

Phase 3 Request for Pilot Project Applications

Letters of Intent due February 17, 2025 Those selected to submit full applications will be notified by February 21, 2025.

Selected full applications due March 31, 2025

Anticipated project start date: July 1, 2025

NIH Center of Biomedical Research Excellence Center for Molecular Analysis of Disease Pathways

(http://cmadp.cobre.ku.edu)

The COBRE Center for Molecular Analysis of Disease Pathways (CMADP) at the University of Kansas provides participating investigators with research support, mentoring and access to Core Lab Services in a collegial, collaborative atmosphere. We are seeking to fund a new group of Pilot Projects at up to \$100,000 direct costs per year for one year (July 1, 2025 – June 30, 2026), renewable for a second year contingent on scientific progress and available funds.

Applications must propose research that fits well with the scientific theme of our Center and that will make good use of one or more of the CMADP Core Labs (<u>http://cmadp.cobre.ku.edu/cores</u>). This competition is open to faculty investigators of any rank whose research embraces the molecular analysis of disease pathways in the broadest sense. Priority will be given to new and early-stage investigators with tenure-, research-, or clinical-track faculty appointments.

Research areas eligible for funding

Because COBRE Centers are expected to have a thematic scientific focus, proposed research must fit the COBRE theme of molecular analysis of disease pathways. Successful applications may incorporate one or more of the following topics in significant depth. More information on the overall goals of the Center is provided on the <u>COBRE</u> <u>CMADP website</u>.

- Development of new probes that can be used to study cellular and molecular functions in living model organisms or cells
- New imaging approaches for studying disease pathways
- Micro- or nanotechnology-based methods for studying disease pathways
- New sensing technologies
- Development of innovative platforms and devices on which to analyze biological specimens for such things as microscopy and chemical analytics
- Use of next-generation sequencing (e.g. genome sequencing, RNA seq, ChIP seq) to analyze biological pathways relevant to disease in the broadest sense
- Investigations involving model organisms for studying disease

Eligibility and evaluation criteria for COBRE applications

Applicants must hold a faculty appointment or equivalent to serve as a COBRE Pilot Project Leader. **The proposed COBRE Pilot Project cannot overlap with ongoing funded projects** and must include a significant emphasis on molecular analysis of disease pathways <u>that includes use of one or more of our Center's Core Labs</u>.

Note: Per NIH guidelines, Pilot Project Leaders are not allowed to receive simultaneous research support from other IDeA awards, including an INBRE, an IDeA-CTR, or a different COBRE.

COBRE projects must have a single Principal Investigator who will be responsible for the scientific direction and management of the project. Applications may involve collaborators, but only when they bring complementary investigator strengths and approaches to the project. All collaborators receiving COBRE funds must be from Kansas institutions; a possible exception would be a collaborator providing specialized research services on an established fee-for-service basis.

The basic criteria for NIH grant review may be found at <u>https://grants.nih.gov/policy/peer/index.htm</u>. Additional COBRE-specific review criteria include:

- Strength of the science and the quality and clarity of its presentation
- Likelihood of the project becoming competitive for extramural funding (R21, R01, etc.)
- Likelihood of getting a publishable result within the time frame of the project award period
- Relevance to the COBRE theme of molecular analysis of disease pathways
- Background, experience and career status of the applicant
- A track record of past research, research grant applications and research funding
- A clear, detailed plan for utilization of one or more COBRE CMADP Core Laboratories
 - o Genome Sequencing Core
 - o KU Nanofabrication Facility
 - Synthetic Chemical Biology Core

General terms and conditions of COBRE CMADP Pilot Project awards

- 1. New PIs not previously funded by COBRE are encouraged to apply.
- 2. Projects must make use of one or more of our COBRE's Core Labs:
 - Genome Sequencing Core (<u>https://gsc.ku.edu</u>)
 - KU Nanofabrication Facility (https://nanofab.ku.edu)
 - Synthetic Chemical Biology Core (https://scb.ku.edu)
- 3. For Pilot Projects, PI salary is limited to a maximum of 1 person-month during a given 12-month project period.
- 4. Funds may be used for consumable supplies, services or small laboratory hardware but not for equipment (i.e. items costing > \$5000). Personnel costs are allowable but preference will be given to applications that name specific individuals who are assured to be present on-site, eligible to work and ready to begin no later than July 1, 2025. Travel costs may include essential research-related travel and participation in national/regional scientific meetings. Tuition costs are allowable as per your institution's standard policies.
- 5. Investigators who receive COBRE support are required to participate as fully as possible in the regular monthly research meetings of the Center, as well as seminars, workshops and other special activities organized or sponsored by the Center.
- 6. An investigator who is supported by any type of IDeA Networks of Biomedical Research Excellence (INBRE) funding is not eligible to receive research support from COBRE simultaneously (nor is an investigator allowed to receive research support from multiple COBREs at once).
- 7. The COBRE Director reserves the right to make term and budget adjustments in accordance with the intent of the COBRE CMADP program and NIH policies concerning scientific overlap of projects.
- **8.** By accepting COBRE funds, awardees agree to comply with any and all requirements not already mentioned that may be imposed on COBRE CMADP by NIH or other institutional authorities.

Prospective applicants with questions about eligibility, program details, or the "fit" of their project to the COBRE theme are encouraged to contact Dr. Susan Lunte (<u>slunte@ku.edu</u>) or Dr. Erik Lundquist (<u>erikl@ku.edu</u>).

