



**Weill Cornell
Medicine**

**Clinical & Translational
Science Center**

Clinical & Translational Science Center

A Weill Cornell Medical College Multi-Institutional Consortium with:

Weill Cornell Graduate School of Medical Sciences / New York Presbyterian Hospital / Cornell University, Ithaca / Cornell University Cooperative Extension, New York City / Memorial Sloan-Kettering Cancer Center / Hospital for Special Surgery / Hunter College of the City University of New York / Hunter-Bellevue School of Nursing / Hunter School of Urban Public Health / Hunter Center for Translational and Basic Research / Animal Medical Center and Cornell College of Veterinary Medicine

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CTSC TL1 TRAINING AWARD FOR *PRE- & EARLY* POST-DOCS

Request for Applications

DUE BY 5PM ON WEDNESDAY, MARCH 6, 2024

\$35,694 for one year (Pre-docs)

Up to \$75,792 for one year* (Post-docs)

**Depending on level of experience*

Year 1 Funding Period: July 1, 2024 – June 30, 2025

Appointments are for 2 years and based on positive annual evaluation of trainee progress

[CLICK TO INITIATE APPLICATION](#)

[View Eligibility Requirements and Application Instructions](#)

The goal of the CTSC TL1 Training Award is to support career development among pre- and early post-doctoral trainees near the beginning of their careers by providing rigorous training and mentoring to conduct translational team research across disciplines and institutions.

TL1 projects must have a translational or clinical research focus; *Purely basic research proposals will not be funded.* Pre-clinical studies should *have near-term potential to translate into patient-oriented research.* Emphasis is placed on precision medicine, drug discovery, targeted therapeutics, biomarkers, device development, novel technologies, LGBTI health needs, underserved populations, community health outcomes, pediatric and women's health, life course studies of diseases, and studies incorporating biostatistical methodologies and design.

TL1 Trainees pursue research training *on a full-time basis, defined by NIH as 40 hours per week (100% time and effort).* Appointments are normally made for 12 months (no less than 9 months), up to 2 years, based on positive bi-annual evaluation of scholarly progress. Trainees receive:

- Stipend coverage at the NIH approved level
- Funding for supplies and research support including educational expenses
- Funding for travel to present at national conferences and symposia
- Access to research support services to facilitate conducting C/T research
- Multi-level mentoring
- Clinical and Translational (C/T) research training
- Professional skills and career development training

What is Translational Science? Translational Science is the field of investigations that focus on turning observations in the laboratory, clinic, and community into interventions that improve the health of individuals and the public—from prevention to diagnostics and therapeutics as well as medical procedures and behavioral changes. Read more about the stages of translational science [here](#).

The mission of the Weill Cornell Medicine Clinical Translational Science Center (WCM CTSC) is to rapidly advance translational science discovery with the ultimate goal of getting more treatments to all patients more quickly. To achieve

this mission, the CTSC Education Program (CTEP) aims to educate and train a diverse and empowered group of clinical and translational scientists who are prepared to advance translational science discovery to practice, thereby improving health and enhancing the quality of life by reducing disability and death from disease. The WCM CTSC is committed to ensuring that the translational science workforce is broadly representative across racial, ethnic, sex, gender, age, socioeconomic, geographic and disability status (See [NIH's Interest in Diversity Statement](#)). We seek students who represent and embody the wide range of lived experiences and backgrounds of the US population.

EDUCATIONAL AND PROGRAM REQUIREMENTS

<i>Pre and Post-doctoral MD Trainees</i>	<i>Pre and Post-doctoral PhD Trainees</i>
TL1 awardees who currently hold a medical degree or are medical students are required to enroll in either the Advanced Certificate (if funded for 1 year) or the Master's in C/T Investigation Degree (if funded for 2 years).	TL1 trainees are encouraged to enroll in the Advanced Certificate and/or Master's Degree in C/T Investigation. TL1 Awardees who are enrolled in, or currently hold doctoral-level research degrees (PhDs) are required to complete a total of 10 course credits during their appointment.

