

Biomedical Informatics

The focused goal of the Virginia Commonwealth University Center for Clinical and Translational Research (CCTR) Biomedical Informatics Core is to catalyze clinical and translational research within VCU and its partners by providing technical infrastructure, data, policies and informatics expertise to practitioners and health science researchers.

Biomedical Informatics staff members work toward improving and expanding investigator and research data management support and provide analytical consulting via regularly scheduled training classes and one-on-one consultations. Software tools available for investigators include REDCap and i2b2.

For more information about the CCTR Biomedical Informatics Core, visit go.vcu.edu/biomedicalinformatics.

REDCap Electronic Data Capture

The Biomedical Informatics Core, in partnership with VCU Technology Services and the VCU Health System, has made REDCap (Research Electronic Data Capture) available to the VCU community. REDCap allows for secure Web-based data collection and storage, including online surveys.

Through REDCap's streamlined process for rapidly developing databases, users create a project, define and organize the data they wish to capture, build the related forms, and associate them with study events. REDCap supports prospective and retrospective studies and multicenter clinical trials, and has been used across a broad spectrum of research, from bench studies to community-based research.

i2b2 Cohort Discovery

Informatics for Integrating Biology and the Bedside is a National Institutes of Health-funded national center for biomedical computing. The i2B2 center is developing a scalable informatics framework that will bridge clinical research data and the vast databanks arising from basic science research in order to better understand the genetic bases of complex diseases.

Researchers can use i2b2 to discern whether patient populations with certain criteria exist, including particular demographics, diagnoses, lab tests and/or medications. The information contained in the i2b2 system is de-identified, so barriers to entry are lower and investigational inquiries may be executed prior to requesting identifiable information, should it be required.

