2024 CCTSI Pilot Grant Program Overview

Natalie Julie Serkova, Ph.D.
CCTSI Pilot Grant Program Director
CO-Pilot Grant Program Director
TM-Pilot Grant Program Director

Sue VandeWoude, DVM
CSU Pilot Grant Program Director

Christopher Baker, MD
CMH-Pilot Grant Program Director

Kristen House
CCTSI Pilot Grant Program Administrator
CCTSI Pilot Grant Award Eligibility

• CCTSI Members
• Faculty at CCTSI Partner Institutions

Graduate, undergraduate, postdoctoral students, fellows and PRAs are encouraged to participate in Non-Key Roles.

Underrepresented, female, and minority researchers are particularly urged to apply, as the CCTSI intends to contribute to the creation of a research workforce that is representative of the U.S. population.

CU Anschutz Medical Campus
CU Boulder
CU Denver
Colorado State University

University of Colorado Hospital
Children’s Hospital Colorado
National Jewish Hospital
VA Eastern CO Health Care System
Kaiser Permanente Colorado

https://cctsi.cuanschutz.edu/aboutus/affiliated-institutions
https://cctsi.cuanschutz.edu/funding/membership
What is new in 2024 Pilot Grant Cycle?

- We are in the new NCATS UM1 Cycle (2023-2029)
- We have increased $$ amount per Pilot Award!
- Under the new NCATS guidelines, a pilot project should address overcoming a barrier or roadblock in **translational science** as well as a research question
- No-cost extensions will **not** be allowed for the 2024 award cycle (all projects must be completed by 7/31/2025)
Exclusions/Restrictions

1. An individual may apply in a Key Role on only one application between the CO-/CMH-/CE-Pilots. This restriction is not applicable to the TM-Pilots, nor to Non-Key Roles.
2. Key Role individuals on a no-cost extension (NCE) Pilot award are not allowed to apply for the new cycle.
3. Applications proposing to continue the work of a previously funded CCTSI Pilot Grant Project are not allowed.
4. CCTSI Pilot Grant Awards may not be used to support research conducted outside of the United States. However, proposals that use data or samples collected at international sites through other means may be considered for funding if the portion of the work conducted locally occurs at CCTSI Affiliate Institutions.
5. The CTS-Pilot Program is not designed to fund “translational research projects” (which are only focused on crossing a particular step of the translational process for a particular target or disease) that do not also address to some extent a generalizable translational roadblock in translational science.
# 2024 Pilot Grant Cycle Timeline

<table>
<thead>
<tr>
<th>Event</th>
<th>CO-Pilots</th>
<th>CMH-Pilots</th>
<th>TM-Pilots</th>
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<tbody>
<tr>
<td>RFA Announcement</td>
<td>11/1/2023</td>
<td>11/1/2023</td>
<td>11/8/2023</td>
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<tr>
<td>Informational Call #1</td>
<td>11/13/2023</td>
<td>11/13/2023</td>
<td>11/21/2023</td>
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<tr>
<td>Informational Call #2</td>
<td>12/20/2023</td>
<td>12/20/2023</td>
<td>01/03/2024</td>
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<tr>
<td>Application Due Date</td>
<td>01/16/2024</td>
<td>01/16/2024</td>
<td>01/22/2023</td>
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<tr>
<td>2024 Award Cycle</td>
<td><strong>08/01/2024 – 07/31/2025</strong></td>
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Translational Methods (TM-Pilot) Grant Program

Speed the development and application of novel technologies, methods, or analytical assays for clinical and translational research that are presently lacking or not available to CCTSI members

Facilitate developing functioning and validated methodologies which are not yet available in Colorado, foster new collaborations, and disseminate new technologies across the CCTSI

Award Categories
- Translational Methods
- Biostatistics & Bioinformatics
- Colorado State University (PI)

Program Director
Natalie Serkova, PhD
Translational Methods (TM-Pilot) Grant Program