Upon completion of the TL1 program, the following are required:

- A first author scientific article submitted to a high-quality scientific journal **OR** if appropriate, a clinical & translational grant proposal submitted to a federal (i.e., K award or other NIH funding mechanism) or other funding agency requiring peer-review with the trainee named as Principal Investigator
- Abstract submission and poster presentation of CTSC TL1 research project at the annual [Translational Science National Conference](#)
- Presentation of CTSC TL1 research project at a local, national, or international scientific conference
- Presentation of CTSC TL1 research project at a Research-in-Progress forum
- Completion, within the last four years, of human subjects protection training such as the Responsible Conduct of Research training course

Questions? See [CTEP FAQs](#), or email CTSC-Education@med.cornell.edu



CTSC TL1 PRE & EARLY POST-DOCTORAL AWARD APPLICATIONS

ELIGIBILITY REQUIREMENTS

Applications must comply with eligibility and submission requirements

Documents or information that are missing or incomplete will disqualify application for review

Program Eligibility - All Candidates

Must be **US Citizen, Non-Citizen National, or Permanent Resident** (residency status must be met at time of application; proof of residency status required in order to be appointed)

Must have the ability to devote full-time (**100% effort**) to the program

Must have a **primary appointment** with a **Weill Cornell CTSC partner institution**.

No candidate may apply or hold concurrently a CTSC Seed Funding Award. If awarded, no other Federal funding support is allowed.

No TL1 candidate may be named as PI on more than one active CTSC application

Only 2 resubmissions are allowed by an individual applicant (whether or not the projects are different).

Applicants with pending grant applications to NIH or other private, foundation funding source (with salary/stipend support) are not eligible.

Fellows must ensure that they have at least 2 years remaining in their program (from the start of the TL1 appointment), dedicated to research (100% effort).

Pre-doctoral Candidates

Must have received a **baccalaureate degree** by date of appointment and be one of the following:

- Pre-doctoral medical (**MD**) student in 3rd or 4th year. *Must meet with Dean Salvatore Cilmi and Dr. Anthony Brown to seek approval prior to applying.*
- **Graduate student** enrolled at a **CTSC partner institution**
- **Nurse** candidate enrolled in a **DSN or DNP** program
- Dental (**DDS**), pharmacy (**PharmD**), or veterinary (**DVM**) student

An individual trainee may receive no more than 5 years of aggregate NRSA support at the pre-doctoral level

Transitioning from pre-doc to post-doc during the funding period is **not allowed by the NIH**

Post-doctoral Candidates

Awardees must have received, and been conferred, a **PhD, MD, DDS, DVM, DO, DNSc, DNR, DNP** or comparable doctoral-level degree by date of appointment (July 1, 2024), and be *early* post-docs (no more than 4 years past terminal doctoral degree). May include:

- Residents and fellows (e.g. Medical, Surgical) in a research pathway

An individual trainee may receive no more than 3 years of aggregate NRSA support at the post-doctoral level.

Questions? See [CTEP FAQs](#), or email CTSC-Education@med.cornell.edu



CTSC TL1 TRAINING AWARD (PRE & EARLY POST-DOCS)

APPLICATION INSTRUCTIONS

Applications must comply with eligibility and submission requirements

Documents or information that are missing or incomplete will disqualify application for review

Application Instructions and Checklist

To access your application please login to WebCAMP. Click on **Protocol Authoring and Review**. Under the "Abbreviated Title" column click on **Your TL1 Research Project Title** to access your application.

