THERAPEUTICS & PHARMACOLOGY

RESEARCH OVERVIEW

The Therapeutics and Pharmacology (TAP) Graduate Program at MD Anderson Cancer Center UTHealth Graduate School of Biomedical Sciences trains students with an understanding of normal biology to apply the scientific method of hypothesis testing to research projects that include testing in preclinical laboratories and mouse models and validating preclinical efforts in the clinic — the classic “bench-to-bedside” approach. Students also receive exposure to high-throughput screening and structure-based drug design, as well as to agents that target DNA and cell replication, and induce DNA damage and repair responses.

PROGRAM HIGHLIGHTS

The TAP Program promotes the discovery, development and application of therapeutics is a rapidly growing field that includes disease biology, identification of novel molecular targets, molecular modeling, chemistry to synthesize and identify small molecule inhibitors, drug design and understanding metabolic pathway.

Upon completion of the TAP program, a basic understanding of biological research will enable students to pursue careers in areas such as academic research, technology discovery and intellectual property protection, positions within the Food and Drug Administration, or pharmaceutical and biotechnology industries.

ABOUT OUR FACULTY

The TAP Program brings together faculty from more than 10 different departments at the University of Texas MD Anderson Cancer Center and the University of Texas Health Science Center at Houston. Faculty are well diversified in translational research.

CONTACT US

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TAP students receive the necessary tools needed to reach their goals and imagine their dreams.

**DIRECT YOUR PATH**

“TAP provided me the support I needed to participate in a teaching internship at Rice University. This opportunity gave me familiarity with instructing an undergraduate course and invaluable hands-on experience that is essential in my path to becoming a teaching-focused professor at an undergraduate institution.”

Luisa Orlando
PhD Candidate

**CREATE OPPORTUNITY**

“Non-academic experiences are key to making the most of your PhD. My internships and extracurriculars made me a well-rounded and less risky hire for companies. They gave me the confidence to speak about business considerations and industry trends with authority.”

Cavan Bailey, PhD
2020 TAP Graduate
Associate Consultant

“TAP provides students with a wide range of cancer therapeutics including small molecule, large molecule, and cell therapy. Working directly with experts in these areas will provide unique opportunities for students to work on intellectual property-creating projects, to get exposure to intellectual property protection strategy and patent filing.”

Carly Young, PhD
2013 TAP Graduate
Licensing Manager

**DISCOVER YOUR FUTURE**

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**DIRECTOR’S CORNER**

The major objective of the Therapeutics and Pharmacology (TAP) program is training the next generation of biomedical scientists who wish to direct their careers to the conceptualization and development of new therapeutics. Based on a firm foundation of hypothesis driven basic research, TAP students will graduate with an in-depth knowledge in the discipline of therapeutics that would prepare them for a variety of career opportunities. If this learning objective addresses your career directions, please contact us for additional information.

Bill Plunkett, PhD
TAP Program Director

**DIVERSIFYING CAREERS**

42 graduates in Academic, Pharma, Biotech, Health Care, Government, I.P. and Consulting positions

- **Academia (29%)**
- **Government (7%)**
- **Intellectual Property (2%)**
- **Health Care (17%)**
- **Consulting (5%)**
- **Pharma & Biotech (26%)**