LSU Health Shreveport’s Center for Redox Biology and Cardiovascular Disease, a NIH Center for Biomedical Research Excellence (COBRE), is pleased to announce a call for COBRE Research Projects and Pilot Project grants. The goal of the program is to expand and enhance the scientific goals of the center and facilitate the development of established and junior faculty research independence.

The Research Project Program will provide funding for up to three years for a tenure-track faculty member. The research project should propose innovative science that has the potential to advance the field and jumpstart the research program of the faculty member.

The COBRE Pilot Project Program will provide funding for a one-year period that will allow investigators to develop preliminary data required for larger externally funded individual or multi-investigator proposals.

Background: The COBRE program is an initiative of the NIH National Institute of General Medical Sciences (NIGMS). COBRE Centers are intended to:

- Support thematic, multidisciplinary centers focused on a single research area
- Augment and strengthen biomedical research capacity
- Expand and develop faculty research capability
- Enhance research infrastructure, including core facilities
- Encourage collaborative research and research grant applications
- Foster health related research

The official RFA under which the Cardiovascular COBRE Center is funded may be found here: https://grants.nih.gov/grants/guide/pa-files/PAR-22-163.html

Center for Redox Biology and Cardiovascular Disease: All COBRE Centers are required to have a thematic scientific focus. The LSU Health Shreveport Center for Redox Biology and Cardiovascular Disease employs a broad definition of cardiovascular disease (CVD) thus providing researchers the opportunity to study key redox mediators in CVD including reactive oxygen species, reactive nitrogen species and reactive sulfur species. Key research questions relevant to the LSUHS Redox and Cardiovascular COBRE include critical topics such as: a) exact reactive species identity and origins in CVD; b) molecular target modifications in CVD; c) altered signaling and/or gene expression changes in CVD; and, d) CV tissue pathology and/or dysfunction.

Timeline: Proposals should be submitted electronically to the contact persons below as a single PDF document by 5:00PM on Monday, June 24, 2024. Proposals selected for funding by the internal review committee will begin following approval by NIH.

Start Date: July 1, 2024

Additional Information: For additional information, contact:

Bridget Powell at bpowell@lsuhs.edu / 318-675-5409
Inna Rom at inna.rom@lsuhs.edu / 318-675-8136
Research Project Program Application Instructions

Format: All applications must be in 11-point Arial font with half-inch margins. Figure legends may be 10-point. All figures must be large enough to be clearly legible. The page limit for the Research Strategy section is 6 pages. Using PHS398 forms and instructions, each proposal should include the following sections:

- NIH face page ([Face Page](#))
- NIH Page 2: ([Summary, Relevance, Project/Performance Sites, Senior/Key Personnel](#))
- Detailed Budget ([Form Page 4](#)) and Budget Justification ([Form Page 5/Continuation Format Page](#), as needed)
- Biographical Sketch(es) of PI and Key Personnel ([Biosketch Format Pages, Instructions and Samples](#))
- Updated Other Support (Signed by DocuSign)
- Research Strategy (see below)
- If the proposed study involves human subjects: Completion of the PHS Human Subjects and Clinical Trial Information Form (study record, inclusion data record, protection of human subjects, and data and safety monitoring plan, if applicable); Provide a copy of human subjects education certification for PI and all key personnel involved in the design and conduct of the human subjects research component.
- Vertebrate animals justification and protection, if applicable
- Resource Sharing Plan
- Data Management and Sharing Plan
- Authentication of Key Biological and/or Chemical Resources
- A letter of Support from the PI’s Department Head/Chair
- A letter agreeing to participate in COBRE, including support for the project, from a Mentor
- List of all grant applications submitted during the last two (2) calendar years. Please include the date of submission, name of granting agency, project title, start/end dates and direct costs requested.
- NO appendices or email attachments should be submitted with the application