Trainee Application Form

Completed

- A valid **employer issued/institutional email** is required to initiate an application.
- **Is this a re-submission?** Answer 'yes' if the current application is a re-submission of a prior application that was not selected for funding/admissions. Resubmissions must outline/highlight changes from previous submission. No more than 2 resubmissions are allowed, whether or not the projects are different. ☐
- **Click on your current Residency Status.** Residency status must be met at time of application; proof of residency status required in order to be appointed. ☐
- If you are a post-doc, enter the **start date of the first position** held after terminal doctoral degree. ☐
- Has there been any **disadvantage** in your life or training that you have had to overcome? ☐
- **If you are not selected for the TL1 Award and wish to be considered for any of the MS or Advanced Certificate program**, please select the appropriate check box(es). A letter of support from your department chair/division chief will required upon acceptance. ☐
- **Proposed Research Study:**
 - **Is this project covered under mentor's IRB/IACUC?** Answer 'yes' or 'no' ☐
 - If research study is covered under **multiple IRB or IACUC protocols**, please click on the "Other IRB/IACUC numbers" link to enter in additional protocol numbers.
- **Project Summary:** Briefly (250 word or less) describe your project written in plain language so even a non-scientist can understand the importance of the project. Include the project's broad, long-term objectives, specific aims, research design, methods, significance, and innovation. ☐
- **Multidisciplinary Integration:** Briefly (250 words or less) describe how a multidisciplinary approach is integrated into this proposal. A multidisciplinary approach is one that brings experts from biomedical or physical sciences together with non-biological disciplines including biostatistics. ☐
- **Mentors** - Click on **[add]**, fill in required information. Two mentors are required, but list no more than 3 mentors. A Primary Mentor must be designated, each mentors' role must be defined. All mentors must have **active** or **recent** (federal or foundation) **funding**. Mentors cannot be listed on more than 2 active CTSC applications or current awards (including CTSC Seed Awards). Of the mentors:
 - One must be designated to serve as a **clinical research mentor** and one a **basic science or public health mentor**
 - At least one mentor must have active NIH funding.☐

<ul style="list-style-type: none"> Both mentors must have a strong history of mentorship & a clear collaboration/mentoring plan. At least 2 mentors, <i>including the designated primary mentor</i>, must be from different Weill Cornell CTSC partner institutions and from different disciplines. NIH definition of different disciplines will have priority (areas <u>outside</u> biology, e.g., computer science, imaging, chemistry, mathematics, informatics, engineering, behavioral science, health services/outcomes research, and biostatistics). A mentor's institution will be determined by their primary appointment. 	
Biographical Sketches	Completed
Upload individual MS Word files for the applicant and mentors; note the current NIH Biosketch format is required for all key personnel.	<input type="checkbox"/>
Supporting Documents – Please Upload Attachments as individual PDF files.	Completed
<ul style="list-style-type: none"> Research Proposal: Projects must have a translational or clinical research focus. Pre-clinical studies should have <u>near-term potential to translate into patient-oriented research</u>. Clinical Trials (phases I or II) are permitted. Emphasis is placed on drug discovery, targeted therapeutics, biomarker, device development, novel technologies; LGBTI and underserved populations health needs, research directly impacting health outcomes in the community; pediatrics, women's health studies; life course studies of diseases; and studies incorporating biostatistical methodologies and design. <u>Purely basic research proposals will not be funded</u>. 3 single-spaced pages (at least ½ inch margins, no smaller than 11pt Arial font) to include: <ul style="list-style-type: none"> Hypothesis and specific aims Scientific background for the study, citing appropriate references of work in the area by the investigator(s) and others Significance of the research (relating specific aims to future studies to be generated) and importance of funding to feasibility of the project Research Plan (research team to be involved, experimental design, methods, statistics, timeline, innovation, human subjects and animal issues, if applicable) References and supporting tables, figures, 2-3 additional pages First Name, Last Name in the upper left-hand corner on all pages 	<input type="checkbox"/>
Career Statement (1 page or less) – Discuss your short- and long-term goals, and how this award would impact your career & professional development. Please include First Name, Last Name in document header.	<input type="checkbox"/>
<p>Letters: address to the TL1 Admissions Committee on departmental letterhead, signed, and emailed directly from the department/admin office to ctsc-education@med.cornell.edu with candidate's name in the subject header.</p> <p>a) Department Chair/Division Chief Letter: Must state that the applicant will be guaranteed 100% protected time & effort.</p> <p>b) Medical students: In addition to Primary Mentor's Chair/Division Chief letter, include a separate letter signed by Dean Cilmi stating approval of this application and permission to accept this award and the program requirements. Medical students should also meet with Dr. Anthony Brown prior to submitting an application. Graduate students: letter should state approval of this application and permission to accept this award and the program requirements, co-signed by Dean Rajadhyaksha and chair of the PhD graduate program.</p> <p>c) Mentors Letters: Required from all mentors and the designated primary mentor's letter must include a mentoring plan (click link for instructions).</p>	<input type="checkbox"/>
Other Support	<input type="checkbox"/>