Amount: $30K
Duration: 1 year

Major goals

• Provide support for developing new technologies, assays, algorithms, animal models
• Support new collaborations between a “technology driven PI” and an “application PI”
• Facilitate dissemination of the newly developed technologies among CCTSI research community
CCTSI Review Panels will use the NIH 9-point scoring system and rate based on following criteria:

a. **Innovation** in proposed methods to be developed, approaches, and techniques.

b. **Approach/Scientific Merit** based on rigor, transparency and **one-year feasibility** of the proposed study design.

c. **Principal Investigators’** research qualification and collaborative potential of team

d. **Significance** to the CCTSI Vision to “Accelerate and catalyze the translation of innovative science into improved health and patient care.”

e. **Translational Science Roadblock:** does the Pilot proposal address a [translational science roadblock](#) that could be generalizable to other research studies?

f. **Dissemination** of the to-be-developed methods/technology among CCTSI members

g. **Environment** and institutional support to the PI and the proposal

h. **Health Equity and Diversity (Non-Scoring Criteria)**
Tips for Success

Please make sure that your application includes all scientific sections:

- ABSTRACT: strict 250 words
  - State clearly the scientific problem, your working hypothesis, the proposed methods, and the expected results.
- SPECIFIC AIMS: ½ page
  - usually 2 specific aims,
  - with an additional third one being your Translational Science Roadblock
  - please do NOT copy and paste specific aims from a larger applications (such as yours, or your mentors, R01) – this is a PILOT grant
- Background, Significance and Innovation: 1 and ½ pages
  - here, you can include also your preliminary data (not required)
  - Clearly describes your translational science roadblock
- Approach: 3 pages
  - Experimental Design (don’t forget anticipated challenges and alternative approaches)
  - Explain (2-3 sentences) how the rigor of your experimental design and data will address the translational science roadblock(s)
  - Don’t forget (i) data analysis and statistics; (ii) shared resources; (iii) feasibility and timeline
The CU Cancer Center supports a variety of state-of-the-art technological shared resources – *their incorporation into CO/CMH/TM-Pilot proposals is encouraged!*


https://medschool.cuanschutz.edu/colorado-cancer-center#CUMain
Research Core Labs

One of the defining features of a top-tier research university is the availability of core facilities that provide a spectrum of contemporary analytic tools that can be shared across the campus. Ideally these cores provide both technical and consultative services at modest cost and, as a result, elevate the quality of the overall research enterprise. It is appropriate that the core landscape evolves as new technologies emerge and others become obsolete.

Below is a list to the current operational research cores supported by the School of Medicine and the research leadership on the Anschutz Medical Campus.

Search our Core Labs

Keyword or Phrase

e.g., biomarker, data analysis, flow cytometry, genetic screen, proteomics

https://researchcores.cuanschutz.edu/
A key tenet of translational science is to understand common causes of inefficiency and failure to complete translational research projects in a timely fashion, which may present a common barrier across various research targets, diseases, and therapeutic areas.

Whereas “translational research” focuses on crossing a particular step of the translational process for a particular target or disease, translational science is focused on the general case that applies to any/multiple targets or diseases.
**Examples of Translational Science Roadblocks**

In the application, the PI must state clearly what is your “translational science roadblock” that you will be addressing in your proposal:

- improved study design by improving rigor and transparency in major generalizable areas of translational discovery
- technical execution of complex mechanistic studies in humans or animal models
- challenges to data acquisition, integrity and analysis
- translational barrier from animal models to human trials; or between adult and pediatric patient populations
- timely participant recruitment and retention
- enhanced recruitments and engagement of underserved populations
- Discovering new therapeutic targets and molecular pathways which play crucial roles across various therapeutic areas
- Developing or testing models that better predict a person’s response to treatment
- Using novel methods to translate findings from the laboratory, clinic, or community into treatments and interventions
- Developing data acquisition methods or post-processing that will facilitate use of complex technologies and datasets in clinical research
- Novel use of informatics or big data to answer important clinical questions
- Developing or testing novel methods in early stage (Phase 1-2) clinical trials to make the trial more efficient
- Developing or testing novel methods, processes or study designs to address health disparities
- Enhancing the design and conduct of clinical trials so the results more accurately reflect the patient population generally affected by a disease (to enhance clinical relevance)
- Developing and testing new tools for engagement of underserved populations
- Developing or testing processes to improve enrollment of diverse populations in a hypothesis-driven research pilot study
- Validating natural animal models of human disease in companion animals
Some Examples of Translational Science Pilot Focus

