



Center of Biomedical Research Excellence (COBRE)

September 27, 2022

Request for Applications for Pilot Grants

The CNAP COBRE center at Kansas State University is soliciting applications for pilot grants that will begin on June 1, 2023. The grants are open to all faculty with appointments at higher education institutions within the State of Kansas, although early- and mid-career faculty will be prioritized for funding. Proposed pilot grants should seek to enhance neuroscience research in the State of Kansas and/or fit within CNAP's theme of cognitive and neural plasticity. We fund basic, translational, and clinical research in humans and animals from a wide range of disciplines (e.g., animal behavior, biology, pharmacology, veterinary medicine, cognitive science, human factors, kinesiology, human nutrition, computer science, engineering). Further details can be found at www.k-state.edu/cnap.

Faculty research career development is a strong focus of the CNAP COBRE program, with an overarching goal of promoting extramural grant funding success. Pilot grants are mentored by experts in the relevant research areas who assist with research project and career development. CNAP offers premier grant writing support to assist faculty with their proposal submissions. We also provide core facilities, and relevant training, to support cutting edge techniques in animal neuroscience, human neuroscience, and advanced computational modeling applications. Our scientific exchange network provides additional core facility access, support for collaborations, and access to scientific training and professional development workshops.

Seed pilot grants (1 year in duration; 3-page limit for research strategy) are available for up to \$25,000 in total direct costs plus F&A at the approved institutional rate. These awards are recommended for applicants who are early-stage investigators with limited funding track records.

Developmental pilot grants (1-2 years in duration; 6-page limit for research strategy) are available for up to \$100,000 in total direct costs plus F&A at the approved institutional rate. These awards are recommended for applicants who are more established early- and mid-career investigators with some previous funding track record, but who have not yet received major research project funding (e.g., R01).

Individuals may submit **one application** to the pilot grant program to apply for either a seed grant or developmental grant. The application should use current versions of relevant NIH PHS forms and should follow all instructions and guidelines outlined in the *Instructions for Submitting CNAP Pilot Grant Proposals*. The required forms are noted in the Pilot Grant Instructions below and are available from the NIH web site.

Applicants are encouraged to submit a letter of intent by **5 PM (CST) on Wednesday, February 1, 2023**. This is highly recommended to ensure that your grant can be reviewed in a timely manner. Applications should be submitted by the applicant's research office and are due by **5 PM (CST) on Wednesday March 1, 2023**.

Submissions should be directed to the CNAP center email address: cnap@ksu.edu. Please direct any inquiries to the CNAP Program Director, Dr. Kimberly Kirkpatrick: kirkpatr@ksu.edu

Sincerely,

Kimberly Kirkpatrick

Program Director, Cognitive and Neurobiological Approaches to Plasticity Center

Instructions for Submitting CNAP Pilot Grant Proposals

Applicants may submit a single application to the pilot grant program to apply for either a seed pilot grant or a developmental pilot grant.

The application package will consist of the following documents compiled into a single pdf in the following order:

- **PHS 398 Face page** – use PHS 398 Face Page 1 form. The performance period should be 6/1/23-5/31/24 for 1-year grants and should be 6/1/23-5/31-25 for individuals requesting 2 years of support.
- **Project Summary/Abstract** – provide a general project summary and relevance statement – please use PHS 398 Face Page 2 form. Make sure to list the mentors as “Other Significant Contributors” on the second page of this form.
- **Specific Aims (1 page)** – discuss your overarching project goals
- **Research Strategy (3 pages for seed pilot grants up to \$25K in total direct costs; 6 pages for developmental pilot grants up to \$100K in total direct costs)** – Research strategy document should include the following:
 - *Innovation and Significance* of the project
 - *Research Approach* to achieve the specific aims of the project including research design and procedural information. Make sure to discuss anticipated outcomes of the proposed research.
 - *Scientific Premise* – general strengths and weaknesses of prior research that the application is based on and how you will address any identified weaknesses.
 - *Scientific Rigor* – discuss efforts to ensure robust and unbiased experimental design, methodology, analysis, interpretation, and reporting of results.
 - *Project Timeline*
 - *Achievement of Pilot Grant Milestones* – See Pilot Grant Program description for more details on the program milestones. Pilot grant applicants should include specific plans for submitting conference abstracts, publications, and grants.
- **Bibliography (no page limit)** – include a reference list for all cited sources in the application.
- **Other support for the applicant** – use the other support form page to report any completed, current, or pending support. Make sure to note any overlap with the pilot project and plans for dealing with overlap.
- **Biosketches (5 pages)** are required for the **applicant and mentor(s)**. Use the current NIH biosketch form: <https://grants.nih.gov/grants/forms/biosketch.htm>
- **Detailed budget and justification (no page limits)** – use the NIH PHS detailed budget form (PHS Form Page 4). Grantees should not exceed \$25,000 in direct costs for seed grant applications and \$100K for developmental grant applications, plus F&A at the approved institutional rate. Seed grant budgets are for one year only. Developmental grants may request one or two years of support, but the total direct costs requested across the two years should not exceed \$100K. Please provide a budget justification for each item in the budget. The budgets may cover equipment, salaries (plus benefits), supplies, animal care costs, human participant payments, other research costs, and travel costs.
- **PHS Forms G Human Subjects and Clinical Trials Information, Study Record(s), Human subjects education certificates, and IRB approval letter (if applicable; no page limits)** – make sure to include all relevant attachments in the compiled pdf form as well as the human subjects education certificates, and IRB approval letter*
- **Vertebrate animals and IACUC approval letter (if applicable; no page limits)**

***It is recommended that the title of the IRB/IACUC application in the approval letter should match the title of the pilot grant. This will make it easy for NIGMS to evaluate the IRB approval as relevant to the application.**

Applicants should use **at least** 11 point Arial, Georgia, Helvetica, or Palatino Linotype, **at least** 1/2 in margins, and no more than six lines per vertical inch line spacing for all documents.

External Advisory Committee (EAC) and NIGMS approval is required for all pilot grants.

Year 7 Pilot Program Timeline:

February 1, 2023 (5 PM central) – submit letter of intent with pilot grant title, type of award you plan to apply for (seed grant or developmental grant), abstract (500 words max), and proposed project grant mentor(s) names, email addresses, and brief description of qualifications. The letter should also include the names of 3-5 recommended reviewers along with their institution, email address, and a brief description of their relevant research interests.

March 1, 2023 (5 PM central) – submit all above pilot grant materials as a single compiled pdf file with items arranged in the above order

April 12, 2023 – scientific review completed; grants sent to EAC for review

May 3, 2023 – pilot grant decisions sent to NIGMS for approval

June 1, 2023 – pilot grant awards begin

Note that the timeline for reviews is aspirational as reviewers may take longer to complete their assignments, and the time frame for NIGMS approval may take longer than planned. We will do our best to keep as close to the timeline as possible.

It is possible that some grantees may be asked to revise and re-submit their grants. In these cases, we will construct a new timeline in consultation with the applicant.

NOTE: All materials should be submitted through the applicant's pre-award services/research office at their host institution. The face page should be signed by the applicant organization's signing official. Materials should be submitted as a single package via email to: cnap@ksu.edu

Helpful links:

General guidance on writing NIH applications: <https://grants.nih.gov/grants/how-to-apply-application-guide/format-and-write/write-your-application.htm>

PHS 398 Forms G forms and instructions: <https://grants.nih.gov/grants/forms/all-forms-and-formats.htm>

COBRE program announcement: <https://grants.nih.gov/grants/guide/pa-files/PA-19-312.html>

Rigor and Reproducibility: <https://grants.nih.gov/reproducibility/index.htm>

NIH biosketch form: <https://grants.nih.gov/grants/forms/biosketch.htm>

Tips for developing your budget: <https://grants.nih.gov/grants/how-to-apply-application-guide/format-and-write/develop-your-budget.htm#cost>

