

## Request for Applications (RFA) NEW Clinical and Translational Science Project

Application information:

<b>Letter of Intent due date:</b>	February 21, 2023
<b>Budget:</b>	\$125,000-\$150,000 direct costs per year (minimum \$125K)
<b>Duration:</b>	Minimum of two years; Up to three years
<b>Anticipated start date of funding:</b>	January 1, 2025

The Clinical and Translational Science Institute (CTSI) was launched in 2015 and is supported by a Clinical and Translational Science Award (CTSA) from the National Center for Advancing Translational Sciences (NCATS) at NIH. Guided by our overarching goal to perform research to improve health and reduce health disparities in our community and the nation, the CTSI has catalyzed a transformation of our clinical research environment since our CTSA was first funded in August 2015. The CTSI offers a broad range of expert support at no cost to researchers through the expertise and resources by cores that include biostatistics, epidemiology, and research design (BERD); recruitment to clinical trials; clinical research facilitation; regulatory support; expertise in biomedical informatics; an extensive portfolio of educational and training workshops and seminars; and a mentored career development program for early-stage investigators.

Current CTSA funding continues until the end of 2024. The CTSI will be applying for continued CTSA funding to be submitted in December 2023. This application will include a new initiative for Clinical and Translational Science Projects. One or two projects will be included as part of the proposal.

### Translational Research vs. Translational Science

**This RFA is a call for translational science projects.** NCATS, the NIH institute that funds CTSAAs, is requiring a focus on translational science as distinct from translational research, that will be included in our CTSA proposal submission in December. Below, we clarify the differences between translational research and translational science.

- **Translational Research** takes scientific discoveries made in the laboratory, in the clinic or out in the field and transforms them into new treatments and approaches to medical care that improve the health of the population.

- **Translational Science** is the field of investigation focused on understanding the scientific and operational principles underlying each step of the translational process. Translational science expedites the translational research process and the time it takes for laboratory discoveries to become treatments for patients.

### Example 1:

Translational **research** question: Is a new drug for the treatment of hypertension superior to the standard of care?

Related translational **science** question: What are the barriers to recruiting a representative population to clinical trials for the treatment of hypertension, given that participants in most clinical trials in the US include less than 10% underrepresented minorities?

- A trial to address this question might compare two different recruitment strategies in a study for the treatment of hypertension and assess the results of the two strategies in recruitment of a representative population.

### Example 2:

Translational **research** question: Is a new drug effective in delaying the onset of dementia in people with Alzheimer’s Disease? Of note, people with low income are underrepresented in many trials in Alzheimer’s Disease.

Related translational **science** question: To what extent does discrimination by algorithm contribute to underrepresentation of populations with adverse social determinants of health in clinical trials? For example, some scheduling algorithms encourage double booking for lower-income patients because they are more likely to be a “no-show.”

- A trial to study this question might include an analysis of algorithms used by different clinical trial management systems and a trial of an Alzheimer’s disease intervention in which participants are randomized into groups that are scheduled and managed using different algorithms with the endpoints being recruitment and retention of participants related to income and demographics.

### Example 3:

Translational **research** question: Will education of families in healthy food choices change shopping habits?

Related translational **science** question: What is the most effective approach to educate families in making healthy food choices in grocery stores?

- A trial to address this question might compare written educational materials vs. video animations vs. providing a prefilled shopping template of healthy food choices.

**Each project should be designed to yield a generalizable solution to a translational science question or bottleneck.** The proposal must include an impact

statement and a dissemination plan should the project's aims be achieved. The project must be completed within the designated time frame.

**An information session will be held via Zoom on January 23 at 12 noon. Please be sure to register [here](#).** We strongly encourage participation, for anyone interested in applying, to discuss this new initiative of support through the CTSA.

Please contact Timothy Murphy, MD ([murphyt@buffalo.edu](mailto:murphyt@buffalo.edu)), to discuss. The CTSA will work with you in designing and planning your project.

**Eligibility criteria:**

- Full-time faculty member at UB and eligible to serve as a PI of an NIH grant
- Have the expertise and research experience to enable the proposed work

**Projects related to health disparities and multi-PI projects led by investigators from two different disciplines are strongly encouraged.**

Submission of Letter of Intent (**2 page limit**) due date February 21, 2023.

**Please include:**

- Title of proposed Research Project
- List of Key Personnel
- Overview, including the translational science question
- Specific Aims
- Approach
- Roadblock to be addressed
- Generalizable innovations/insights
- Impact statement and Dissemination plan
- NIH Biosketch for each investigator

**Combine all documents in one pdf and submit to: [CTSA-Pilot-Studies@buffalo.edu](mailto:CTSA-Pilot-Studies@buffalo.edu).**

**Review criteria:**

- Does the project address a critical problem or barrier in the field of clinical and translational science?
- Does the project team have experience in clinical and translational research and the expertise to successfully perform the proposed project?
- Are the specific aims of the project clear, well thought out and feasible?
- Does the project use novel or innovative approaches to challenge or shift current research, clinical practice, or implementation paradigms?
- Does the project have the potential to provide sustainable, generalizable innovations that increase the efficiency or effectiveness of translation?

- Are there opportunities for collaborations throughout the Buffalo Translational Consortium and/or other CTSA Program hubs?

**Application process:**

<a href="#">Information session</a>	<a href="#">Monday, January 23, 2023, 12 noon by Zoom</a>
Letters of intent due	Tuesday, February 21, 2023
Individual development meetings by invitation	Late February-early March, 2023
Work with CTSA writing team to design and write proposal	March – September, 2023
Submission of proposal to NCATS	December 2023
NCATS prior approval requirements	September – December 2024
Anticipated funding begins	January 1, 2025

The LOIs will be reviewed. Those that are under consideration for moving forward, to be included in the CTSA application, will be contacted for individual development meetings.

**Other useful resources:**

NIH NCATS Clinical and Translational Science Award (CTSA) RFA

<https://grants.nih.gov/grants/guide/pa-files/PAR-21-293.html>

Element E is the relevant section for this translational science project RFA

Excellent article on the concept of translational science and opportunities in translational science:

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8504824/>

UB Clinical and Translational Science website:

<https://www.buffalo.edu/ctsi.html>