

The following text can be modified for use in grant applications that require support from the Penn State Clinical and Translational Science Institute (CTSI). For additional information, contact Rebecca Jenkins, rjenkins@hmc.psu.edu

SHORT VERSION: The Penn State Clinical and Translational Science Institute (CTSI) was established in 2011 with grant funding from the Clinical and Translational Science Award (CTSA) program in the National Institutes of Health (NIH). The CTSI serves as an independent but highly integrated academic engine for clinical and translational science. The overall goals of the CTSI are to catalyze interdisciplinary collaboration and novel approaches to predict, prevent and treat disease; to provide access to investigators across the University to resources that enhance and rigorously evaluate the impact of clinical and translational research; to train a new generation of health professionals and investigators; and to effectively share and disseminate data, discoveries and new knowledge with researchers, health practitioners, other institutions, and the community at large. The CTSI's key function areas include: 1) Biomedical Informatics; 2) Biostatistics, Epidemiology, and Research Design; 3) Clinical Services Core; 4) Community Engagement and Research Core; 5) Education and Training; 6) Novel Methodologies; 7) Pilot Studies; 8) Regulatory Support and Ethics; 9) Tracking and Evaluation; and 10) Translational Technologies.

LONG VERSION: The Penn State Clinical and Translational Science Institute (CTSI) was established in 2011 with grant funding from the Clinical and Translational Science Award (CTSA) program in the National Institutes of Health (NIH). The CTSI serves as an independent but highly integrated academic engine for clinical and translational science. The overall goals of the CTSI are to catalyze interdisciplinary collaboration and novel approaches to predict, prevent and treat disease; to provide access to investigators across the University to resources that enhance and rigorously evaluate the impact of clinical and translational research; to train a new generation of health professionals and investigators; and to effectively share and disseminate data, discoveries and new knowledge with researchers, health practitioners, other institutions, and the community at large. The CTSI is made up of ten key function areas, which together advance clinical and translational science efforts across the university.

The **Biomedical Informatics** key function area provides expertise and training for analyzing clinical and genomic data from all data acquisition platforms. Staff is available for consultation and to customize these tools and provide training. These services are provided through the various CTSI partner units at the Hershey and University Park campuses, including the Clinical Informatics Research Core, Center for Quality Innovation, Research IT Group, Data Warehouse Group, Bioinformatics Core, Center for Statistical Genetics, and the Institute for Genomics, Proteomics, and Bioinformatics.

The **Biostatistics, Epidemiology, and Research Design (BERD)** group provides statistical and epidemiological support to investigators on study design, data management, data entry, statistical software usage and analysis. It offers collaborations with researchers on grant proposals, and also provides education in statistical design and methods to investigators.

The **Clinical Services Core (CSC)** provides an integrated, investigator-oriented infrastructure to facilitate clinical and translational research. The CSC has two Clinical Research Center (CRC) sites, one on the Hershey campus and the other at the University Park campus, that provide investigators with experienced clinical research staff and space for research with human subjects.

The **Community Engagement and Research Core (CERC)** provides core educational and research services that enable investigators to design and conduct research protocols that effectively engage communities. The CERC funds pilot projects and provides consultation related to all phases of research when working with community partners. The CERC also supports a Community Advisory Board (CAB) whose members represent the Central Pennsylvania region.

The **Education, Training and Career Development** key function area broadens the base of clinical and translational researchers by sponsoring a multidisciplinary postdoctoral KL2 scholar program and a pre-doctoral professional (medical and nursing) and graduate student TL1 program. The Education and Training group also supports dual-title PhD and certificate programs in Clinical and Translational Science.

The **Novel Methodologies** key function area implements seminars and events that facilitate interdisciplinary translational science, and supports the development of novel methodologies that facilitate translational science through pilot funding mechanisms.

The **Pilot Studies** program provides funding for interdisciplinary, cross-campus collaborative pilot projects. In conjunction with other key function areas, the Pilot Studies team develops innovative ideas for pilot projects, drafts requests for applications (RFAs), and distributes the RFAs to faculty. Pilot funds are awarded after a competitive review process, and all projects undergo monitoring and evaluation throughout the course of the study.

The **Regulatory Support and Ethics** key function area aims to integrate and streamline regulatory support functions across the university, and to address the ethical issues raised by clinical and translational research. The regulatory arm of this program works closely with the IRBs at both campuses to promote regulatory compliance as a means of protecting human subjects. The Research Ethics Consultation service assists researchers in identifying ethical issues and defensible options for resolving those issues. This service is available to researchers at all stages of their careers and during all phases of the research process.

The **Tracking and Evaluation** key function area promotes institutional self-evaluation, identifies gaps and barriers to implementation of programs, and identifies areas of opportunity for solutions that address specific needs in clinical and translational research.

The **Translational Technologies Core Services Unit** enhances access to the technology resources and expertise needed in clinical and translational research. A major initiative of Translational Technologies has been the implementation of the eagle-I database, a searchable, central catalog of existing resources at Penn State. The Translational Technologies group funds efforts to develop needed research resources, and applies survey and evaluation methods to guide future investments.