

# UCLA CTSI Translational Science Pilot Funding Program

## Agenda

Translational Research vs. Science

Examples of Translational Science

Details of the FOA

Q & A

# Translational Science Pilots: Research vs. Science

## Translational Research

Traversing a particular step from basic science to the discovery toward improved diagnosis and treatment of a disease, i.e. from bench to bedside to populations.

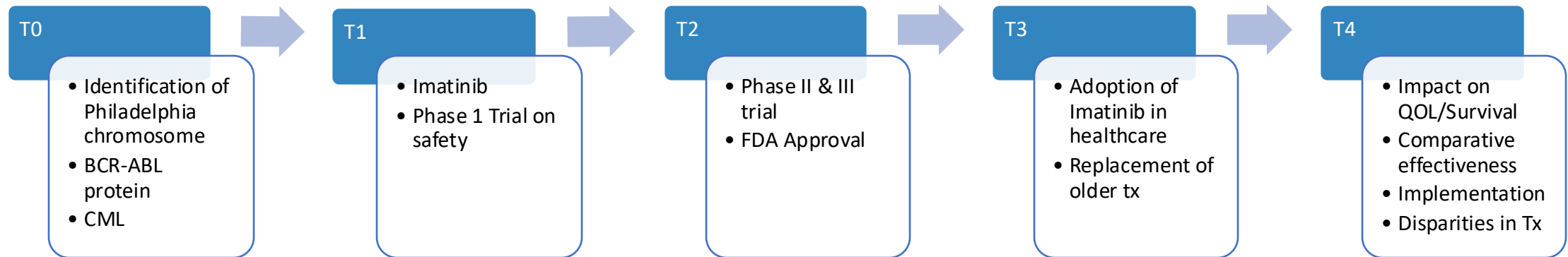
Often focuses on 1 disease and 1 step of the process.

## Translational Science

Understanding the scientific and operational principles/barriers underlying each step of the translational process.

Development of generalizable methods to overcome barriers to translational research, which can be applied to translational research across diseases, conditions, treatments, health care delivery settings, and populations.

# Translational Lifecycle



## Translational Science Barriers

- Collecting genetic data
- Data repositories
- Phenotype/Genotype measurement
- Rare disease issues
- AI/Modeling

- Clinical trial subject recruitment
- Subject retention
- Diversity in clinical trial populations/Community engagement
- Regulatory/IRB hurdles
- Team science
- Consenting process

- Dissemination/Implementation
- Efficacy vs. Effectiveness
- Precision Medicine/Heterogeneity effects
- Costs and Access
- Community engagement
- QOL measurement
- Population health measurement
- EHR data accuracy/integrity/distribution
- Data reproducibility

# Examples

NOT Translational Science	Translational Science
Test a new compound in humans after showing it works in animals	Develop models/assays that better predict efficacy in humans
Evaluate the toxicity of a new Alzheimer's drug	Create an in-vitro assay that more efficiently predicts toxicity in humans than current animal methods
Identify novel biomarkers of chemotherapy resistant lung cancer (precision medicine)	Develop a new framework or computational model that better predicts chemotherapy resistance
Retain recently incarcerated persons in a longitudinal intervention study	Develop a new method to increase study retention among hard-to-reach subjects (e.g. snowball retention)
Create a new database of patients with a systemic sclerosis	Develop a more accurate and efficient method to merge clinical datasets from different sources Create novel NLP method to estimate disease severity from EHR

# Prior FOAs on translational science

- <https://grants.nih.gov/grants/guide/pa-files/par-24-272.html>
- <https://grants.nih.gov/grants/guide/pa-files/PAR-22-167.html>

# Examples of funded translational science

## [Bytes to Bedside: Collaborative Development for Translational Clinical Decision Support](#)

This study aims to create a multi-institutional infrastructure to improve the effectiveness and scalability of clinical decision support (CDS) systems by leveraging electronic health record (EHR) data and enhancing data interoperability to improve clinical outcomes.

## [Improving Efficiency, Quality, and Equity: Randomized Controlled Evaluations of Remote vs. In-Person Clinical Trial Methods](#)

This project will conduct a rigorous evaluation of remote versus in-person clinical trial methods across three randomized controlled trials, measuring trial efficiency, quality, and inclusivity.

## [Integration and interoperability of complex data and tissues from the human brain](#)

This project will develop a standardized virtual brain tissue bank and data platform across multiple institutions, integrating multimodal datasets and human brain samples to enhance research and clinical care, particularly for rare brain disorders.

# RFA for Translational Science Pilot Funding Program

- **Up to 3 awards of \$75,000 each for pilot projects**
- **Potential for future funding of \$125,000-\$250,000 for up to 2-3 years** (similar to an R21)
- At least one aim must focus on a **translational science innovation to address a barrier to translational research**
- Additional aims may address a translational research-focused use case to test the translational science hypothesis
- The project and aim(s) should be feasible within the grant budget and timeline

# RFA for Translational Science Pilot Funding Program

## **Eligibility**

- Principal PI must hold a faculty appt at one of the four partner institutions
- A community partner can be a co-leader

## **Special considerations**

- Cross-cutting across diseases/themes/disciplines
- Broadening the inclusion of participants in translational research
- Applying AI and data science strategies to accelerate translation
- Multi-disciplinary, cross-site teams

## **Awardee requirements**

- Interim progress report
- Present at EAC meetings, including Feb 3-4, 2024



# Application Components (3 pages)

## **Specific Aims & Relevance to Translational Science**

- Explicitly state the translational science barrier that will be addressed
- Explain translational science relevance/significance
- State potential benefits/impact on translational research

## **Significance/Innovation**

- Impact on health/health care
- Impact on translational research

## **Approach/Methods**

## **Community Engagement**

- Identify your community/plans for community connections

## **Investigators/Environment**

## **Timeline/Outcomes/Future plans**

# Additional Application Components

Cover page (1 page)

Bibliography (no page limit)

Budget/Justification

Biosketches for PIs & co-investigators

# RFA for Translational Science Pilot Funding Program

## Important Dates

Release Date	By Oct 7
Pilot Funding Information Session	Oct 16, 4:30 P.M.
Pre-Application Due Date	Nov 1, 5:00 P.M.
Review of Pre-Applications	By Nov 8
<b>Invitation to Collaborative Process</b>	Nov 11
Collaborative Process Period	Nov 11 – 22
Awards Announcement	Nov 27
Funding Period	Dec 1, 2024 – Nov 30, 2025

# Collaborative Process, Nov 11-22

- Upon review of applications, selected groups will be invited to the collaborative process period
- Goals of the collaborative process:
  - Refine the translational science question
  - Assist in project planning (e.g. partnerships, recruitment, design)
  - Assess and assist with feasibility
  - Facilitate community collaboration, multi-site participation

# Submit Your Online Application



## Request for Proposals for CTSI Translational Science Pilot Projects

The CTSI Translational Science Pilot Funding Program is requesting applications be submitted by November 1, 2024 at 5pm, in order to be considered for review. Please respond to all required fields below.

For detailed instructions, please refer to the RFA guidelines at <https://ctsi.ucla.edu/funding-and-grant-support/funding-opportunities/ctsi-rfas/ctsi-translational-science-pilot-funding-program>

RFA



Online Form



Contact PI Name\*

Contact PI Email\*

Institution of Contact PI\*

Select all that apply. Contact PI must have an appointment at one of UCLA CTSI's four partner institutions.