Request for Oklahoma COBRE in Structural Biology Pilot Project Proposals

The Oklahoma Center of Biomedical Research Excellence in Structural Biology (OCSB) invites proposals for pilot project grants to be funded through our NIH/NIGMS COBRE award. The project Principal Investigator must be a research or tenured/tenure-track faculty member in the State of Oklahoma. Investigators currently supported by COBRE/INBRE grants are not eligible. These pilot project grants are intended to provide short-term funding, primarily to acquire preliminary data or generate publications to strengthen applications for full research project grants to NIH, NSF or other major funding mechanisms. Projects must be of high significance and potential impact, commensurate with NIH and NSF funding criteria and priorities, and have significant potential for near-term publication in a peer-reviewed research journal. Junior investigators and established investigators who are not currently engaged in structural biology research but have a strong basis of wanting to move in this direction are especially encouraged to apply.

Pilot project proposals should embody the scientific theme of the OCSB (http://structuralbiology.ou.edu). The Center seeks to promote and support research that combines structural biology approaches (defined broadly) with other functional characterization of important biomolecules relevant to the NIH mission of improving human health. Studies that explore the structure and function of macromolecules and/or macromolecular complexes as they relate to catalysis, regulation and assembly at all levels of biological organization are of interest, as are theoretical, computational modeling and other quantitative approaches. An expansive view will be taken to evaluate the relevance of projects to the OCSB theme. Questions regarding the suitability of projects for Pilot Project support should be directed to Dr. Ann West (awest@ou.edu). Projects that involve Core research facilities supported by the OCSB (macromolecular X-ray diffraction, crystallization, protein production) are particularly welcomed.

The OCSB anticipates funding 2-3 applications at a level of $25,000 - $50,000/year (direct costs only) for up to 2 years of funding.

Important Dates

Application deadline: 5 pm March 30, 2018
Anticipated Funding Start date: June 15, 2018 (successful applicants will be notified immediately after a funding decision is made)
Funding End date: funds MUST be expended each year by May 31st (no-cost extensions will not be granted)

Submission Information

Applications should be submitted as a single PDF formatted document to Dr. Ann West (awest@ou.edu). Projects may be directed by a single investigator or by a collaborative team; the first named PI will be considered to be Project Leader and will assume responsibility for funds provided by the Pilot Project grant.

Review

External reviews will be solicited from at least two outside reviewers. Applicants may submit a list of up to 5 names as potential reviewers. Applications will be evaluated on the basis of the project's relevance to the COBRE central theme, scientific merit, and the potential of a Junior Investigator to become an independent investigator. An Internal Advisory Committee will then recommend proposals to the COBRE External Advisory Committee (EAC) for their approval and contingent upon NIH final approval.

Application Content and Format

The application does not require a form. However applications should be written using Arial 11 point or similar type font, with page margins no less than 1.0 inch on all borders. The application should include a Research Description together with Supporting Materials.

The Research Strategy section (items 3-5 below) should comprise **no more than five pages**, be comprehensible to a reviewer who is not necessarily a specialist in the project discipline, and should include the following sections:

1. *Face page:* The title of the project, project PIs, their departmental affiliations, and contact information should be listed. If there is more than one PI, the first listed will be considered to be the corresponding and lead PI for the project.

2. *Abstract* (<250 words): Provide a summary of the problem the proposal addresses, its intellectual and/or biomedical significance and the specific aim(s) of the proposal. The abstract may be used by the OCSB for reporting purposes and published on the OCSB website.

3. *Specific Aim(s)* (1 page): No more than two specific aims are recommended and should be stated clearly and concisely.

4. *Background and Significance* (1 page): The question(s) to be addressed or the hypothesis to be tested in the specific aim(s) should be clearly and concisely stated. The applicant should explain how the data and results to be generated with Seed Grant funding will be used to support a future research project grant application.