This document provides other active and pending support to ensure there is no scientific, budgetary, or commitment overlap through NIH “Other Support” guidelines. Note the current NIH Other Support format is required for all key personnel. Upload individual MS Word files for the applicant and mentors.	
Transcripts and Test Scores – Upload digital copies of test scores and transcripts with application submission. Upon award acceptance, official documents will be submitted. Test scores include: MCAT, GRE. Transcripts from Undergraduate, graduate and/or medical school.	<input type="checkbox"/>
How to Submit Your Application	
<ol style="list-style-type: none"> 1. Return to the Application Status Page (link in the upper left-hand side of the page) and click on the blue Submit Application button. 2. If you do not see the Submit Application, please click on the Run Detailed Completeness Check link to display items still missing or incomplete. 	

REVIEW CRITERIA

Upon submission to the online application module [ePAR](#), your application will undergo review based on several [Application Review Criteria](#).

APPLICATION PROCESS & TIMELINE

Applications are due by 5pm on Wednesday, March 6, 2024. Candidates will be notified in **June 2024** of their applications’ final disposition. At that time, if selected for funding, the applicant will complete additional required regulatory and compliance documents within 30 days. Funding is contingent on submission of this information and failure to do so will result in disqualification. Upon submission of this additional information, the CTSC will prepare an award agreement. Once the award agreement is signed by the appropriate institutional business official(s), WCMC Office of Sponsored Administration will review and sign the agreement and notify the CTSC that funds can be released.

BUDGET NOTES

- A budget is not due at the time of application
- Tuition and fees: partial support is available on some pre-doc TL1 awards
- TL1 trainees cannot receive stipend support from any other federal grant
- Items not allowed: 1) Capital or depreciable equipment, 2) Furniture, 3) Office supplies, 4) Membership fees or dues to organizations, 5) General software
- Only supplies of consumable nature that are directly related to the project are allowed
- Funding requests for travel and/or other supplies must be directly related to the project and clearly outlined in the budget justification. Foreign travel to conduct research is not allowable.
- Each year of funding is contingent on satisfactory participation in the CTSI TL1 activities and progress toward the scholar's individual career goals, and continued support from the Scholar's mentors and department
- This is an institutional career development award granted to the CTSC at Weill Cornell Medicine, and it is non-transferable; scholars who leave the CTSC Consortium will not be able to continue receiving TL1 funding from the Weill Cornell CTSC

For a fast start on spending your award funds:

No expenditures related to human subjects or animals will be permitted until the CTSC is provided with a copy of the official IRB/IACUC letter of approval. Investigators are **strongly encouraged to submit IRB and/or IACUC protocols well in advance** in order to avoid significant delays in project initiation. Applicants must also be current on institutional compliance regulations.

Questions? See [CTEP FAQs](#), or email CTSC-Education@med.cornell.edu



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MENTORING PLAN INSTRUCTIONS:

(Each mentor's letter not to exceed 3 pages, excluding table of current and past trainees)

Please provide a detailed mentoring plan for the Candidate that describes the approaches to be used including frequency of one-on-one and group meeting; oral scientific presentations; instruction on how to critically evaluate the literature and experimental design; training in scientific writing (e.g., grant proposal preparation, manuscripts, and abstracts); designing experiments, etc.

Plans to enhance the candidate's research capabilities should include:

1. Describe how the Candidate will be supported and guaranteed protected time, and how it will be ensured that the project is completed in a timely manner
2. Specific skills to be acquired during the mentoring experience
3. Milestones that will be reached during the mentoring experience (e.g., acquisition of preliminary data, new research skills, presentation of research findings at local/national meetings, and publications)
4. Opportunities to interact with research team; The role of other investigators who will contribute to the research mentoring should be described in the application
5. The mentoring plan must include instruction in the ethical conduct of research (including training in animal and human subjects' protection, if applicable)
6. A plan to acquire presentation and publication skills, and presentation of at least one poster or oral presentation at a national or international scientific meeting during the award period
7. A plan on how opportunities will be provided for the Candidate to participate in writing and publishing scientific papers
8. Describe any planned outside laboratory experiences or collaborations for the Candidate
9. How this experience will help the candidate move toward achieving her/his stated career goals
10. Mentors and candidate must provide a projected timeline delineating specific research milestones and other activities that will be undertaken to secure independent research funding (i.e., anticipated publications, training in grantsmanship, timeframe for grant submissions and type of independent research support the candidate seeks)
11. Mentors should provide evidence of mentoring experience and success. Please provide a table containing: (1) Current Trainees, (2) Past Trainees (≤ 10 years). For each of the individuals listed, please provide their current positions and name of institution, outcomes of the prior trainees. Describe how these prior mentoring experiences influenced the development/mentorship plan proposed for the current candidate