Forms can be found here: [http://grants.nih.gov/grants/funding/phs398/phs398.html](http://grants.nih.gov/grants/funding/phs398/phs398.html)

Research Strategy should contain the specific aims of the project, significance, innovation, and approach. The page limit for these sections together is 6 pages, including all figures and tables. Suggested page lengths and section descriptions are described below:

- Specific Aims (1/2 page): List the goals, long-term objectives, hypothesis to be tested and relevance to Cardiovascular Disease. There must be a clear description of how the pilot project will lead to a grant submission with a specific anticipated submission date. Maximum of 2 specific aims.
- Background/Significance (1/2 page): Briefly describe the background/research to date that has led to the present application. Describe the significance and innovation of the project and specifically identify the need this project will fill.
- Preliminary Studies (1 page): Describe the PI’s preliminary studies relevant to the current proposal. Establish the PI’s experience and competence to pursue the aims of the proposal. Preliminary data is not required.
- Experimental Approach and Research Design (4 pages): Describe the experimental approach to the research questions and concisely state the procedures and methods to be used in achieving the specific aims. Describe how data will be collected, analyzed, and interpreted. Present a timeline with the expected completion of milestones for the project. Identify potential problems and alternative approaches. The 4-page limit includes all figures and tables.
- Literature Cited (no page limit): Limit references to relevant and current literature pertinent to the proposed research.

IRB or IACUC approval may be pending at the time of submission but is required prior to selected pilot projects being sent to NIH for funding approval.
Budget: Projects will be awarded for up to 3 years, with a budget of up to $150,000 in direct costs per year. Research project funds may be used to purchase consumable supplies, animals and housing, core services or small laboratory hardware (items costing less than $5,000). PI salary and effort are required at 50% (6 calendar months). Equipment ($5,000 and above) may not be purchased. Non-PI personnel costs are allowable; however, applications must name specific individuals who are assured to be present and eligible to work on the project no later than July 1, 2024. Essential research related travel and travel costs to attend national/regional scientific meetings may be included.

Eligibility: Research Project should be led by a Research Project Leader (RPL) who is responsible for ensuring that the Specific Aims of that project are met. An RPL must hold an independent faculty appointment (or equivalent at a research institute) at the time the application is submitted, and must qualify either as an NIH Early Stage Investigator (ESI) or as a New Investigator (NI). See Section III. Eligibility Information for additional details. NIH defined Junior Investigators are eligible to apply and are required to have a mentor. Per the COBRE RFA: “The junior investigator is defined either as (1) an individual who does not have and has not previously had an external, peer-reviewed RPG or Program Project Grant (PPG) from either a Federal or non-Federal source that names that investigator as the PD/PI or (2) an established investigator who is making a significant change to his/her career. The intent of this FOA is to support and develop promising investigators whose early career support consists of awards geared toward initiating their intended area of research. support may be provided to an established investigator who is making a significant change to his/her career goals by initiating a new line of research that is distinctly and significantly different from his/her current investigative program. The current or previous history of independent peer-reviewed research support, which should be indicated in the Biographical Sketch, in a different investigative area than that proposed in this application does not disqualify the investigator. Furthermore, this individual can be of any faculty rank. However, investigators whose current research is already supported by a RPG or PPG and who are not changing their current research program are not eligible.”

Evaluation: Proposals will be evaluated on scientific merit by an internal review committee and the COBRE External Advisory Committee (EAC). Evaluation will consist of an assessment of the proposal’s overall impact according to the standard NIH review criteria. When comparing proposals with similar impact scores, preference will be given to junior investigators who do not have, or have not previously had, prior NIH funding as PI over funded junior faculty and more senior faculty. Priority will be given to applications that make significant use of the Cardiovascular COBRE core laboratories. Specific criteria for evaluation of COBRE Pilot Project applications includes:

