MASTER’S DEGREE IN CLINICAL & TRANSLATIONAL INVESTIGATION
APPLICATIONS DUE BY 5PM ON WEDNESDAY, JANUARY 27, 2016
Courses Begin in August 2016

The goal of the Clinical & Translational Education Program (CTEP) is to educate and train highly motivated individuals to become successful, independent clinical and translational (C/T) investigators with a strong foundation in knowledge and practical skills necessary to conduct clinical and translational team research across disciplines and institutions.

The Master’s Degree track is comprised of a didactic curriculum of core and elective courses and a mentored clinical research project. During the first year, trainees work with their mentors to fine tune the research project. In the second year, trainees will utilize the skills acquired from the didactic curriculum to conduct their research project, at 75% (50% for surgeons) time and effort.

Projects must have a translational or clinical research focus. Pre-clinical studies should have near-term potential to translate into patient-oriented research. Clinical Trials (phases I or II) are permitted. Emphasis is placed on drug discovery, targeted therapeutics, biomarker or device development and novel technologies; projects focusing on health needs of LGBTI and underserved populations and/or directly impacting health outcomes in the community; pediatric and women’s health studies; life course studies of disease; and studies incorporating biostatistical methodologies and design. Basic research proposals will not be considered for admission.

Click to learn more about CTEP Core and Elective Curriculum.

INVESTIGATORS FROM ALL DISCIPLINES—PRE-CLINICAL, CLINICAL AND TRANSLATIONAL—ARE WELCOME TO APPLY.
INDIVIDUALS FROM UNDERREPRESENTED GROUPS, FROM DISADVANTAGED BACKGROUNDS AND/OR WITH DISABILITIES ARE STRONGLY ENCOURAGED TO APPLY.

ELIGIBILITY AND APPLICATION INSTRUCTIONS
Applications must comply with eligibility and submission requirements
Missing or incomplete documents or information will disqualify your application for review

Program Eligibility - All Candidates
Must be a US Citizen, Non-Citizen National, or Permanent Resident (Proof of legal status required)
Must have the ability to devote full-time 75% effort (50% for surgeons) to the MSCTI
Must have primary appointment or be employed at a CTSC partner institution
Only one re-submission for each application is allowed
Medical students and Medical Doctors (MDs), MD/PhDs, senior residents, fellows
Veterinarians (DVM), Osteopaths (DO), Dentists (DDS, DMD), or Physical Therapists (DPT)
Post-doctoral PhDs seeking a career in clinical and translational research
Faculty members from any of the partnering Weill Cornell CTSC institutions
PhD candidates in Nursing School, those with Bachelor of Science in Nursing (BSN), Master of Science in Nursing (MSN), and Doctorate of Science in Nursing (DNS) degrees
Certified Physicians’ Assistants and Clinical Research Project Coordinators/Aides
### A. Application Instructions and Checklist – Complete all fields.

1. **Trainee Application Form - Click on** your current citizenship status to proceed  
   a. **Personal and demographic information** – a valid work email is required.  
   b. **If you are not selected** for the Master’s Degree program and **would like to be considered** for the Advanced Certificate Program please check the box notifying the program office.  
   c. **Project Summary** – Provide a brief description (250 words or less) of your research project written in language that is clear and concise.  
   d. **Multidisciplinary Integration** - Provide a brief description (250 words or less) of the multidisciplinary integration of this proposal. A multidisciplinary approach is one that brings experts from traditionally basic biological or physical sciences with disciplines.  
   e. **Mentors** - Click on [add] and fill in required information. All mentors must have **active or recent** peer-reviewed (federal or foundation) **funding**. Mentors cannot be listed on more than 2 active CTSC applications or current awards (including CTSC Seed Awards). Two mentors are required, but no more than 3 mentors can be named on an application. The Primary Mentor must be designated as well as each mentor’s role. **Of** the two proposed mentors:  
      - One must be designated to serve as a **Clinical Investigator mentor** and one a **Basic Science or Public Health mentor**  
      - At least 2 mentors, **including the designated primary mentor**, must be from different Weill Cornell **CTSC partner institutions** and from **different disciplines**. NIH definition of different disciplines has priority (areas *outside* biology, e.g., computer science, imaging, chemistry, mathematics, informatics, engineering, behavioral science, and health services/ outcome research)

2. **Biosketches**: Upload individual PDF files for the applicant and mentors; note the new NIH Biosketch format is required for all key personnel otherwise application is not eligible for review.

