

ssistance and advice from Tufts CTSI is available at every turn through our signature A programs and our education and training opportunities.

SIGNATURE PROGRAMS

Our unique signature programs help you to conduct research with collaborative, efficient, holistic, patientcentered approaches. You may request consultations with subject matter experts, or acquire program-specific knowledge at in-person seminars and on I LEARN.

Comparative Effectiveness Research

Comparative Effectiveness Research (CER) compares the benefits and harms of alternative interventions including improving health care delivery to prevent, diagnose, monitor, or treat a clinical condition. The CER Program offers consultations to help researchers at all levels to apply for grants and advance CER methods.

CER: Who is eligible?

Consultations and connections to collaborators, with specific expertise in Patient-Centered Outcomes Research (PCOR), are available to faculty members at Tufts CTSI-affiliated academic, industry, and hospital partner institutions.

One Health

The One Health approach to advancing science leverages the synergies of diseases shared by people and animals, as well as the benefits of human-animal interactions, to advance collaborative and interdisciplinary solutions for important medical issues. Tufts CTSI partners with Cummings School of Veterinary Medicine to more effectively translate research into practice to improve the health of humans, animals, and the environment. Specialties of the One Health Program include natural animal models of human disease, infectious/ zoonotic diseases, and human-animal interactions.

ONE HEALTH: Who is eligible?

The One Health Program offers consultations to help you identify relevant natural animal research models and matchmaking services to connect collaborators for One Health-related projects. This service is available to investigators at all levels, at all Tufts CTSI partner institutions and across the CTSA consortium.

Research Process Improvement

The Research Process Improvement Program builds the capacity of research teams to conduct efficient, cutting-edge research across the translational spectrum. This program introduces methods used in industry and health care to address challenges and barriers that impede the research process, and focuses on implementing best practices and evidence-based strategies to enhance the success of projects.

RESEARCH PROCESS IMPROVEMENT: Who is eligible?

The Research Process Improvement Program facilitates teams to improve research processes and offers consultations on using improvement methods in research studies. Faculty and trainees at Tufts CTSI partner institutions are eligible for these services; however, anyone can stop by a Tufts CTSI Drop-In Session to ask questions or get advice.

Stakeholder & Community Engagement

Our Stakeholder & Community Engagement Program has two core functions:

- 1. Addressing Asian health disparities
- 2. Promoting stakeholder and community engagement in research across the translational spectrum

This program offers consultations, connections to collaborators, capacity-building for community partnerships, grant support, and support for systems change initiatives.

STAKEHOLDER & COMMUNITY ENGAGEMENT: Who is eligible?

- Anyone can request a consultation.
- Grant planning, editing and support is available to faculty and staff at Tufts CTSI partner institutions.

www.tuftsctsi.org

EDUCATION AND TRAINING

Clinical & Translational Science Graduate Program

The Clinical and Translational Science (CTS) Graduate Program was the first MS/PhD program in clinical research in a biomedical graduate school and an academic medical center in the nation. Offered through the Sackler School of Graduate Biomedical Sciences, it is designed for trainees who seek to translate research into improved clinical care and public health. The CTS Graduate Program offers PhD, Master's, and Certificate degrees and opens courses to non-degree students who want to develop their research skills.

All of the CTS Programs are intended for individuals with training in the medical and health sciences, most commonly fully-trained physicians. Those with other clinical degrees (e.g., DDS, DVM, or PharmD) or graduate biomedical or clinical degrees (e.g., MS) may also be considered. Tufts CTSI Career Development (K) scholars and research (T) fellows receive tuition as part of their awards. Other scholarships may be available for Tufts CTSI partners to enroll in the summer Introduction to Clinical Care Research course.

CTS GRADUATE PROGRAM: Who is eligible?

Students seeking admission to the CTS Graduate Program apply to the Sackler School of Graduate Biomedical Sciences. Most candidates are fully trained physicians or have advanced biomedical or clinical degrees.

TL1 Fellowship Programs

The TL1 Fellowship Program offers research training for scholars and clinicians with an interest in clinical and translational research. Selected fellows receive a stipend and full tuition for the CTS Graduate Program, and are required to pursue their research training full-time. Tufts CTSI offers three fellowship types: (1) Clinical and Translational Science Predoctoral Fellowship; (2) Comparative Effectiveness Research Postdoctoral Fellowship; and (3) One Health Postdoctoral Fellowship.

TL1 FELLOWSHIPS: Who is eligible?

- Eligible applicants for predoctoral fellowships are third-year medical students.
- Eligible applicants for postdoctoral fellowships are doctoral-level scholars and clinicians (e.g., DMDs, DVMs, MDs, PhDs, ScDs). All applicants must submit an online application through the Sackler School of Graduate Biomedical Sciences. In their personal statements, applicants should specify the fellowship that interests them.