- Strength of the science and presentation quality/clarity (grantsmanship)
- Likelihood the project can be developed into a full, competitive/fundable NIH proposal
- Possibility of obtaining a publishable result during the one-year project period
- Relevance to thematic mission of COBRE Center and synergy with existing projects
- Clear, detailed plan for engaging with COBRE core facilities
- Applicant’s background, experience, career status and track record of past research

Terms and Conditions:

- Research project awardees are required to submit quarterly progress reports, as well as a final progress report to be submitted with the COBRE annual progress report.
- Recipients are required to present their project to the External Advisory Committee (EAC) during their annual review of the COBRE program as well as during the CCDS seminar series or equivalent departmental seminar series.
- Awardees are required to participate as fully as possible in regular COBRE research meetings, as well as seminars, workshops and special events organized by the COBRE.
- PI agrees to submit external grant applications that are based on the data or results obtained from the COBRE Research Project
- The COBRE director may make project term and budget adjustments in accordance with COBRE Center policies and NIH guidelines regarding scientific overlap.
- Upon receipt of funds, COBRE awardees agree to comply with any and all requirements not already mentioned that may be imposed by the NIH or other institutional authorities.
Pilot Project Program Application Instructions

**Format:** All applications must be in 11-point Arial font with half-inch margins. Figure legends may be 10-point. All figures must be large enough to be clearly legible. The page limit for the Research Strategy section is 6 pages. Using PHS398 forms and instructions, each proposal should include the following sections:

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- Research Strategy (see below)
- If the proposed study involves human subjects: Completion of the PHS Human Subjects and Clinical Trial Information Form (study record, inclusion data record, protection of human subjects, and data and safety monitoring plan, if applicable); Provide a copy of human subjects education certification for PI and all key personnel involved in the design and conduct of the human subjects research component.
- Vertebrate animals justification and protection, if applicable
- A letter of Support from the PI's Department Head/Chair
- A letter agreeing to participate in COBRE, including support for the project, from a Mentor
- List of all grant applications submitted during the last two (2) calendar years. Please include the date of submission, name of granting agency, project title, start/end dates and direct costs requested.
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**Research Strategy** should contain the specific aims of the project, significance, innovation, and approach. The page limit for these sections together is 6 pages, including all figures and tables. Suggested page lengths and section descriptions are described below:

- **Specific Aims (1/2 page):** List the goals, long-term objectives, hypothesis to be tested and relevance to Cardiovascular Disease. There must be a clear description of how the pilot project will lead to a grant submission with a specific anticipated submission date. Maximum of 2 specific aims.
- **Background/Significance (1/2 page):** Briefly describe the background/research to date that has led to the present application. Describe the significance and innovation of the project and specifically identify the need this project will fill.
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above) may not be purchased. Non-PI personnel costs are allowable; however, applications must name specific individuals who are assured to be present and eligible to work on the project no later than July 1, 2024. Essential research related travel and travel costs to attend national/regional scientific meetings may be included. Projects will potentially be renewable for a second year, contingent upon scientific progress and available funds.

**Eligibility:** COBRE Pilot Projects must have a single principal investigator. NIH defined Junior Investigators are eligible to apply and are required to have a mentor. Per the COBRE RFA: “The junior investigator is defined either as (1) an individual who does not have and has not previously had an external, peer-reviewed RPG or Program Project Grant (PPG) from either a Federal or non-Federal source that names that investigator as the PD/PI or (2) an established investigator who is making a significant change to his/her career. The intent of this FOA is to support and develop promising investigators whose early career support consists of awards geared toward initiating their intended area of research. support may be provided to an established investigator who is making a significant change to his/her career goals by initiating a new line of research that is distinctly and significantly different from his/her current investigative program. The current or previous history of independent peer-reviewed research support, which should be indicated in the Biographical Sketch, in a different investigative area than that proposed in this application does not disqualify the investigator. Furthermore, this individual can be of any faculty rank. However, investigators whose current research is already supported by a RPG or PPG and who are not changing their current research program are not eligible.”

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