5. *Experimental approach* (1-3 pages): This section should show how the experimental approach specifically addresses the question or hypothesis but should not contain detailed experimental protocols. Expected results, as well as potential pitfalls and alternative experimental approaches (which may or may not be within the scope of Pilot Project support) should be described. Potential use of core facilities should be clearly stated (questions regarding suitability of core facilities to the proposed project should be discussed with core directors). Experimental support from collaborators who are not PIs should be documented with a letter of collaboration (see “Supporting Materials).

Supporting Materials:

6. *Literature Citations*: No more than a single page; no particular format is required, but should include the title of the article or book, the name of at least the first author and

sufficient information to retrieve the article or book from PubMed or a library reference database, respectively.

7. *Budget (maximum of $50,000 direct costs only per year):* Funds may be used to provide salary and benefits for PI(s), postdoctoral researchers, technicians, graduate and undergraduate students, supplies and small equipment (<$5000), travel for purposes of obtaining experimental data and contracted services (*e.g.,* DNA sequencing, user fees for research cores). Costs should be itemized using NIH budget Form Pages 4 and 5 (https://grants.nih.gov/grants/funding/phs398/phs398.html) and a 1-page Budget justification provided. PIs should work with their campus research administration office in preparing a budget for their proposal. All submissions in response to this solicitation must be reviewed and approved by the responsible official on your campus (*i.e.* routed through your Research Services or Sponsored Programs office).

8. *Biosketch(s) of PI(s)*: NIH – format biosketch (download non-fellowship type form from http://grants.nih.gov/grants/funding/phs398/phs398.html).

9. *Current and Pending Support:* List all current sources of institutional or extramural funding and pending applications. Indicate funding agency, grant number (if applicable), project title, total project period, role in project (*e.g*., PI, co-PI, collaborator, consultant, etc.), amount of funding awarded or requested.

10. *Proposed funding applications*: List the grant applications that the PI proposes to submit based on results expected from Pilot Project funding. Indicate the target submission dates for applications, and the funding agency and funding agency division (examples: NSF, Molecular and Cellular Biosciences division, or NIH, National Institute of General Medical Sciences).

11. *Letters of Support/Collaboration, if applicable*: Letters need only indicate that the collaborator plans to participate in the project as indicated in the Research Description. For Junior Investigators, a mentor should be identified and a letter of support should be provided indicating his/her willingness to serve as a mentor for this pilot project. A mentor should be an established investigator with relevant expertise, preferably on the same campus and ideally a track record of NIH funding.

12. *Institutional licenses and approvals, if applicable*: Provide Institutional Biosafety Committee Approval number if the project will utilize (a) recombinant DNA, (b) infectious agents or toxins (c) vertebrate animal studies. If the project utilizes radioactive materials, hazardous chemicals, and/or generates radioactive or hazardous waste, written approval from the relevant institute's Environmental Health and Safety Officer must be obtained. A statement that such approval has been obtained by the PI should be provided, if applicable. If the project will utilize live vertebrates or tissues, body fluids or feces from vertebrate animals, the appropriate protocols that involve animals or tissues must be approved by the relevant institutional Animal Care and Use Committee (IACUC) before commencement of research activities. If applicable, provide IACUC protocol approval number prior to start of project.

13. *List of potential reviewers (optional)*: List up to five (5) names of potential reviewers, their contact information, and a statement regarding the extent of your professional relationship.

Terms of Award:

- Awardees are required to provide semi-annual progress reports (due in advance of the OCSB External Advisory Committee semi-annual site visits).

- Awardees are expected to attend and participate in OCSB meetings including the OCSB monthly work-in-progress meetings, semi-annual EAC meetings, and annual structural biology symposia.

- Awardees must acknowledge receipt of this grant support in any publications or presentations as well as usage of OCSB-supported core facilities. For example, "*Research reported in this publication was supported by an Institutional Development Award (IDeA) from the National Institute of General Medical Sciences of the National Institutes of Health under grant number P20GM103640*."

Questions can be directed to Ann West (405-325-1529; awest@ou.edu).