Human Subjects Research Overview: <https://grants.nih.gov/policy/humansubjects.htm>

Preparing FORMS G human subjects and clinical trials documents: <https://grants.nih.gov/grants/how-to-apply-application-guide/forms-g/general/g.500-phs-human-subjects-and-clinical-trials-information.htm>

Preparing the vertebrate animals section: <https://olaw.nih.gov/guidance/vertebrate-animal-section.htm>

CNAP Pilot Grant Program Description

Overall Description. The pilot grant program will provide funds to support projects with a maximum budget of \$25K in total direct costs for seed pilot grants and \$100K in total direct costs for developmental pilot grants plus institutional F&A costs at the approved institutional rate.

Specific Aims. The pilot grant program will expand our range of specific projects that CNAP supports to: **(1)** capitalize on new core facility capabilities; **(2)** establish new collaborations; **(3)** develop stronger interdisciplinary and cross-institutional connections; **(4)** provide additional expertise for the cross-cutting themes; and **(5)** utilize resources available through the SEN. Pilot grants are expected to result in extramural grant submissions and have good prospects for publications, conference presentations, and other relevant research products.

Investigator Eligibility. The intent of this program is to support and develop promising early- and mid-career investigators to pursue extramural funding. The program will favor supporting promising individuals who do not

have, or have not previously had, external peer-reviewed Research Project Grant (RPG), Program Project Grant (PPG) or equivalent awards from either Federal or non-Federal sources as the Program Director/Principal Investigator (PD/PI) or project PD/PI of a PPG. Each pilot project lead should indicate his/her current, pending, and previous history of peer-reviewed research support.

Applicants must hold a tenure-, research-, or clinical-track faculty appointment at an eligible institution of higher education within the State of Kansas at the time that the award is made. Individuals may have had previous CNAP funding, but we will favor funding individuals who are new to the program. Investigators who are on leave (e.g., sabbatical) may be eligible to participate, but should consult with Dr. Kirkpatrick (kirkpatr@ksu.edu) prior to applying. Postdoctoral fellows or other positions that do not carry independent faculty status at the applicant institution will disqualify that individual and his/her pilot grant project from consideration. Individuals must be conducting or planning to conduct research in an area related to the CNAP center theme of cognitive and neural plasticity. Eligible individuals must have good potential to obtain extramural funding evidenced by a strong research track record.

Individuals may apply for either a seed grant or a developmental grant. Seed pilot grants are recommended for early-stage investigators. Developmental pilot grants are recommended for applicants who are more established investigators, but who have not yet received significant RPG funding.

Mentor Qualifications. All pilot grants are mentored, and mentors must be approved by the PI/PD (Dr. Kirkpatrick) prior to initiation of funding. Mentors will receive compensation for their time through central COBRE funds. Applicants should include their mentors in their applications but should not include the mentor fees in their budgets. Each pilot grant should be supported by at least one mentor who has expertise in the relevant field, a strong research track record, extensive mentoring experience, and is experienced at reviewing and/or managing grants. The mentor(s) should provide specific scientific expertise to support the project development and development of extramural grant applications.

Implementation Plan. The performance period for this round is 6/1/23-5/31/24 for one-year projects and 6/1/23-5/31/25 for two-year projects. Seed grants must be limited to one year of support, but developmental grants may be proposed for one or two years. Proposals should be relevant to the overarching CNAP theme and with an appropriate scope for the size and duration of the award. Applications will be reviewed following NIH review guidelines for regular R-grants with the additional criterion of selection for fit to the CNAP center mission. The External Advisory Committee (EAC) will conduct a secondary review of the applications and the reviewer comments and make the final recommendation for funding consideration (approve, revise, and resubmit, or disapprove). Progress will be assessed by the EAC during the January and June evaluation meetings.

