



Duke Specialized Program in Research Excellence (SPORE) in Brain Cancer Career Enhancement Program (CEP) Request for Applications

The National Cancer Institute–funded SPORE in Brain Cancer at Duke University is requesting applications for pilot projects from new and early stage investigators with translational¹ potential for funding through the SPORE Career Enhancement Program (CEP).

Purpose

The CEP of the Duke University SPORE in Brain Cancer supports promising individual or collaborative pilot research projects that have a translational¹ potential and are likely to generate new knowledge with a high probability to impact the diagnosis, treatment and/or prevention of adult and/or pediatric brain tumors. In accordance with NIH provisions, all funded CEP projects that have strong translational potential may become full projects in the SPORE. Although both clinical and laboratory research projects are eligible for funding, the translational emphasis of the program requires that the hypotheses in all projects have the potential to impact the incidence and mortality of brain cancer or improve the quality of life for primary brain cancer patients. These projects, however, do not have to reach a human endpoint during the project period, but should, ideally, utilize human cells or tissues, and/or have the potential to translate to the human context. The resources of the Duke SPORE in Brain Cancer, including the SPORE Biospecimen, Pathology, and Immune Monitoring Core, are available to all investigators and those interested in utilizing these resources should consult with the appropriate Core leaders. Innovative projects are encouraged. We particularly wish to encourage women and minority investigators, investigators from minority and other area institutions, as well as individuals who have not previously worked in the brain tumor field to apply. Applications for scientific teams and scientists exploring new areas of investigation are encouraged. Duke is an equal-opportunity employer, and we value diversity in all of its many facets and meanings.

Eligibility²

This program typically supports junior faculty or established investigators who wish to further develop or refocus their careers on translational research in primary brain cancer. This program does not support pre- or post-doctoral fellows, either preclinical or clinical. However, advanced post-doctoral or clinical fellows who provide a letter from an institution stating that the candidate will be joining its faculty within the year are eligible to apply. Investigators supported by NCI career development awards (K series) may be eligible for support through this program. An applicant may not have previously received funding through the Duke Brain SPORE CEP.

Current recipients of an award from the Duke Brain SPORE CEP may submit a competitive renewal application for a second year of funding. This will be contingent upon productivity and successful completion of the work during the first-year award. In addition to the criteria outlined for new applicants, competitive renewal applications should include a progress report and a description of the proposed work to be accomplished in the second year.

Application Process

Stage 1: Interested investigators will submit a one-page Specific Aims proposal. The Aims should include

¹ *Translational: A term to describe the process by which the results of research done in the laboratory are used to develop new ways to diagnose and treat disease.*

² *We are also offering SPORE Developmental Research Program (DRP) grant awards. The DRP typically supports promising individual or collaborative pilot research projects that have a translational potential and are likely to generate new knowledge with a high probability to impact the diagnosis, treatment, and/or prevention of adult and/or pediatric brain tumors. Faculty (or equivalent position at Duke University or at their institutions, universities, or research organizations) who have innovative projects are encouraged to apply. Please see the DRP RFA and apply for that award if it is more applicable.*

a statement of a scientific gap and why it is important to fill the gap; relevance to brain cancer; specific hypothesis and specific aims; translational potential; and subsequent funding strategy. References are not included in the page count. You may include 1–2 figures showing preliminary data (if available). A project title and an NIH biosketch of the principal investigator(s) should also be included. The top meritorious applications will be selected to proceed to Stage 2. **Please submit your application as a single document.**

Stage 2: PIs of the applications deemed to have met the criteria of the SPORE CEP and are meritorious enough to be competitive will be invited to give a brief (10–15 minute) presentation.

Final Selection Process

Proposals will be reviewed by the SPORE PIs, CEP Director, and the Oversight Committee using the criteria of Significance, Innovation, Investigators, Environment, and Approach, as defined in the NIH-style review system, and a preliminary score will be rendered using the 1–9 scale. Additional criteria that will be considered include:

- Compatibility with the goals and objectives of the Duke Brain SPORE, other Duke SPORES, and the DCI.
- Potential for translation within a five-year period.
- Potential for development into a full SPORE project or an independently funded project such as an R01.

Selected projects will be asked to submit a full application in advance of funding being issued. A complete application should be made on the NIH PHS398 (<http://grants.nih.gov/grants/funding/phs398/phs398.html>), following the NIH R21 format, and should include: a face page, a detailed one-year NIH budget³ with budget justification, an abstract of the project (narrative not required), biosketches of PI(s) and other key personnel, a Specific Aims page and a Research Strategy. The Research Strategy should be a maximum of 6 pages, excluding references, and should have the following components:

- **Significance:** Explain the importance of the problem or the critical barrier to progress in translational cancer research that the proposed project addresses.
- **Innovation:** Explain how the project challenges and seeks to shift current translational research or clinical practice paradigms.
- **Investigator(s):** Describe the qualifications of the project leader and his/her prior involvement in brain tumor research and the qualifications of any co-investigators.
- **Approach:** Describe the overall strategy, methodology, and analyses to be used to accomplish the aims of the project. Include how the data will be collected, analyzed, and interpreted.

Preliminary data can be included at any appropriate place in the Research Strategy. Standard NIH sections on Resources, Human Subjects (including the Inclusion of Women and Minorities and Children consistent with institutional and NIH provisions) and Vertebrate Animals will also be required if applicable. All necessary IACUC, IRB, and any other institutional approvals will be required to be on file prior to an award. Therefore, given the short, one- or two-year term of this award, applicants are encouraged to ensure that these approvals are sought after in a timely fashion, e.g., at the time of the application. This will expedite award distribution and start of the project. Biostatistics review by the Biostatistics and Bioinformatics Core is required prior to receiving CEP funds. CEP funds cannot be used for the purchase of equipment.

Funding

Funding decisions will be made in August and communicated directly to the PI. Successful projects will be funded September 1, 2023–August 31, 2024, at a maximum of \$100,000 per year, renewable for a second year.

Application Deadline

The **Stage 1** deadline for all applications is **noon on Friday June 9, 2023**. Late applications will not be accepted. All applications will be submitted electronically as a single document to:
Steve Keir, DrPH, MPH, MMCi, Scientific Administrator, at stephen.keir@duke.edu and
Katie Preston, PMP, Project Planner, at katie.preston@duke.edu

Notice of Award and Award Management

Award notification will be made by written communication from the PI or Administrator of the SPORE in Brain Cancer. The SPORE administrative team, working with CEP leadership, will handle all matters related to administration of the award.

³ Please note, if you are a Duke faculty or staff member, there are no indirects.