### B. Supporting Documents – Please Upload Attachments as individual PDF files.

1. **Projects must** have a translational or clinical research focus. Pre-clinical studies should have near-term potential to translate into patient-oriented research. Clinical Trials (phases I or II) are permitted. Emphasis is placed on drug discovery, targeted therapeutics, biomarker or device development and novel technologies; projects focusing on health needs of LGBTI and underserved populations and/or directly impacting health outcomes in the community; pediatric and women’s health studies; life course studies of disease; and studies incorporating biostatistical methodologies and design. Limited to 3 single-spaced pages (at least \( \frac{1}{2} \) inch margins, no smaller than 11pt Arial font) to include:  
   - Hypothesis and specific aims  
   - Scientific background for the study, citing appropriate references of work in the area by the investigator(s) and others  
   - Research Plan (research team to be involved, experimental design, methods, statistics, timeline, human subjects and animal issues if applicable)  
   - References and supporting tables, figures, (2-3 additional pages are allowed)

2. **Career Statement** (1 page or less) – Discuss your short and long-term goals and how this award would impact your career development.

3. **Letters** - Must be addressed to “Dear Master’s Degree Selection Committee”, on departmental letterhead signed, and emailed directly to ctsc-education@med.cornell.edu:  
   a. **Department Chair/Division Chief Letter**: must state a guarantee of 75% protected time (50% for surgeons).  
   b. **Mentors Letters**: Required from all mentors and the designated primary mentor’s letter must include a mentoring plan.

4. **Proof of Legal Status**: Submit verification of legal status (scanned copies acceptable):  
   - **US Citizen**: U.S. Passport, Birth Certificate, Certificate of Citizenship, or Naturalization Certificate  
   - **Non-Citizen National**: a notary’s signed statement certifying that you have legal verification of such status  
   - **Lawfully Admitted Permanent Resident**: a notary’s signed statement certifying that you have legal verification of such status and scanned copy of Permanent Resident Card (USCIS Form I-551)

5. **Transcripts and Test Scores** – Digital copies of test scores and transcripts must be uploaded at the time of application submission. Upon acceptance, official documents will be required in hardcopy. Test scores include: MCAT, GRE and TOEFL. Submitted transcripts from Undergraduate, graduate and/or medical school
MENTORING PLAN INSTRUCTIONS:
(Each mentor’s letter not to exceed 3 pages)

Provide a detailed mentoring plan for the Candidate that describes the approaches to be used such as 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. Specific skills to be acquired during the mentoring experience
2. 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)
3. Describe how the Candidate will be supported and guaranteed protected time, including how they will ensure that the project will be done in a timely manner
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 guidance 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 participation in poster or oral presentations in at least one 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 time line delineating specific research milestones and other activities that will be undertaken in an attempt to secure independent research funding (i.e., anticipated publications, 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 list 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 mentoring guidelines

PROGRAM REQUIREMENTS
- 75% time and effort devoted to performing and completing a mentored clinical & translational research project during the training period
- 30 credits of didactic curriculum (22 Core and 8 Elective)
- A grant submitted to the NIH or other funding agency requiring peer-reviewed funding with the trainee as the Principal Investigator, or a first author article submitted to a high-quality, peer-reviewed, scientific journal
- A presentation of the mentored research project at the Translational Science National Meeting or at a national/international scientific conference
- Presentation of the mentored research project at a CTSC Research in Progress Luncheon
- Master’s Degree Thesis Defense

APPLICATION PROCESS & TIMELINE
Applications are due by 5pm on Wednesday, January 27, 2016. Applicants will be notified by May 2016 whether his/her proposal is approved. At that time, if accepted, the applicant must complete additional required regulatory and compliance documents within 30 days.
REVIEW CRITERIA
Similar to the NIH process, each proposal is reviewed by at least two independent reviewers for scientific merit based on translational focus and significance. The following criteria are taken into consideration:

- **Scientific Merit of Proposed Research**
- **Candidate’s quality** - career statement, potential for future funding and publication, publication/presentation background, and quality of research experience
- **Research team** – team orientation and new collaborations are strongly encouraged. If this is not a new collaboration, is there strong evidence of a new direction for an existing team? Are the investigators well-qualified to undertake the project?
- **Departmental Commitment** – Letter from division/department head ensuring protected time for the MS candidate’s research project and approval for the candidate to attend classes
- **Letters of recommendation from mentors and Mentorship Plan**
- **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. Emphasis on drug discovery, targeted therapeutics, biomarker trials, or device development.
  - **Pre-clinical studies** should have near-term potential to translate into patient-oriented research, clinical trials (phases I or II) are permitted.
  - **Emphasis is placed on** drug discovery, targeted therapeutics, biomarker or device development and novel technologies.
  - **Emphasis on comparative effectiveness and health disparities research** - Projects focusing on health needs of LGBTI and underserved populations and/or directly impacting health outcomes in the community.
  - **Pediatric and Women’s Health Studies**
  - **Life course studies of disease**
  - **Studies incorporating Biostatistical Methodology and Design**

Questions? email CTSC-Education@med.cornell.edu