New Med Student Pre-doctoral Research Program: SOAR

Einstein has a rich tradition of promoting research experiences for medical students. A new program under the direction of Dr. Ellie Schoenbaum will build on these strong foundations, and enhance the oversight and quality of student-conducted research. At the cornerstone of this effort is the new Student Opportunities in Academic Research (SOAR) program, launched with the current first year medical students (MD Class of 2016) and designed to be completed in 4 years. There are 8 concentrations in SOAR. Two of them are specifically geared for student research aligned with the goals of the CTSA program: the Clinical Research concentration (directed by Dr. Schoenbaum), and the Translational Sciences concentration (directed by Joan Berman, PhD). The other 6 concentrations feature research opportunities in Aging, Bioethics, Integrative Medicine, Public Health, Urban Health, and Global Health.

All of the concentrations are designed to enrich student experience in critical thinking, leadership skills, and academic pursuits. This program enables interested and motivated students to take a ‘deeper dive’ into research training, with the goal of providing a more meaningful, skills-developing educational experience, and serving as an important pipeline program to increase the pool of physician-investigators.

Gene Sequencing

Personalized medicine involves the customization of healthcare, tailored to the individual patient by use of genetic or other information. With Einstein seed funds, the Division of Translational Genetics directed by Bernice Morrow PhD in the Department of Genetics is expanding human genetics capabilities into the clinic. The department’s Epigenomics/Genomics Core will sequence patient DNA samples from individuals with known genetic diseases using gene panels developed at Einstein. The current screening panel has 650 genes spanning 4.85 megabases and includes genes associated with known inherited disorders resulting from germ-line mutations such as Noonan syndrome, cardiomyopathy, collagenopathies, hearing impairment, and breast cancer, among others. In addition, Affymetrix 6.0 microarrays containing 1.8 million genetic variations will also be used to identify genomic deletions and duplications as well as to classify ethnic ancestry. For more information, contact the project manager, Maria Delio, maria.delio@einstein.yu.edu.