

Appendix D: Copy of the Memorandum of Understanding between the National Science Foundation and the National Center for Advancing Translational Sciences (NCATS) at the National Institutes of Health (NIH)

DRAFT

MEMORANDUM OF UNDERSTANDING (MOU)

BETWEEN

THE NATIONAL CENTER FOR ADVANCING TRANSLATIONAL SCIENCES

AND

NATIONAL SCIENCE FOUNDATION

This MOU is between the National Science Foundation ("**NSF**"), and the National Center for Advancing Translational Sciences ("**NCATS**"), a component within the National Institutes of Health ("**NIH**"), hereinafter referred to as "**Parties**".

The Parties share a common interest in positioning US Government funded technologies for success in achieving widespread commercial and societal impact. NCATS's mission is to catalyze the generation of innovative methods and technologies that will enhance the development, testing and implementation of diagnostics and therapeutics across a wide range of human diseases and conditions. The National Science Foundation - Innovation Corps (I-Corps) Program is a public-private partnership program that teaches grantees to identify valuable product opportunities that can emerge from academic research while offering entrepreneurship training.

The goals of NCATS are:

- To focus NOT on specific diseases, but on what is common among them and the translational science process.
- To emphasize innovation and deliverables, relying on the power of data and new technologies to develop, demonstrate and disseminate improvements in translational science.
- To serve as an adaptor to enable other parts of the research system to work more effectively.
- Specifically, through the NCATS Clinical Translational Science Award ("**CTSA**") program, the goal is to conduct innovative translational research and to foster innovative methods, training and career development.

The goals of NSF are:

- Using knowledge gained by this pilot program, NSF anticipates broadening participation to other agencies interested in the I-Corps™ program.
- To gain experience and develop a framework for expansion of the NSF I-Corps program and curriculum to other government agencies, thereby increasing the impact of the program and successful leveraging of taxpayer funds.

Pursuant to mutual and complementary goals above, the Parties enter into this Memorandum of Understanding ("MOU**") as of May 15, 2015 ("**Effective Date**").**

I. PURPOSE

The purpose of this MOU is to establish a framework for collaboration between the Parties with regard to positioning US Government funded technologies for success in achieving widespread commercial and societal impact. In particular, this MOU will establish a framework for collaborating on expansion of the NSF I-Corps™ program to include participation by NCATS and its funded initiatives and programs, such as the CTSA program, through an extension hereinafter referred to as "**I-Corps@ NCATS**". This program would serve as a development platform for expansion of the I-Corps™ program and curriculum to other government agencies.

The initial stage of I-Corps@ NCATS will begin as a pilot program, whereby up to 10 NCATS CTSA funded researchers will participate in the NSF I-Corps™ Train the Trainer program to gain insight into the I-Corps™ training process. After the training program, they will have access to the NSF I-Corps™ curriculum for dissemination at their local CTSA institutions which will nurture and develop local and network wide innovation ecosystems.

Should the Parties desire to continue working together, then during the second stage of this collaboration, project teams (each team comprised of the principal investigator, entrepreneurial lead and a mentor) will be selected for full participation in the NSF I-Corps™ program curriculum. Selected I-Corps@ NCATS teams will have the opportunity to concurrently participate in the educational programs with NSF I-Corps™ awardees. Based on the outcomes of this pilot phase, the Parties will evaluate the benefits and feasibility of further collaboration and expansion of the I-Corps@ NCATS program.

I-Corps@ NCATS will strive to maintain core elements of the I-Corps™ model. I-Corps@ NCATS will be managed by NCATS program officers with guidance from and in collaboration with NSF program directors. For the pilot phase, eligibility will be limited to CTSA selected awardees with NCATS funding. The proposal and selection process for teams will be structured to closely mimic that of NSF, with the identical team structure requirements. Applicants will undergo NCATS/NSF screening and participate in a call with I-Corps™ instructors before final I-Corps@ NCATS selections are made.

II. AUTHORITY

NCATS enters this MOU pursuant to Section 479 of the Public Health Service (PHS) Act (42 U.S.C. § 287); Section 301 of the PHS Act, 42 U.S.C. § 241.

NSF enters into this MOU pursuant to the National Science Foundation Act, 42 U.S.C. § 1861 *et seq.*

III. ACTIVITIES

Collaboration between the Parties may include, but is not limited to, the following:

- A. NSF may choose to provide input on the development of the I-Corps@ NCATS structure. NCATS will strive to maintain the following core elements of the NSF I-Corps™ structure:
 - a. *Lineage*: NCATS projects involvement in NSF I-Corps™ will initially be limited to former and existing NCATS award recipients with academic Principal Investigators (i.e. award recipients with principal investigators from non-commercial entities including national laboratories and universities).

b. *Team Composition:* I-Corps@ NCATS projects will identically mimic the required three member team composition; that is, each I-Corps@ NCATS team will consist of 1) the principal investigator, 2) an entrepreneurial lead, and 3) a mentor.