Application Process

Step 1 - Send Email Letter of Intent

Letters of intent should be sent as a PDF via email to Cady Bush, COBRE CMADP Assistant Director (<u>cbush@ku.edu</u>). Your letter of intent **must:**

- Be **received** by Monday, February 17, 2025.
- Be no longer than one page, sent by email as a PDF attachment along with the applicant's NIH biosketch;
- Explain briefly how the applicant meets the eligibility criteria;
- Explain briefly the nature or focus of the research that will be proposed and, if not obvious, how it fits the scientific theme of COBRE CMADP; and
- Explain briefly how the project will utilize one or more of the COBRE CMADP Core Labs.

You will be notified by February 21, 2025 if you should go on to prepare and submit a full application (Step 2).

Step 2 – Prepare and Submit Application

Please obtain assistance from the appropriate Grant Services agency at your university to prepare and submit your proposal.

Applications should be prepared in general accord with the NIH PHS 398 application guidelines, (03/2020 revision, available from http://grants.nih.gov/grants/funding/phs398/phs398.html). In the http://grants.nih.gov/grants/funding/phs398/phs398.html). In the http://grants.nih.gov/grants/funding/phs398/phs398/phs398.html). In the http://grants.nih.gov/grants/funding/phs398/phs398/phs398.html). In the http://grants.nih.gov/grants/funding/phs398/phs398.html). In the http://grants.nih.gov/grants/funding/phs398/phs398.html). In the http://grants.nih.gov/grants/funding/phs398/phs398.html).

- Face Page (signed by your institution's authorized official)
- Summary, Relevance, Project/Performance Site(s), Senior/Key Personnel, Other Significant Contributors, and Human Embryonic Stem Cells

BUDGET INSTRUCTIONS: Please prepare two separate PHS 398 Form Page 4 detailed budget pages and justifications as follows:

- Initial budget period: July 1, 2025 June 30, 2026
 - Maximum budget: \$100,000 DC, 1.0 person-month max paid effort for PI
- Second budget period: July 1, 2026 June 30, 2027
 - Maximum budget: \$100,000 DC; 1.0 person-month max paid effort for PI

Please also include a single PHS 398 Form Page 5 to reflect the budget for the entire proposed project period.

Note: Due to NIH guidelines on COBRE grant funding, <u>no carry-forward will be allowed between budget</u> periods, and there is no project funding extension possible past June 30, 2027.

- Biosketch Format Page
- Omit the Table of Contents page and the Resources page (unless you have something unique to mention)
- Research Strategy, developed for a potential two-year project period
- References
- Instead of using PHS Other Support pages, please follow these COBRE-specific requirements:
 - Other Support. Provide a listing of all current research support from all sources. For each source listed, please provide the following information: Name of funding source, title of project, project start/end dates, and amount of direct costs available (or available to you if a multi-PI grant), and

percent effort. If you are a junior faculty member, please include the following details of your startup package in this list: amount initially provided, current unspent balance, and expiration date or other restrictions if any.

- Provide a listing of all grant **applications** submitted during the past **two** years (January 2023 to present). For each application submitted, please provide the following information: Date of submission, name of granting agency, title of project, project start/end dates requested, and amount of direct costs requested.
- Letters of support/collaboration are not required but allowed.
- Checklist Form Page. Please note that, per a special agreement with the KU Office of Research, the F&A rate applied should be no more than 53%.

In addition, please observe the following COBRE-specific requirements:

- The Research Strategy section **may not exceed six (6) pages** in length including figures and tables but excluding references (which must be complete citations in the NIH style). The Specific Aims section must fit entirely on one page (**maximum of two specific aims** for a Pilot Project) and is not included in the 6-page limit for the Research Strategy.
- Please be sure to include a <u>Data Management & Sharing Plan</u> and <u>authentication of key biological and/or chemical</u> resources. If the key biological section does not apply, please include a statement to that effect.
- Please use 11-point Arial font with **0.5**" margins on all four sides. Write concisely and limit the amount of general background to the essentials that reviewers will need to be aware of to appreciate the proposed research.
- All figures and their lettering must be large enough to be clearly legible.
- Copies of all relevant compliance approvals (radioisotopes, recombinant DNA, vertebrate animals, human subjects, etc.) must be provided at the time of application. NOTE: if compliance approvals are still pending at the time of application (March 31, 2025), please provide documentation that approvals have been requested but not yet approved.

COBRE Application Package and Checklist

Please type the applicant's name in the upper right hand corner of every page. Number pages consecutively starting with the face page of the NIH PHS 398 form as page 1.

- Please use 11 point Arial font and 0.5" margins on all four sides.
- Observe the strict six (6)-page limit on the Research Strategy section (including figures and tables but excluding references and the one-page Specific Aims section).
- No appendices or additional email attachments should be submitted with the application.
- Please be sure that the first page of the application, the face page, is signed by your institution's authorized official.
- The last page of the application should be the NIH Checklist page.

Submission of Application Package

Please work through your institution's Grant Service agency to have applications submitted via email on NIH PHS 398 forms (as a single PDF document) to Cady Bush, COBRE CMADP Assistant Director (<u>cbush@ku.edu</u>).

Applications must be **received** no later than 5:00pm on Monday, March 31, 2025.

Review of Applications

COBRE Pilot Project applications will be reviewed administratively according to the NIH criteria and the COBREspecific criteria mentioned above. Applicants recommended for funding will be notified in late April 2025.