A $16 million Clinical and Translational Science Award (CTSA), awarded to UB by the National Institutes of Health (NIH) this past summer, took a good thing and made it even better. The 18 recipients of the award, including Mt. Sinai and UC San Diego, are in the top tier of institutions engaged in translational research. Several factors, including UB’s expertise in bioinformatics, community outreach programs and the Clinical and Translational Research Center (CTRC)—a building uniquely designed to foster interaction, with a research center above a hospital and collaborative spaces in between—helped secure our place in this elite group of institutions that are changing the face of medicine.

**Translation, or “bench-to-bedside” research, denotes the process of translating basic biomedical research into new therapies:**

**T1** Translation to humans
Researchers perform studies in the lab and in animal models to develop new drugs, devices, vaccines and diagnostic tests.

**T2** ... to patients
New treatments are tested in humans in clinical trials. Such trials compare a new drug with a placebo or a currently used drug to identify better drugs and novel treatments for diseases that currently have none.

**T3** ... to practice
Researchers explore ways to best implement new treatments in a real-world, clinical setting, and evaluate their effect in the community.

**T4** ... to population
Researchers assess the impact of new treatments on population health. This research may directly influence public policy by showing benefits of a new therapy on a widespread scale.

**SPEEDING UP SCIENCE**

The CTSA award will allow UB to provide better health care more quickly to more people through:

**RESEARCH FUNDING**
Without resources, a brilliant idea is just that: an idea. A portion of the grant will go to jump-starting pilot programs, or financing the preliminary development of a good idea. Researchers whose ideas take off can apply for larger, extramural grants.

**ENROLLMENT IN CLINICAL TRIALS**
Poor enrollment in clinical trials can slow down drug development and advances in health care. The CTRC is pursuing several strategies to boost enrollment, including utilizing biomedical informatics, partnering with Buffalo’s Patient Voices Network (a patient-driven collaborative between patients and physicians) and reaching out to diverse patient populations through the newly established Clinical Research Office.

**WORKFORCE DEVELOPMENT**
The CTSA includes a mentored research career-development program to train the next generation of leaders in translational research. The center is also hiring and training new workers, including research coordinators, data managers and bioinformaticians, who will play key roles on clinical research teams.