submission)

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 explanation of other resources that may be leveraged to support the project. If this is a WFSM-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 12/31/22. 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 IACUC and/or IRB protocols must be approved prior to funding of the approved pilot.

**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, and;
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- 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. 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 School of Medicine.” Publications must also be registered in PubMed Central.
3. 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 or 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>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Quarters</strong></td>
</tr>
<tr>
<td>Activity/Aim/Milestone 1</td>
</tr>
<tr>
<td>Activity/Aim/Milestone 2</td>
</tr>
<tr>
<td>Activity/Aim/Milestone 3</td>
</tr>
</tbody>
</table>