Accelerating Cancer Therapeutics: Pilot Award Pre-Proposal Instructions

Herbert Irving Comprehensive Cancer Center (HICCC)

2020-2021
Accelerating Cancer Therapeutics (ACT) is a therapeutic development accelerator program focused on providing funding, education and mentorship to Columbia Investigators, with a goal of advancing novel cancer therapies from the lab towards the clinic. Advice and project guidance will be provided by a steering committee of academic and industry experts in the field of drug development. We work closely with Columbia Technology Ventures (CTV) to provide early stage funding and project development resources to investigators with promising scientific ideas looking to advance their discoveries through the translational spectrum to where outside funding would be available for further commercialization. The Herbert Irving Comprehensive Cancer Center (HICCC) is inviting Columbia University Faculty to submit pre-proposal applications for its annual pilot awards. Investigators in all therapeutic areas (basic, translational, clinical and population sciences) are encouraged to apply. Funding from this pilot award is intended to move projects forward to an inflection point of value (e.g. high throughput screen (HTS) for hit to lead, dosing studies of small molecules including proteins and chemical compounds, assay development for target mechanism/engagement, pivotal small animal study, design of clinical study) so that they are eligible to explore later stage funding opportunities through Government or Foundation grants and/or industry partnerships. Applicants are strongly encouraged to present a complementary team comprising of at least a basic scientist and a clinical scientist as part of the pre-proposal application.

Selected pre-proposal applications will be required to attend a Life Science Accelerator Boot Camp, run in partnership with Irving Institute Translational Therapeutics (TRx) Accelerator and the Columbia Biomedical Technology Accelerator (BioMedX), which consists of interactive evening sessions that will aid in preparation of the full proposal. During the training period, additional resources (business consultants, core facility resources, etc.) can be provided as needed to the project teams. The full proposal will outline the target market and feasible milestones for the one-year development project. Details of the full proposal application requirements and format will be provided at a later date.

Full proposals selected to receive funding will receive the support of an ACT/TRx Development Team to guide project progression. Typically, the team will include the following members but will be customized to the project need:

1. The applicant clinical and basic scientists
2. A core facility or shared resources facility representative (if needed)
3. An industry representative
4. A representative from Columbia’s Clinical Trials Office and/or Columbia Technology Ventures

ELIGIBILITY:
Applicants must have a full-time Columbia University faculty appointment. Graduate students and post doctorate trainees can act as project leads with permission from the principal investigators (PIs). Projects must focus on translating a validated target and address a clear unmet medical need in cancer. Projects that focus on new treatments for cancer disease targets, new drugs for known targets and pathways in cancer, and new activities for currently known and/or approved cancer drugs (repurposing) are eligible.

AREAS OF INTEREST:
All cancer-related projects with a valid target in any stage of development with translational/commercialization trajectory are encouraged to apply. Additionally, we strongly encourage applications from underrepresented groups. Therapeutic strategies including small molecules, biologics, novel delivery approaches, gene therapy, and cell therapeutics will be considered.

FUNDING:
At the conclusion of the accelerator Boot Camp, participants will be eligible to submit a full proposal and application for a one-year pilot grant of up $75,000 per project, based on the project’s needs. Funding should be directed to a specific experimental milestone that will make the project eligible for follow on funding through Government or Foundation grants and/or industry partnerships. We encourage that the majority of funds be utilized for project specific study
experiments, a smaller portion of the funds may be used towards Post-doctorate researcher, graduate student and technician salary. Funding may not be used towards PI salary. Outstanding projects with excellent progress will be considered for a second year of funding to further advance development towards commercialization. Additional funding is contingent on competitive review and the availability of funds.

PRE-PROPOSAL DIRECTIONS:
Pre-proposals are due by 5:00 PM EST on Friday, November 20th, 2020. Pre-proposals should be completed through an online form found at https://columbialsa.submittable.com/submit

Please allow time to create a Submittable account if you do not already have one.

1) Areas that will be covered on the online form include:
   - Project Title
   - PI Name(s).
   - Brief Non-Confidential Abstract
   - Project Team
     A brief description of the clinical and basic scientists and their area of expertise. Please do not include full biosketches.
   - Project Description and Clinical Need
     A summary of the project, the current stage of development and plan to reach the next stage. Also, a brief description of the medical need and desired indication.
   - Competitive Landscape
     A brief description of the current standard of care and how this therapy, if developed, is an improvement over currently available treatment.
   - Project Needs
     Describe the resources and expertise needed to progress the project and the amount of funding required to support this next stage of development (max $75,000). Please indicate if a Columbia Core Lab is needed for the project.
   - Intellectual Property
     List if there are patents covering this idea or invention reports with Columbia Technology Ventures.

2) Complete the online form for each section and submit by 5:00pm EST on Friday, November 20th to:
https://columbialsa.submittable.com/submit

REVIEW PROCESS:
Pre-application proposals will be reviewed for eligibility and feasibility. Full proposals will be reviewed by a panel of faculty (including HICCC leadership) and industry members with consideration of any potential conflicts-of-interest. Each application will be judged on the basis of translational and commercialization potential, scientific and medical merit and feasibility.

NOTE: IRB/IACUC approval is not required at the time of the pre-proposal application. However, if a candidate is awarded a pilot award for their subsequent full proposal and the project involves the use of data from human and/or animal subjects, an IRB/IACUC approval number must be forwarded prior to receipt of funding.

NOTE: The pre-proposal will be confidential; however, we suggest you discuss the application and project with your Columbia Technology Ventures licensing officer prior to applying. If you do not have a licensing officer, please reach out to techventures@columbia.edu.
Recent Recipients
2017-2018
- Brent Stockwell & Michael Stokes
- Suzanne Lentzsch, Donald Landry, & Li Shirong

2018-2019
- Lance Kam & Pawel Muranski
- Changchun Deng, Owen O’Connor, Teresa Palomero, Donald Landry & Jennifer Lue
- Zhengyu Jiang, Timothy Wang, & Donald Landry
- Tal Danino, Nicholas Arpaia & Sreyan Chowdhury
- Gary Schwartz, Andrea Califano, Prabhjot Mundi, & Matthew Ingham

2019-2020
- Adolfo Ferrando, Clara Reglero, Brent Stockwell & Nobuko Hijiya
- Harmen Bussemaker, Chaitanya Rastogi, Neel Shah & H. Tomas Rube
- Yiping Han, Fay Kastrinos & Timothy Wang
- Fatemeh Momen-Heravi & Akiva Mintz
- Cory Abate-Shen, Juan Arriaga, Donald Landry & Shi-Xian Deng
- Harris Wang & Kristin Beiswenger
- Christine Hendon, Hanina Hibshoosh, Richard Ha & Diana Mojahed