K Scholar Programs

Tufts CTSI offers a KL2 Career Development Award for highly-qualified junior faculty to conduct multidisciplinary clinical/patient-oriented research for a period of two to three years. Applicants are innovative scientists across the entire translational science spectrum who seek protected research training time towards the development of a clinical translational research career. This program includes research training, funds for protected research time and some research supplies, and a structured program to enhance and prepare candidates for translational research careers. KL2 funds cannot be used during fellowship training.

CAREER DEVELOPMENT AWARDS: Who is eligible?

Eligible applicants are US citizens or permanent residents with a faculty appointment at the Instructor or Assistant Professor-level at a Tufts CTSI partner institution, including all Tufts CTSI academic and hospital partner institutions.

For more information, or to request a consultation, visit www.tuftsctsi.org.



Tufts Clinical and Translational Science Institute (CTSI) accelerates the translation of laboratory and medical research into clinical use, widespread medical practice, and improved health care delivery and health policy. We are one of more than 60 institutions comprising the national Clinical and Translational Science Awards (CTSA) Consortium, led by the National Center for Advancing Translational Sciences (NCATS), part of the National Institutes of Health (NIH). We've built a robust partnership of medical, academic, industry, and community organizations and developed a unique identity within the CTSA Consortium, with nationally recognized strengths in emergency medicine, large effectiveness clinical trials, clinical trials methods innovations, and translational science education. Tufts CTSI was founded in 2008, supported by NCATS award number UL1TR001064.

Our resources, services and signature programs can help translate your research into results. Whether you need collaborators, study design, regulatory submission, sample collection, animal models, laboratory assistance, data analysis, process improvement, or consultation, Tufts CTSI is ready to assist you. Buckle your seatbelt and let us show you the way.

Tufts Clinical and Translational Science Institute



Tufts Clinical and Translational Science Institute (CTSI)

Email: info@tuftsctsi.org Website: www.tuftsctsi.org Phone: 617-636-CTSI (2874) Mailing address: 800 Washington Street, #63, Boston, MA 02111 Offices: 35 Kneeland Street, Floors 8-11, Boston, MA 02111



Suit Up

Before you get behind the wheel, make sure you have what you need to succeed. Our professional development programs offer a wide array of opportunities to help you hone your skills at your pace, on your schedule.

Tufts CTSI offers interactive seminars and workshops for new and experienced researchers, faculty, staff, and students. These courses address the growing need for investigators to operate across different disciplines and across key stages in the translational spectrum, and equip you with the competencies you need to advance clinical and translational research.

Most seminars are on I LEARN (http://ilearn.tuftsctsi.org), Tufts CTSI's interactive education website. This online library, available at any time to anyone with an internet connection, combines professionally videotaped recordings of live lectures with other learning materials to transcend the traditional in-classroom experience. Whenever you're ready to get up to speed, I LEARN will be waiting for you.

HELP FROM EXPERTS: Who is eligible?

Anyone can request a consultation with a Navigator, free of charge, via **www.tuftsctsi.org**.

Course topics available on I LEARN include:

- Clinical Research
- Comparative Effectiveness
 Research
- Developing & Managing Your Research Career
- Grant Writing
- Informatics
- One Health
- Quality Improvement in Health Care
- Regulatory Affairs
- Research Design & Data Analysis
- Stakeholder & Community Engagement

Meet Your Pit Crew

ufts CTSI's **Navigators** are a team of experts in every phase of translational research, who will fuel you with connections to resources, services, mentors and collaborators at the starting line and throughout your journey.

Navigators can also connect you with thought leaders and experts from across the translational research community for expert advice on research approaches, developing collaborations, and guidance about the inclusion, provision, and deployment of our resources and services to enhance integration across all phases of the clinical and translational research spectrum.

Contact a Navigator or request a consultation by submitting a request through **www.tuftsctsi.org**. Anyone can request a consultation, free of charge, at any time.





W ith research design and analysis, informatics, clinical trials, and regulatory support, you'll be ready to roll in no time.

Biostatistics, Epidemiology, and Research Design (BERD) Center

The Biostatistics, Epidemiology, and Research Design (BERD) Center can help you develop research grants and protocols. Our team of biostatisticians and epidemiologists will work with you to ensure your grant proposal is as strong and complete as possible. For in-depth pre- or post-award assistance, request a consultation.

BERD Center services include I LEARN seminars; help to develop specific aims and hypotheses; study design; power and sample size calculations; analysis and randomization plans; pilot data analysis for inclusion in grants; analysis file creation and data set organization and cleaning; statistical analyses and interpretation of results; table preparation; graphics; drafting the statistical methods and results section; and manuscript review.

BERD CENTER: Who is eligible?

