Experimental Therapeutics Institute

Charged with moving promising novel therapeutics more quickly and easily from the bench to the bedside to the community, Conduits supported the creation of the Experimental Therapeutics Institute (ETI) at Mount Sinai School of Medicine, which brings together the intellectual and technical expertise of several basic science departments. The ETI acts as an institutional hub for developing and implementing a range of emerging technologies including drugs, devices, and intellectual property. Recently named the Director of Conduits’ Experimental Therapeutics & Technology (ET&T) Program, Ming-Ming Zhou, PhD, Professor and Chairman of the Structural Biology Department, and Co-Director of the ETI, leads both the IdeasLab and the Pilot Project initiative through the ET&T group that works together with the Experimental Therapeutics Institute.

The IdeasLab promotes collaboration between junior and senior faculty, both clinical practitioners and basic scientists, for developing initial ideas for new translational projects. The IdeasLab will focus on facilitating the very early exploratory phase of research questions. A clinician may have an interesting clinical observation that could give rise to a research question. Alternatively, an investigator may have a laboratory finding that has clinical potential. The IdeasLab will provide a forum to systematically explore these initial ideas.

Small molecule research, one of ETI’s cores, promises to be an important resource, providing access to emerging high-end technologies for researchers throughout Mount Sinai in chemical biology, chemoinformatics, and medicinal chemistry. Researchers may consider developing small molecule compounds as therapeutic agents for disease treatments or using small molecules as research tools to help validate and discover new drug targets. Dan Felsenfeld, PhD works at the ETI to provide services in experimental screening through the Integrated Screening Core, and Dr. Roberto Sanchez can provide support with computational screening through their core in Molecular Informatics.

Lakshmi Devi, PhD, currently works with the ETI on small molecule discovery to accelerate the identification of new therapeutic targets for drug development in the treatment of obesity. Utilizing the virtual screening techniques provided by ETI, she was able to validate her findings and fast-track them to translational research. According to Dr. Devi, “Virtual screening is one of the emerging techniques that make these kinds of drug development studies possible in an academic setting.”

Conduits’ ET&T solicits applications for pilot projects on an ongoing basis. The purpose of these grants is to encourage collaborative translational projects between clinical and basic scientists, to develop high-risk/high-gain ideas, and to obtain proof-of-principle data to help a research team with more competitive applications to extramural funding agencies. Projects will be funded at $25,000 or $50,000 for one year. This year, 35 applications were received and are now in the process of being evaluated. Up to eight proposals will be funded. Each application gets written feedback from ETI’s expert panels, giving them a competitive edge in obtaining funding for ongoing translational research.

ETI’s multidisciplinary research advisory board and investigator panels are also available to assist any MSSM researcher or research teams in preparing their applications.

For more information about pilot projects, please contact Kruti Mohan, Administrative Director, Translational Research Institutes, at 212-824-7328 or Kruti.Mohan@mssm.edu.

For more information about the Experimental Therapeutics Institute and its services, please contact Ming-Ming Zhou at Ming-Ming.Zhou@mssm.edu.
Obtaining written informed consent is more than just a signature on a form. It involves an education and information exchange that takes place between the researcher and the potential subject. The consent document cannot serve as a substitute for discussion. During the informed consent process, information is presented clearly and without coercion in order to enable potential subjects to voluntarily decide whether or not to participate in a research study. The information can be complex or distressful and may require multiple discussions. Potential subjects should be encouraged to talk about the research with family members or trusted advisors.

The consenting researcher has an obligation to ensure that potential participants understand the information. Questions from the Investigator/Research Coordinator to elicit understanding can broaden the discussion, prompt the potential subject to think more carefully about the study, and help the researcher decide whether the person has adequately understood the study. Useful questions should be open-ended. Examples of open-ended questions are:

- “Just so that I'm sure you understand what is expected of you, would you please explain to me what you think we're asking you to do?”
- “What is the possible benefit to you of participating in this study? What are the possible risks?”

In contrast, close-ended questions do not further discussion and should be avoided. Examples of closed-ended questions are:

- “Do you understand?”
- “Do you see that there are some risks to taking this drug?”

In addition, researchers must appropriately and thoroughly document the informed consent process. Using a checklist helps ensure that the documentation on file confirms that the research team has operated using the best clinical practice. Examples of checklist items:

- Individual meets inclusion criteria/ does not meet exclusion criteria
- Consent and HIPAA reviewed and presented by Principal Investigator/Research Coordinator
- All questions / concerns were answered / addressed
- Consent(s) and HIPAA form (if separate from the consent) signed and dated with correct time