Boston University Clinical & Translational Science Institute
www.bu.edu/ctsi

Clinical & Translational Science Resources

The BU-CTSI is a center of expertise providing tools, services and resources to clinical investigators, maximizing the impact of discoveries & speeding the translation of research into improved patient care.

Research investigators can request no-cost consultations from various BU CTSI services at any point during their research study. Requests can be made during or even before submission for IRB approval. BU CTSI Program Directors and staff will spend up to two hours on consultations related to your research. To find out more about consults or to learn more about BU CTSI's no-cost consults, please visit the Research Navigator page.

For a full list of resources and more information about the CTSI please visit our website @ http://www.bu.edu/ctsi/

Resource
Members of the BU CTSI Research Navigator Team (RNT) can provide guidance, linkages, resources, and concierge services to all investigators and their research teams for every stage of their translational research from planning to dissemination of findings. The RNT also helps to educate research teams about the many CTSI resources which include tools and services for clinical investigators to maximize the impact of discoveries and speed the translation of research into improved patient care and population health. Departments, sections and research forums can request a presentation from the RNT to provide an overview of the many CTSI services. Please visit the CTSI RNT website page to request any of the services/resources described below, ask questions or request any other CTSI service or resources. https://www.bu.edu/ctsi/support-for-research/the-research-navigator-team/
Vouchers
Vouchers are intended to enable preliminary work, generate data for new or ongoing projects, and/or secure fee-based core services for expert consultation services (e.g. biostatistics & data management) with the ultimate goal of furthering clinical and translational research. Vouchers provide a maximum of $5,000. **Vouchers** are available on a rolling basis. To apply, please complete the application here
Regulatory Consultations for Protocol Development
Staff in our Clinical Research Resources Office (CRRO) are available for one-on-one consultations or training sessions with groups of researchers to help prepare IRB applications, respond to IRB stipulations, or get help with study implementation. http://www.bumc.bu.edu/crro/ Protocol Builder is secure, cloud-based technology that provides step-by-step guidance for developing research protocols. This new protocol writing technology can help you write investigator-initiated protocols that adhere to IRB and regulatory standards in less time with less hassle. It provides organization, guidance, and collaboration tools for your observational or interventional research protocols. To request access go here https://app.protocolbuilderpro.com/register/boston-university

Resource	

Research Networking (RN)

A core goal for the CTSI is to use the resources and expertise of available at BU to promote the highest quality and most efficient clinical and translational research. We believe this is best achieved through a Team Science approach, where investigators with complementary and supplementary disciplines engage and interact in networks of teams. Research Networking tools connect institutional systems, broad research networks, public research data, and restricted data by collecting accessible information from a wide range of sources and then aggregate and organize the information as expertise profiles for faculty, investigators, scholars, clinicians, community partners, and facilities.

- **BU Profiles** is a software tool that supports research networking and expertise searches. It enables individuals (either internal or external to BU) to locate researchers by subject matter, name, institution, department, division, faculty, etc. This RN tool is a way to network and collaborate, find potential mentors, search for relevant panel members and advisory board expertise, evaluate research trends by investigator, and broadly surveys the community at large.
- **Clinical Research Informatics and Technology Consultations (CRITC)**-Examples of assistance provided by CRITC:
- Chronic disease registry for research
- Development of chronic disease registries for research
- Patient education kiosk for patients in a clinic waiting room
- Project to create and study of a mobile application to improve care
- Project to create and study of a bedside clinical technology
- **Trials Today** a quick way to search the thousands of studies available on Clinical Trials.gov and to find local studies to participate in

Grant writing, editing and formatting services

The CTSI in collaborating with Boston Medical Center's Office of Development, Foundation Relations and Government Grants team and the Boston University School of Medicine Office of Proposal Development offer the BU research community (all campuses) ***grant writing, editing and formatting*** services for NIH and other federal applications.

- All non-BU MED Investigators, please go here to request this services
- BUSM Investigators, please go here to request services

The Biostatistics, Epidemiology, and Research Design (BERD) Program

The priority of BERD is to provide collaboration with junior faculty, fellows, and residents but initial consultation is provided also to senior investigators in order to determine how best to obtain necessary data management and analytic support through our partners such as BEDAC on the Medical and Charles River Campuses. The goal of BERD collaboration and consultation is to develop research for future external funding. This, however, does not include consultation on student projects beyond an initial consultation. We will assist in connecting students to student analysts from graduate programs at Boston University in Biostatistics and Statistics. Please submit a request for biostatistics consulting here

The Biostatistics and Epidemiology Data Analytics Center (BEDAC)

The Boston University School of Public Health (BUSPH) Biostatistics and Epidemiology Data Analytics Center (BEDAC) has been a resource since 1984, providing research services to BU investigators and government, foundation and industry partners (www.bu.edu/bedac). The BEDAC is comprised of over 50 faculty, staff, post-doctoral fellows and PhD and masters-level students. Since its inception, the BEDAC has participated in over 1,000 small- to large-scale research investigations, spanning over 16 countries and providing services for the following ten core competencies. For more information and to request BEDAC services through the CTSI Research Navigator Team, please submit a request here.

Resource

Research Tools & Data Science Resources

REDCap (Research Electronic Data Capture)- a secure web-based application for building and managing online surveys and databases for research. Using REDCap's streamlined process for rapidly developing projects, users can create and design projects applying:

- the online method from your web browser via the Online Designer; and/or
- he offline method by constructing a "data dictionary" template file in Microsoft Excel, which can be later uploaded into REDCap

BMC/BU Clinical Data Warehouse for Research The Clinical Data Warehouse (CDW) consolidates patient data from the BMC Electronic Medical Record Systems. Investigators with IRB-approved studies may make requests for data from the CDW.

TriNetX is a dynamic, data driven platform that leverages the i2b2 data warehouse and Cerner PowerChart (EHR). Employing a clean and easily navigable user interface, a researcher can easily generate a query to perform study feasibility and cohort discovery. Additionally, TriNetX has the ability to perform analysis of the identified cohort and "estimated rate of arrival" projections. TriNetX is a valuable resource for accelerating the conduct of both investigator initiated and industry research

The CTSA National Center for Data to Health (CD2H) accelerates advancements in informatics by promoting data reuse and interoperability, tool sharing, informatics fluency, and collaboration across the CTSA community

The ACT Network (SHRINE) is a real-time platform allowing researchers to explore and validate feasibility for clinical studies across the NCATS Clinical and Translational Science Award (CTSA) consortium, from their desktops. ACT is HIPAA-compliant and IRB-approved.

The BU i2b2 (Informatics for Integrating Biology and the Bedside) provides a standardized data architecture and informatics capabilities to combine clinical patient data with demographic, biologic, and genomic data for use in clinical research projects. An easy-to-use aggregate data query tool, i2b is accessible via the internet using the i2b2 web client

openSESAME (Search of Expression Signatures Across Many Experiments) is a web-based tool for using patterns of gene expression to discover relationships between experimental conditions, diseases, or biological states. openSESAME is unique in that it identifies connections between datasets based on expression patterns alone, without the need for prior knowledge of experimental groups or phenotypes

GeneHive is a free, secure, flexible, easy-to use, and extensible object storage system designed for the storage and annotation of high-throughput research data. The current implementation contains a suite of data structures designed to encapsulate common concepts such as samples, sample sets, assays, processed datasets, and biomarkers.

To view the full list if tools and to request use of any of these resources please submit a request here.