

Clinical Research at the NIH Clinical Center



Yesterday

- In 1953, the Clinical Center (CC) opened on the Bethesda, Maryland, campus. It was a self-contained community of clinicians, scientists, patients, and support staff, with the common goal of conquering both chronic and acute disease.
- Since the beginning, NIH's "Guiding Principles in Medical Research Involving Humans" required prior review and the participant's informed consent. This was an early version of the Institutional Review Board mandated in 1966 by the US Surgeon General for all Public Health Service grants involving human subjects.
- Milestones in medical discovery were made thanks to the more than 350,000 volunteers from around the world and all walks of life who have participated in research at the NIH CC.
- Groundbreaking treatments and procedures pioneered at the NIH CC include:
 - chemotherapy, initially targeting choriocarcinoma, and later treating childhood leukemia and Hodgkin's disease
 - artificial mitral heart valve replacement surgery
 - use of immunotherapy to treat cancer (melanoma)
 - treatment of AIDS with AZT
 - gene therapy
 - controlled trials of lithium's effect on depression
 - immunosuppressive therapy for nonmalignant diseases such as in lupus, Wegener's granulomatosis, and midline granuloma (a small mass of granulation tissue caused by chronic infection)
 - a computerized hospital information system to facilitate clinical research

- development of blood screening tests for AIDS and hepatitis that have made for a safer blood supply.

Today

- As America's research hospital, the NIH Clinical Center leads the global effort in training today's investigators and discovering tomorrow's cures.
- The NIH Clinical Center in Bethesda, Maryland, is the world's largest hospital dedicated totally to clinical research.
- The Clinical Center's new hospital, the Mark O. Hatfield Clinical Research Center, opened in 2004.
- The Clinical Center provides a versatile clinical research environment enabling the NIH mission to improve human health by:
 - Investigating the pathogenesis and natural history of disease; developing state-of-the-art diagnostic, preventive, and therapeutic interventions; training the next generation of clinical researchers; and ensuring that clinical research is safe, efficient, and ethical.
- Each year there are about 1,450 clinical research protocols, most of which are clinical trials testing new treatments and natural history studies. Most studies are early trials, Phase 1 and 2.
- The number of principal investigators now totals 481, up from 478 in 2008. In 2009, there were 10,315 new patients, 6,426 admissions to the hospital and 96,372 outpatient visits.
- Research collaborations have expanded to include extramural partners through the Bench-to-Bedside awards program (<http://www.cc.nih.gov/cc/btb/about.html>), designed to speed translation of promising laboratory discoveries into better medical treatments.

- The Biomedical Translational Research Information System (BTRIS) (<http://btris.nih.gov/>), a resource available to the NIH intramural community, brings together clinical research data from the Clinical Center and other NIH Institutes and Centers. BTRIS provides clinical investigators with access to identifiable data for the subjects on their own active protocols, while providing all NIH investigators with access to de-identified data across all protocols.

Tomorrow

- The focus of the CC's clinical research will shift from treating chronic diseases to predicting illness before it occurs and personalizing therapies.
- The CC will continue to adapt physically to evolving research needs because of its unique design flexibility.
- The CC will continue to be on the leading edge of the NIH Roadmap for Medical Research's efforts in re-engineering the clinical research enterprise and will be a major resource in the Clinical and Translational Science Award Program consortium.
- Collaborations with research partners outside NIH will continue to be pursued through the Bench-to-Bedside awards program and extramural researchers will have opportunities for access to the CC's unique resources.
- Informatics tools developed at the CC will be refined and available for use and adaptation by extramural researchers. The Clinical Research Information System's next phase will be a data mart that will pool data and text for use by intramural researchers. A repository will allow data sharing with extramural investigators.

Contact: Clinical Center Communication 301-495-2563

<http://clinicalcenter.nih.gov>

Clinical Center website: <http://www.cc.nih.gov/>

Bench-to-Bedside Overview:

<http://www.cc.nih.gov/cc/btb/about.html>

BTRIS Homepage: <http://btris.nih.gov/>