Establishing Molecular Mechanisms of Polymorphism of Cytochrome P450: This study will be performed in vitro using Tg and KO epithelial and hepatic cells using novel immunosuppressive drug (CU AMC Drug Discovery Core). CYP450 polymorphism is a very generalized problem, and its understanding will help to establish pharmacokinetic properties of over 75% of existing therapeutic agents (CSU Drug Discovery Core). The pilot addresses the barrier of rigor and transparency in major generalizable areas of translational discovery.

Advanced Bulimia Treatment in Adolescent Girls: Efforts will be made to enroll young female participants from diverse geo-economic and racial background to address eating and behavioral disorders. fMRI at a 3 Tesla MRI (CU AMC Brain Imaging Core) will provide pharmacodynamics readouts. Addresses enhanced recruitments and engagement of underserved populations.
Some Examples of Translational Science Pilot Focus

Validating Natural Animal Translational Disease Models: Many diseases of dogs, cats, horses and other animals are more similar to diseases in people than induced diseases in traditional rodent models. For example, osteosarcoma in dogs is genetically similar to the same tumor in people and responds to similar therapies. Idiopathic epilepsy in dogs has many symptoms that mimic childhood epilepsies. Accordingly, validating the molecular, diagnostic, and therapeutic features of these diseases in veterinary clinical trials (so called “T0.5”) is a mechanism for improving translational science, addressing translational barrier from animal models to human trials.

Retrospective Analysis on Multi-Institutional CU-CSU Omics Data: These pilots could leverage the pilot to address the issue of performing team science across institutions and data harmonization and transfer between institutions, etc. Address challenges in data acquisition, integrity and analysis
Application Process

Kristen House
CCTSI Pilot Program Administrator
How to Apply

Funding Opportunities
Each year, the CCTSI awards more than $2 million in pilot grants, microgrants, and pre-doctoral and post-doctoral research scholar awards. You can find more information on each grant and how to apply below.

https://cctsi.cuanschutz.edu/funding
Request for Applications (RFA)

The RFA describes eligibility, award categories and application requirements.

The window for sending a letter of intent has ended. Please check back in November 202

2024 CCTSI TM-Pilot Grant CTS Program RFA (pdf)
292 KB

Information & Resources

2024 CCTSI-CO-CMH-InformationalCall#2 (pdf)
Download (2165 KB)

2024 CCTSI Pilot Grant Applicant Checklist (xlsx)
Download (19 KB)

2024 CCTSI Pilot Grant Applicant Checklist (pdf)
Download (120 KB)

2024-CCTSI-CO-CMH-InformationalCall (pdf)
Download (2765 KB)

2024 Sample Budget and Justification (pdf)
Download (215 KB)

2024 Required Budget Template (pdf)
Download (98 KB)

2024 Required Budget Template (xlsx)
Download (13 KB)
# Application Checklist

This checklist is for informational purposes only. All applicants must comply with the requirements of the official Request for Funding Applications (RFA) posted on the CCTSI website.

