Clinical and Translational Science (CTS) is a framework that helps us understand and develop new approaches to improving human health by linking basic biology, clinical medicine and community health. CTS students learn to design, execute and report studies of how biologic and non-biologic aspects of health care interact to influence individuals and populations. The programs provide individuals with diverse backgrounds the opportunity to work with faculty from many disciplines and offer an Educational and Career Development Program to prepare them for roles as important and productive contributors to CTS.

DEGREES
Clinical and Translational Science CGS
Clinical and Translational Science M.S.
Clinical and Translational Science Ph.D.

FACULTY
Callas, Peter W.; Research Associate Professor, Department of Mathematics and Statistics; PHD, University of Massachusetts Amherst
Kennedy, Amanda G.; Professor, Department of Medicine-General Internal Medicine Research; PHARMD, Northeastern University
Littenberg, Benjamin; Professor, Department of Medicine-General Internal Medicine; MD, Case Western Reserve University
MacLean, Charles Duncan; Professor, Department of Medicine-General Internal Medicine Research; MD, McGill University
Pinckney, Richard G.; Associate Professor, Department of Medicine-General Internal Medicine; MD, SUNY Buffalo
Rubin, Alan Saul; Associate Professor Emeritus, Department of Medicine-General Internal Medicine; MD, New York University
van Eeghen, Constance O.; Assistant Professor, Department of Medicine-General Internal Medicine; DRPH, University of North Carolina Chapel Hill

Courses
CTS 6010. Design Clin&Translational Res. 3 Credits.
Seminar emphasizing the skills for designing and executing clinical and translational research.

CTS 6020. Quality in Healthcare. 3 Credits.
Introduces students to the principles and practices of health care quality and quality improvement. Principles in the design and management of continual improvement activities will be presented and applied. Cross-listed with: GRNS 6280.

CTS 6070. Cell to Society. 3 Credits.
A seminar that addresses a medical issue from molecule to market. By the end of the seminar, students will understand and appreciate the full range of translational science. A theme is selected and announced each year.

CTS 6100. Conduct Clin&Translational Res. 3 Credits.
Seminar emphasizing the ethics and mechanics of clinical and translational research.

CTS 6150. Report Clin&Translational Res. 3 Credits.
Seminar emphasizing communication skills for writing, editing and presenting science.

CTS 6200. Analyze Clin&Translational Res. 3 Credits.
Seminar emphasizing basic and analytical skills for clinical and translational research. Prerequisite: CTS 6200 or Instructor permission.

CTS 6250. Multi Analysis Clin&Trans Res. 3 Credits.
Introduction to multivariate regression; models that account for effects of multiple predictors on a single outcome, including linear and logistic regression and survival analysis. Prerequisite: CTS 6200 or Instructor permission.

CTS 6391. Master’s Thesis Research. 1-18 Credits.
Research for the Master’s Thesis.

CTS 6990. Special Topics. 1-18 Credits.
Special topics in Clinical & Translational Research.

CTS 6991. Internship. 1-18 Credits.
On-site supervised work experience combined with a structured academic learning plan directed by a faculty member or a faculty-staff team in which a faculty member is the instructor of record, for which academic credit is awarded. Offered at department discretion.

CTS 6995. Graduate Independent Research. 1-18 Credits.
Graduate student work on individual or small team research projects under the supervision of a faculty member, for which credit is awarded. Offered at department discretion.

CTS 7491. Doctoral Dissertation Research. 1-18 Credits.
Research for the Doctoral Dissertation.

CTS 7990. Special Topics. 1-18 Credits.
See Schedule of Courses for specific titles.

CTS 7991. Internship. 1-18 Credits.
On-site supervised work experience combined with a structured academic learning plan directed by a faculty member or a faculty-staff team in which a faculty member is the instructor of record, for which academic credit is awarded. Offered at department discretion.

CTS 7993. Independent Study. 1-18 Credits.
A course which is tailored to fit the interests of a specific student, which occurs outside the traditional classroom/laboratory setting under the supervision of a faculty member, for which credit is awarded. Offered at department discretion.
CTS 7995. Graduate Independent Research. 1-18 Credits.
Graduate student work on individual or small team research projects under the supervision of a faculty member, for which credit is awarded. Offered at department discretion.