Our legacy includes awards of Nobel Prizes to several faculty and student alumni of our program - 1971 to Earl W. Sutherland Jr. for his discovery of the now famous “intracellular messenger” cAMP; 1994 to Alfred Goodman Gilman for characterization of signal transduction via G-proteins; and 1998 to Ferid Murad for his discovery of the role of nitric oxide in intercellular signaling.

The program in Pharmacology builds upon this heritage to discover specific mechanisms that control physiological processes at cellular and molecular levels.

Our research focuses on the future. From bioorganic chemistry and molecular and structural biology to signal transduction and the cell biology of synapse formation and pain sensation, the Pharmacology program provides a scholarly continuum that uses understanding of molecular interactions to unravel clinically relevant drug targets.

**Molecular Therapeutics Training Program**
This NIH-funded training grant provides trainees with the knowledge and research skills to begin independent investigative and teaching careers in the pharmacological sciences.

Doctoral training in Pharmacology builds a didactic base in cell and molecular biology along with research rotations to facilitate PhD mentor selection. Secondly, a foundation in physiology and pharmacology is achieved via a 2-part core course emphasizing quantitative analysis and disease-focused drug studies. Thirdly, students choose specialized training in one of four tracks:

- Molecular Pharmacology & Cell Regulation
- Membrane Structural Biology & Pharmacology
- Cancer Therapeutics
- Translational Therapeutics.

The interdisciplinary design of the MTTP fosters collaboration across departments.

**Questions? Contact Us!**
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