## Intent to Apply Form (LOI)

<table>
<thead>
<tr>
<th>Item</th>
<th>All Applicants</th>
<th>Mentored</th>
<th>Junior</th>
<th>CU-CSU Award</th>
<th>TM-Pilot</th>
<th>CSU Faculty</th>
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<tbody>
<tr>
<td>1. Select CCTSI Pilot Grant Program</td>
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<td>2. Select Pilot Award Category</td>
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<td>3. Certify this project meets RFA Eligibility &amp; Exclusion criteria</td>
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<td>4. Does this study involve collaboration with non-CCTSI Affiliated Institution(s)?</td>
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<td>5. Are any investigators involved with this project associated with Colorado State University?</td>
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<td>6. Project Title</td>
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<td>7. Translational Science Roadblock</td>
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<td>8. Contact Information: Principal Investigator</td>
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<td>9. Contact Information: Co-Principal Investigator</td>
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<td>Required</td>
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<td>Optional</td>
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<tr>
<td>10. Contact Information: Co-Investigator(s)</td>
<td>If Applicable</td>
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<td>11. Contact Information: Primary Mentor (or two Co-Mentors)</td>
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<td>Required</td>
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<td>12. Contact Information: Requested Reviewer(s)</td>
<td>Optional</td>
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<td>13. Research Topics (Used to pair applications with reviewers)</td>
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Application Checklist (Excel) or (PDF)
<table>
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<tr>
<th>Application Checklist (Excel) or (PDF)</th>
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<tbody>
<tr>
<td><strong>Application Form</strong></td>
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<tr>
<td><strong>All Applicants</strong></td>
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<tr>
<td><strong>Mentored</strong></td>
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<td><strong>Junior</strong></td>
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<td><strong>CU-CSU Award</strong></td>
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<tr>
<td><strong>TM-Pilot</strong></td>
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<tr>
<td><strong>CSU Faculty</strong></td>
</tr>
<tr>
<td><strong>1</strong> Confirm all contact information from LOI is accurate. Combine all documentation required in the RFA and combine into a single PDF to upload with your online Application Form.** Required</td>
</tr>
<tr>
<td><strong>2</strong> <strong>Project Overview (2-3 sentences)</strong> Required</td>
</tr>
<tr>
<td><strong>3</strong> <strong>List all investigator names, titles, institutions before the Project Overview</strong> Required</td>
</tr>
<tr>
<td><strong>4</strong> <strong>Abstract (strict 250 word limit)</strong> Required</td>
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<tr>
<td><strong>5</strong> <strong>Specific Aims (1/2 page), including a Translational Science Roadblock</strong> Required</td>
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<tr>
<td><strong>6</strong> <strong>Background, Significance and Innovation (1 and 1/2 pages), including the description of the translational science roadblock</strong> Required</td>
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<tr>
<td><strong>7</strong> <strong>Approach (3 page limits), including Experimental Design, Translational Science Roadblock, Data and Statistical Analysis, Feasibility, Shared Resources, Timeline</strong> Required</td>
</tr>
<tr>
<td><strong>8</strong> <strong>References (no page limit)</strong> Required</td>
</tr>
<tr>
<td><strong>9</strong> <strong>Multiple PI Plan (1 page limit)</strong> Required Optional</td>
</tr>
<tr>
<td><strong>10</strong> <strong>Mentor Letter of Support (no page limit)</strong> Required</td>
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<tr>
<td><strong>11</strong> <strong>Career Development Plan (1 page)</strong> Required</td>
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<tr>
<td><strong>12</strong> <strong>Letters of Support (no page limit)</strong> Optional</td>
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<tr>
<td><strong>13</strong> <strong>May include department chairs, consultants, foundations, commercial sources, manufacturers, etc.</strong> Optional</td>
</tr>
<tr>
<td><strong>14</strong> <strong>Budget (1 page limit, vertical alignment only)</strong> Required</td>
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<tr>
<td><strong>15</strong> <strong>Please use the CCTSI Budget Template (available on the CCTSI website)</strong> Required</td>
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<tr>
<td><strong>16</strong> <strong>Budget Justification (1 page limit)</strong> Required</td>
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<tr>
<td><strong>17</strong> <strong>Blind Review (no page limit)</strong> Required</td>
</tr>
<tr>
<td><strong>18</strong> <strong>CSU OSP Proposal Transmission Letter (no page limit)</strong> Required Required</td>
</tr>
<tr>
<td><strong>19</strong> <strong>Contact Jessica Hunter (<a href="mailto:jessica.hunter@colostate.edu">jessica.hunter@colostate.edu</a>) for details.</strong> Required</td>
</tr>
<tr>
<td><strong>20</strong> <strong>Cost Share Budget (1 page limit)</strong> Required</td>
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<tr>
<td><strong>21</strong> <strong>Applications may include collaboration with non-CCTSI Affiliated organizations. Refer to RFA for specific instructions.</strong> Required</td>
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<tr>
<td><strong>22</strong> <strong>Other Institutional Prior Approval (no page limit)</strong> Required</td>
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<tr>
<td><strong>23</strong> <strong>Applicants based at CCTSI Affiliated Institutions are strongly encouraged to work with the sponsored programs office at their institution to meet all pre-application requirements specific to their organization, including applications for federal and non-federal (internally funded) seed grant programs.</strong> Required</td>
</tr>
<tr>
<td><strong>Check with institution</strong> Required</td>
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### CCTS1 Pilot Grant Award Budget