- B. NSF may provide input and collaboration in the proposal selection process for applicants and trainers to I-Corps@ NCATS. The review and selection process will strive to mimic current NSF I-Corps guidelines. Specifically, the expected process will consist of the following steps: (1) NCATS will identify potential trainers and teams based on internal review, (2) Select NCATS trainers may participate in a secondary screening with both NSF and NCATS representatives, (3) Select Teams will participate in a secondary screening with both NSF and NCATS representatives, and (4) thereafter, encouraged trainers and teams may be asked to submit proposals to NCATS;
- C. NSF may participate in NCATS's determination of final milestones and deliverables for applicants selected for I-Corps@ NCATS;
- D. NSF will help to coordinate the inclusion of I-Corps@ NCATS teams within the standard I-Corps™ training workshops and curriculum;
- E. NCATS will be responsible for monitoring I-Corps@ NCATS's participants' progress throughout the I-Corps™ program; NSF may assist NCATS's program management for I-Corps@ NCATS projects.
- F. NCATS will provide continual feedback to NSF on best practices for expanding and extending I-Corps™ to other agencies.

IV. FUNDING

This MOU is neither a fiscal nor a funds obligation document. Nothing in this MOU authorizes or is intended to obligate the Parties to expend, exchange, or reimburse funds, services, or supplies, or transfer or receive anything of value. All cooperative activities will be carried out in the framework of this MOU, unless specified otherwise in writing. NCATS is responsible for allocation of funds for selected trainers and teams to participate in the NSF I-Corps™ program activities. NSF will advise NCATS on the amount of funding necessary to conduct these activities.

This MOU constitutes only a non-binding statement of the Parties' intentions and neither constitutes nor should be construed as evidence of any form of offer, acceptance or binding contract. This MOU is non-exclusive in nature. The term of this MOU will be two (2) years from the first signature of the Agreement.

Provisions of the MOU:

1. **Effect of Termination.** Either Party may unilaterally terminate this MOU by providing ninety day (90) advance written notice to the other Party of its intent to terminate the MOU. This MOU may be terminated at any time by mutual agreement of the Parties. Such termination is effective immediately upon the agreement of the Parties.
2. **Governing Law.** This Agreement shall be governed by U.S. Federal Law as applied in the Federal Courts of the District of Columbia.

3. **Entire Agreement; Amendment.** This MOU incorporates all Exhibits and Schedules (if any) hereto and constitutes the entire agreement and understanding between the Parties in respect of the subject matter hereof and replaces in its entirety any prior discussions, negotiations, agreements or other arrangements in relation to the subject matter, whether written or oral, all of which are replaced by the terms of this MOU. No amendment or modification of this MOU shall be valid or binding unless made in writing and signed by authorized representatives of both parties.
4. **Notices and Meetings.** All notices pertaining to or required by this MOU will be in writing, signed by an authorized representative of the notifying Party, and delivered by registered, certified, or by an express/overnight delivery service and sent to the other Party at the address designated below.
5. **Points of Contact.** The following individuals are designated points of contact for the MOU: Additional NCATS, NIH and NSF staff may be drawn to provide scientific expertise on the I-Corps at NCATS program as needed.

NCATS Contact Name and Information:

Petra Kaufmann, M.D.

NCATS/NIH

6701 Democracy Blvd Suite 900, Bethesda, MD 20892-3874

Phone: {301} 435-0178

Email: kaufmanp2@mail.nih.gov

NSF Contact Name and information:

Rathindra {Babu} DasGupta

Lead Program Director, IIP Academic Partnership Cluster

National Science Foundation

4201 Wilson Boulevard, Arlington, VA 22230

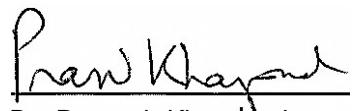
Email: rdasgupt@nsf.gov

Phone number: {703} 292-8353

6. Use of Name; Press Releases. By entering into this MOU, neither party directly or indirectly endorses any product or service that is or will be provided, whether directly or indirectly related to either this MOU by either Party. Each Party agrees to provide proposed press releases that reference or rely upon the work under this MOU to the other Party for review and comment at least seven {7} days prior to publication. Either Party may disclose the Summary Page to the public without the approval of the other Party.

SIGNATURES BEGIN ON NEXT PAGE

NATIONAL SCIENCE FOUNDATION

A handwritten signature in black ink, appearing to read "Pramod Khargonekar", written over a horizontal line.

Dr. Pramod Khargonekar
Assistant Director
Directorate for Engineering
National Science Foundation

National Center for Advancing Translational Sciences

Christopher P. Austin M.D.
Director, NCATS