Translational Therapeutics (TRx) Accelerator Request for Proposal
Pilot Award Pre-Proposal Instructions

Irving Institute for Clinical and Translational Research

2020-2021
The Irving Institute Translational Therapeutics (TRx) Accelerator is a therapeutic development accelerator program that plays a central role in translating the outstanding basic science discoveries at Columbia University into commercial therapeutics. We focus on providing funding, education, partnership and mentorship to Columbia Investigators, with a goal of advancing novel 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), Accelerating Cancer Therapeutics (ACT) and the Columbia Biomedical Accelerator (BiomedX) 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 TRx Accelerator is inviting Columbia University Faculty to submit pre-proposal applications for its annual pilot awards. Investigators in all therapeutic areas are encouraged to apply. Of interest are unique therapeutic targets or ideas that have a clear path towards commercialization. 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 applicants will be required to attend a Lab-to-Market Life Science Boot Camp, which consists of interactive 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 later.

Full proposals selected to receive funding will receive the support of a 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 representative (if needed) e.g., The Organic Chemistry Collaborative Center for drug design and chemistries; The Biomarkers Core Laboratory for metabolomics, PK and ADME studies; Proteomics Shared Resource for qualitative and quantitative protein analysis.
3. An industry representative
4. A representative from Columbia’s Clinical Trials Office and/or Columbia Technology Venture

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 toward commercialization and address a clear unmet medical need. Projects that focus on new treatments for novel disease targets, new drugs for known targets and pathways, and new activities for currently known and/or approved drugs (repurposing) are eligible.

AREAS OF INTEREST:
All therapeutic projects with a valid target in any stage of development with translational/commercialization trajectory are encouraged to apply. Special consideration may be given to the development of therapeutics for rare diseases originating from Precision Medicine efforts and proposals with a focus on novel therapeutics for pain and addiction as well as projects related to the diagnosis and treatment of COVID. 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 TRx Boot Camp, participants will be eligible to submit a full proposal application for a one-year pilot grant of up to $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.

PRE-PROPOSAL DIRECTIONS:
Pre-proposals are due by 5:00 PM EST on Monday, November 20, 2020. Pre-proposals should be completed and submitted through an online form found at ColumbiaLSA.Submittable.com

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 Monday, November 20, 2020 to: ColumbiaLSA.Submittable.com

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

NOTE:
All projects involving human subjects and/or vertebrate animal research that are chosen for Irving Institute pilot funding, are conditionally selected until IRB and/or IACUC approval and NIH-NCATS prior approval are received. IRB/IACUC approval is not required at the time of application but is required in order to receive NIH-NCATS prior approval. Submission to the IRB/IACUC must be completed within thirty (30) days of notification of potential Irving Institute pilot funding. In addition, conditionally selected projects must submit NIH-NCATS prior approval documentation to Irving Institute administration immediately after IRB/IACUC approval is received and within seventy-five (75) days of notification of
potential funding of the Full Proposal. Only complete prior approval packets will be sent to NIH-NCATS. Dispersal of funds cannot occur until all required approvals are obtained.

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.