- **Pre-award services** are offered at no cost to faculty members and trainees at Tufts CTSI academic and hospital partner institutions and members of community partner institutions. Student projects are ineligible for these free services, but students engaged in faculty-led projects may receive free consultations if the PI is a faculty member at a Tufts CTSI institution and participates in the consultations.
- **Post-award services** are offered for a fee and are available to anyone.
- Drop-in sessions are open to anyone, with preference for faculty members, fellows, residents, and graduate students.
 For the current drop-in session schedule, please visit www.tuftsctsi.org.
- Request study design and statistical services by submitting a request through **www.tuftsctsi.org**.

Clinical and Translational Research Center (CTRC)

The CTRC supports investigator-initiated and industrysponsored, high-quality, innovative clinical research across Tufts CTSI partner institutions. This includes services at in- and out-patient facilities at Tufts Medical Center and across other locations of care as a "center without walls." The CTRC provides you with the infrastructure to conduct a wide range of state-of-the-art clinical trials in neonatal, pediatric and adult research participants in the outpatient or inpatient setting, and offers resources to facilitate clinical research for studying the causes and progression of human disease and for translation of biomedical research to prevent,

The CTRC is staffed by specialized research nurses and research assistants, research study coordinators, and laboratory technicians and provides support for every aspect of your clinical study, including protocol design, budget development, regulatory and coordinating services, patient recruitment, subject randomization, data collection, routine and specialized nursing, sample collection, medical administration, adverse event reporting, processing, patient follow-up, and short-term and long-term storage and shipment, as needed.

In addition, the CTRC supports clinical and translational research by providing laboratory services and expertise. Staff members work with you to provide the most appropriate and cost-effective services to meet your research needs.

CTRC: Who is eligible?

treat or cure disease.

All CTRC and lab services are offered for a fee and are available to anyone (nursing services require IRB approval). Some rates are discounted for federally-funded studies. For current rates and services, please visit **www.tuftsctsi.org**.

Regulatory Support

Our Regulatory Support experts focus on the improvement of clinical trials processes and the responsible conduct of human subjects research through interaction with local, state, and federal agencies and Tufts CTSI-affiliated institutions. Not sure whether your project qualifies for a single institutional review board (IRB) for all sites, or needs a data and safety monitoring board (DSMB)? Can a master contract be used? Do you need an Investigational New Drug (IND) application, Investigational Device Exception (IDE), or Certificate of Confidentiality from the Food and Drug Administration (FDA)? How can you streamline clinical trials processes, maximize patient recruitment and ensure success for your clinical trial? Request a consultation. We're here to help.

REGULATORY SUPPORT: Who is eligible?

- Regulatory consultations are available to anyone.
- DSMB services include charter development, DSMB setup, DSMB meetings, and consultation. These services are offered for a fee to faculty members and trainees at academic, hospital, and community Tufts CTSI partner institutions. Costs for DSMBs are handled on a case-by-case basis, and are determined by the complexity of the study, the funding source, and the investigator.

Informatics

Tufts CTSI's Informatics Program can help you to acquire, manage, and share data. Tools include HIPAA-compliant REDCap[™] and REDBank to create surveys, capture data, and manage specimen collections; the clinical academic enterprise trust (CLARET) to obtain data derived from hospital-based electronic medical record systems; and Profiles, to facilitate researcher networking. Support is also provided to standardize forms and databases, and to facilitate data-sharing and resource collaboration.

INFORMATICS: Who is eligible?

- REDCap and REDBank are available to anyone. Researchers not affiliated with a Tufts CTSI partner institution and students must work with a Tufts Medical Center investigator in order to be eligible.
- CLARET is available only to Tufts Medical Center researchers.

Pilot Studies Program

Need a jump start to get your project underway? Our Pilot Studies Program funds proposals for innovative, high impact, translational science projects with a focus on building interdisciplinary, multi-institutional research teams including investigators from the basic, clinical, and/or applied sciences. These seed projects allow awardees to generate sufficient preliminary data to secure future extramural funding, or to develop new methods that will significantly advance translational science. All applicants should have a preliminary hypothesis underlying the research and a defined plan and timeline for seeking extramural funding (i.e., R01 or P01 awards, Small Business Innovation Research awards with industry collaborators, or equivalent) or a defined plan for the application and dissemination of new research methods (i.e., extramural funding, publications, conferences, etc.).

If you're hoping to receive Pilot Studies Program funding, utilize the Biostatistics, Epidemiology, and Research Design (BERD) Center and other services to help you prepare to apply.

PILOT STUDIES PROGRAM: Who is eligible?

In order to be eligible for Pilot Studies grants, the primary Principal Investigator (PI) must have a primary appointment or position at a Tufts CTSI academic, medical, or non-profit research partner institution. Secondary PIs and other team members included in a proposal must hold positions at a Tufts CTSI partner institution.



To get help or consultation from Tufts CTSI, visit **www.tuftsctsi.org** to submit a request.