**Budget and Active Award Period:** August 1, 2024 to July 31, 2025

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<tr>
<th>CATEGORY &amp; ITEM(S)</th>
<th>CU AMC</th>
<th>CSU</th>
<th>CU Boulder</th>
<th>CHCO</th>
<th>Other Institution (Specify Location)</th>
<th>Total Amount</th>
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<td>Animals</td>
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</table>

Applicants should customize these Categories.

Budget Template [Excel](#) and [PDF](#)
Use the link in this email to access the REDCap application form.

Hello,

Thank you for submitting your Intent to Apply Form (LOI) to request funding through the CCTSI Pilot Grant Program. A backup PDF of your submission is attached to this email for your records.

The next step is to complete the online [CCTSI Pilot Grant Award Application Form](https://datastore.cctsi.ucdenver.edu/surveys/7b3w5AzFFx0ttnG50kx) prior to the 5 pm deadline.

If the link does not work, please copy and paste into your browser: [https://datastore.cctsi.ucdenver.edu/surveys/7b3w5AzFFx0ttnG50kx](https://datastore.cctsi.ucdenver.edu/surveys/7b3w5AzFFx0ttnG50kx).

If you have any questions, please contact me by replying to this email.

Thank you,

Kristen House
CCTSI Pilot Grant and MicroGrant Program Administrator
NCATS Clarity Assurance/Oxality Control Group
Colorado Clinical and Translational Sciences Institute
University of Colorado Denver-Anschutz Medical Campus
Visit the [CCTSI Website](https://www.cctsi.org) for funding opportunities
CCTSI is supported in part by Colorado CTSA Grant UM1 TR000399 from NIH/NCATS
You can click "Save and Return Later" if you need more time to complete this form. You can email yourself a unique link to this partially completed form.

Only click “Submit” when you are done and have no additional edits. Once you hit “Submit”, the application is final. Make sure you hit “Submit” before the deadline!
2024 TM Application Cycle Dates

November 8, 2023  Request for Funding Announcement (RFA)
November 21, 2023  TM Informational Call #1 (Zoom)
December 11, 2023  TM-Pilot Intent-to-Apply Form due - 5 pm
January 3, 2024  TM Informational Call #2 (Zoom)
January 22, 2024  TM-Pilot Application Form due - 5 pm

April – 2024  CCTSI Review Panels
June – 2024  Notice of Selection
August 1, 2024  Active Funding Period Begins

2024 Key Dates

- RFA Posted: November 8, 2023
- Intent to Apply Form Due: December 11, 2023
- Informational Call #1: November 21, 2023
- Informational Call #2: January 3, 2024
- TM-Pilot Application Form Due: January 22, 2024
- CCTSI Review Panels: April 2024
- Notice of Selection: June 2024
- Active Funding Period Begins: August 1, 2024
- Award Expiration Date: July 31, 2025
CCTSI Pilot Grant Contacts

https://cctsi.cuanschutz.edu/funding

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Dr. Christopher Baker
CMH-Pilot Director
christopher.baker@childrenscolorado.org

Dr. Sue VandeWoude
CSU Pilot Program Director
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