Successful pilot grants should show clear potential to: **(1)** advance the CNAP program mission of conducting cutting-edge research on cognitive and/or neural plasticity; **(2)** capitalize on CNAP core facilities; **(3)** meet NIH requirements for significance and innovation; and **(4)** obtain extramural funding. Pilot grants must be approved by NIGMS prior to their initiation.

Milestones. Each funded pilot grant will have its own milestones based on the pilot grant timeline. In addition, all pilot grants will be assessed based on the following program milestones: **(1)** deliver at least one conference presentation supported by pilot grant funding; **(2)** submit at least one manuscript based on pilot grant results; and **(3)** submit at least one grant proposal to an extramural funding agency. Applicants should submit plans for achieving these milestones as a part of the Research Strategy. Pilot grant leaders will be asked to report on the milestones and outcomes of their pilot grants in subsequent years following funding to capture outcomes that occur following the grant period. The program milestones will be evaluated by the EAC in January and June annually to examine success rates in manuscript submissions, publications, grant proposal submissions and successful procurement of extramural grants.

Metrics of Success. Success of the program will be gauged through: **(1)** the number of national/international conference presentations based on the pilot grant; **(2)** the number and quality (e.g., impact factors) of peer-reviewed publications based on the pilot grant; **(3)** the number of submissions of RPGs; and **(4)** the percentile ranks of RPGs.

Anticipated Outcomes. The pilot grants will grow CNAP membership, enhance synergy along the cross-cutting themes, and develop interdisciplinary connections with other departments and universities. The program will result in new collaborative projects, increased use of core facilities, increased participation in the SEN, and the formation of new lines of research. The increased use of facilities through the pilot grants will promote the success and impact of the research cores, resulting in significant infrastructure growth. The pilot grants will

also be a means of supporting innovative new lines of research and of providing the foundation for these projects to transform into viable applications for extramural funding. In addition, the pilot grant holders will be considered as potential candidates for future primary projects, contingent on performance in the pilot grant program and on the development of viable primary project proposals. The program will increase the overall intellectual impact and reputation of CNAP through increased research productivity in the form of conference presentations and publications, increased grant submissions, and ultimately increased extramural funding.

Pilot Grant Leader Rights and Responsibilities. Pilot grant leaders will have full access to all COBRE-supported research cores and COBRE-supported programs. They will have the use of the mentoring system to facilitate career development and CNAP central funds will cover consulting fees for the pilot grant mentor(s). The potential pilot grant leaders are expected to participate in the CNAP weekly brown bag whenever possible. They should also attend and participate in CNAP business and evaluation meetings when required.

Successful pilot grant leaders will provide progress reports through the Piestar evaluation system when requested, and will submit any additional data (e.g., survey responses) if requested through the course of the grant year. Pilot grant leaders will continue to provide reporting on conference presentations, publications, grant submissions/awards, scientific highlights (e.g., media coverage) of their work, and other project outcomes following completion of their awards. Successful pilot grant leaders should cite CNAP support in all products (e.g., presentations, publications, media coverage) that used COBRE project funds and/or research cores: "This project was supported by a grant from the National Institute of General Medical Science P20GM113109 of the National Institutes of Health."

The Program Director reserves the right to remove pilot grant funding and/or pilot grant mentors if recommended by the EAC and approved by the NIGMS in the event of poor performance or failure to comply with funding agency requirements. COBRE funds are to be used to support pilot grantees to develop independent, extramurally supported grant funding of direct relevance to the project that was approved for funding by the NIGMS and should not be used to support other projects. Any unspent funds at the end of the grant year will revert to the CNAP center. If the pilot grantee receives other funding for research that overlaps with the pilot grant prior to the end of the performance period, any remaining pilot grant funds will revert to the CNAP center. Pilot grantees may not simultaneously hold any other IDeA program funding such as other COBRE or INBRE pilot grant or project funding during the pilot grant performance period.