Comprehensive Cancer Center Signaling and Biotechnology Program PUSH Pilot Request for Applications for Pilot Awards

Purpose

The Signaling and Biotechnology (SBT) Program is seeking applications for "PUSH" pilot projects to support intra- and inter programmatic collaboration. The pilot award will be used to fund research that focuses on at least one of the following SBT themes:

- 1) Identify critical signaling pathways involved in cancer pathogenesis and cancer immunity, and use this knowledge to develop agents such as small molecule inhibitors and antibodies against these pathways.
- 2) Develop engineering cytotoxic T cells for adoptive T cell transfer as well as novel theranostic nanomaterials to improve cancer diagnosis.
- 3) Develop biotechnology to improve the detection and treatment of cancer.

The goal of the "PUSH" pilot grant is to catalyze new and innovative ideas that allow investigators to pursue a line of research with likelihood for extramural funding and high impact papers resulting in a synergistic effort. We are interested in projects that highlight the "value-added" aspects of the Comprehensive Cancer Center (CCC), such as a focus on basic and translational research, inclusion of investigators from more than one of the four CCC scientific research Programs, use of Cancer Center Shared Resources, new investigator pairings, and disparities research focused on the catchment area. We encourage those that can lead to multi-PI extramural grant applications (R01s, P01s and SPOREs), as well as inter-institutional (with other institutions) collaborations. Special consideration will also be given to projects that have achieved near fundable scores on a prior grant application, in which case the original grant and critiques should be included with the PUSH application. This pilot project opportunity is available to all SBT Program members, and any non-Cancer Center faculty members who wish to collaborate with a SBT investigator as the PI/Co-PI.

Eliaibility

These awards are open to all Signaling and Biotechnology Program investigators, and any non-Cancer Center faculty members who wish to collaborate with a SBT investigator as the PI/Co-PI.

Key Dates

Date	Detail
12/16/20, 11:59 pm	Full Application Deadline
2/15/21	Selection of Awardees
3/1/21	Project Start Date
3/15/22	Latest Project End Date

Funding

The CCC will fund up to \$100,000 in direct costs per project, with funds to be dispersed in increments pending successful progress and attainment of milestones. See section on Budget Guidelines for more details on allowable and non-allowable budget items.

Application Procedure

Full Application Deadline: 12/16/20, 11:59 pm

The application can be submitted through the <u>ePilot electronic submission system</u>, by the deadline noted above. Application instructions are summarized below.

Format Specifications

- Arial font and no smaller than 11 point
- Margins at least 0.5 inches (sides, top and bottom)
- Single-spaced lines
- Consecutively numbered pages

Submission/Applicant Information

- Project Title
- Submitting Investigator, Co-Investigator(s), and other Key Personnel information

Abstract (250 words max)

Research Plan (6 pages max)

- Specific Aims
- Significance Explain how the project addresses an important problem, how it will improve scientific knowledge, technical capability and/or clinical practice.
- Investigator(s) Describe how each member of the team will contribute to the project. Include their expertise and experience that will be utilized on this project.
- *Innovation* Explain how this project uses novel concepts, approaches or methodologies, instrumentation or interventions.
- Approach Describe the overall strategy for this project, including potential problems, alternative strategies and benchmarks for success.
- Projected Timeline

References (no page limit)

Information Regarding Human Subjects

Address the following if the project **involves human subjects**.

- Provide a one-page document addressing the Protection of Human Subjects, if applicable.
- IRB Approval Status (please note: IRB approval is <u>not required</u> for full application submission, however a delay in IRB approval does not alter the project end date) Pre submission discussion with the Wake Forest IRB is strongly suggested.

Information Regarding Live Vertebrates if applicable.

• IACUC Approval Status (please note: IACUC approval is <u>not required</u> for full application submission, however a delay in IACUC approval does not alter the project end date)

Budget and Justification (budget template plus 1-page justification)

- Complete the <u>budget template form</u> provided along with a brief justification for the funds requested for this RFA. Please include explanation of other resources that may be leveraged to support the project.
- Sub-awards to other institutions to carry out work on a project are not allowed.

NIH-style biographical sketch for all Key Personnel (new style)

Budget Guidelines

The budget period is for 12 months, ending no later than 3/1/22. Up to \$100,000 in direct costs may be requested.

Grant funds may be budgeted for:

- Research support personnel (including undergraduate and graduate students)
- Travel necessary to perform the research
- Small equipment, research supplies and core lab costs, or
- Other purposes deemed necessary for the successful execution of the proposed project

Grant funds may **not** be budgeted for:

- Office supplies or communication costs, including printing
- Meals or travel, including to conferences, except as required to collect data
- Professional education or training
- Computers or audiovisual equipment, unless fully justified as a need for the research
- Manuscript preparation and submission. or
- Indirect costs

Awarded funds must be used to conduct the work proposed. All direct charges to this award must adhere to federal regulations and requirements regarding the use of CCC funds. The CCC leadership reserves the right to revoke funding in the event it is determined that funds were not spent in accordance with the approved protocol. The general criteria for determining allowable direct costs on federally sponsored projects is set forth in 2 CFR Part 200: Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards (The Uniform Guidance).

Review Criteria and Process

Proposals will be evaluated by the leadership of the SBT and additional content experts as deemed necessary. Funding decisions will be made based on the reviews of an evaluation of the projects' connection with the goals of the CCC. Final award approval will be at the recommendation of CCC Leadership. Any IACUC and/or IRB protocols must be approved prior to funding of the approved pilot.

Reviewers will score applications from 1 to 9 based on:

- 1. Significance of the problem to be addressed;
- 2. Innovation in the proposed solutions:
- 3. Strength and breadth of the investigative team;
- 4. Methodological rigor and feasibility with clear milestones;
- 5. Likelihood the innovation will be broadly applicable and have impact on translational research, and;
- 6. A reporting plan regardless of whether the study yields positive or negative results;
- 7. Other elements to be considered in the review include: the likelihood that the investment will lead to external funding or a licensable innovation, early-career faculty involvement, race/gender inclusiveness of the research team and inclusion of women, minorities, older adults and children as potential participants.

Program Expectations

Should any significant issues arise, the study team will be required to work with the CCC Director to define an intervention strategy for the study to be successfully completed (or in rare cases, terminated).

Specific Deliverables Include (not a complete list):

- Key preliminary data needed for a revised extramural grant application.
- Proof of concept data to establish a novel scientific hypothesis or approach
- A completed application to an extramural RFA.
- A publication establishing a new collaboration.

Other Guidelines

- 1. Prior to receiving funds, research involving human subjects must have appropriate approvals from the IRB. Either an IRB approval letter or an IRB response to a "Determination Whether Research or Similar Activities Require IRB Approval" must be submitted to the CCC prior to funds being released. Human subjects must be reviewed in accordance with the institution's general assurances and HIPAA. All key personnel must have certification of training in the protection of human subjects prior to the start of the grant period.
- 2. It is expected the PI will report outcomes achieved due to the pilot award, e.g., subsequent external funding, publications, presentations and patents.
- 3. Any awardee who leaves his or her position should contact the CCC Director to discuss future plans for the project.

Grant Administration

The Principal Investigator is responsible for the administration of grant funds. Projects will be for a <u>12</u>-month period of time.

Contacts

Questions about your research proposal should be directed to Yong Lu at yolu@wakehealth.edu or Rafael Davalos at davalos@vt.edu

Questions about your research project or the ePilot electronic submission system should be directed to Brittney Jackson, britjack@wakehealth.edu.