[Reference NHLBI \(7.1.8. MENTORING PLAN\)](#)



CTSC TL1 TRAINING AWARD

APPLICATION REVIEW CRITERIA

Similar to the NIH process, each proposal is carefully reviewed by at least two independent evaluators for scientific merit based on translational focus and significance. The following criteria are taken into consideration:

- ✓ **Overall Impact Score** - Reviewers should provide their assessment of the likelihood that the proposed research plan will enhance the candidate's potential for a productive, scientific research career in a health-related field, taking into consideration the criteria below in determining the overall impact score.
- ✓ **Candidate:** Does the candidate have the potential to develop to be an independent and productive researcher? Is the candidate's prior training and research experience appropriate for the proposed project? Is the candidate's academic, clinical (if relevant), and research record of high quality? Is there evidence of the candidate's commitment to meeting the program objectives to become an independent investigator in research? Do the letters of reference address the above review criteria, and do they provide evidence that the candidate has a high potential for becoming an independent investigator?
- ✓ **Career Development Plan/Career Goals & Objectives** - What is the likelihood that the plan (the award) will contribute substantially to the scientific development of the candidate and lead to a scientific research career?
- ✓ **Research Proposal** - Is there a strong scientific premise for the project? Are the proposed research question, design, and methodology of significant scientific and technical merit? Has the candidate presented strategies to ensure a robust and unbiased **approach**, as appropriate for the work proposed? Is the research plan of high quality, and does it have potential for advancing the field of study with **innovation**? Is the scientific and technical merit of the proposed research plan of **significance**? Will the proposed research lead to an independent line of research for the candidate?
- ✓ **Mentors and Mentoring Plan** - At least 2 mentors are required. Primary and Secondary mentors must be from CTSC partner institutions. Additional mentors may be from any institution. Are the qualifications of the mentor(s) in the area of the proposed research appropriate? Does the mentor(s) adequately address the candidate's potential and his/her strengths and areas needing improvement? Is there adequate description of the mentor's proposed role in providing guidance and advice to the candidate? Is there evidence of the mentors' current research productivity and peer-reviewed support? Is there evidence of the mentors' active/pending research funding? Do the letters from mentors document their willingness to participate in the award program? Is the proposed Mentoring plan likely to contribute substantially to the scientific and professional development of the candidate, and facilitate his/her successful transition to a scientific research career? (see [Instructions for Mentoring Plan](#))
- ✓ **Environment & Departmental Commitment:** Is there a strong statement of commitment by the department to the levels of effort required to devote directly to the research and career development activities described in the application? Is the environment for scientific and professional development of

the candidate of high quality? Is there assurance that the department intends the candidate to be an integral part of its research program?

The following areas receive additional priorities for their special relevance to the CTSC mission:

- **Translational and Clinical Research Focus** – Projects aimed at improving research methods and/or incubating novel technologies to accelerate multidisciplinary clinical and translational research.
- **Pre-clinical studies** should have near-term potential to translate into patient- oriented research, and clinical trials (phases I or II) are permitted.
- **Emphasis is placed on:**
 - Drug discovery, targeted therapeutics, biomarker or device development and novel technologies
 - **Comparative effectiveness and health disparities research:** Projects focusing on health needs of underserved and special populations such as children, the elderly, vulnerable, and disabled populations, and LGBTI communities, and/or directly impacting health outcomes in the community, as well as health disparities research
 - **Pediatric and Women's Health Studies**
 - **Life-course studies of disease**
 - Studies incorporating **Biostatistical Methodology and Design**

Questions? See [CTEP FAQs](#), or email CTSC-Education@med.cornell.edu