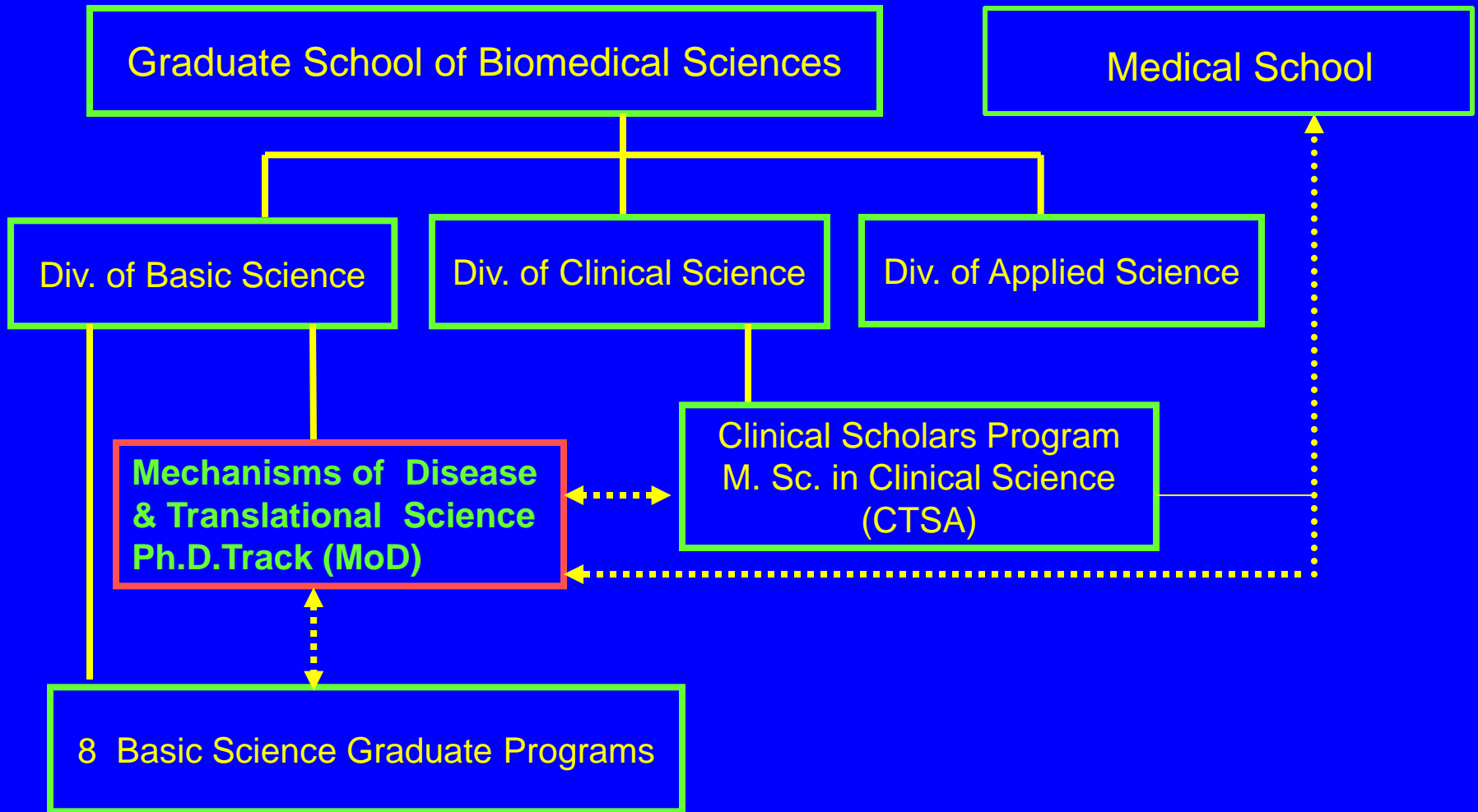


The Mechanisms of Disease & Translational Science Track

University of Texas Southwestern Medical Center

- 2007-2008 inaugural class: 4 students; supported by UTSW
- 2008-2009 class: 6 students, supported by a grant from the University of Texas Graduate Program Initiative
- 2009-2010 class: 8 students, supported by the HHMI Med into Grad and the University of Texas Graduate Program Initiative

University of Texas Southwestern Medical Center at Dallas



The MoD Leadership

- Helen L. Yin, Ph.D.
- Helen Hobbs, M.D.
- Michael McPhaul, M.D.
- Milton Packer, M.D.
- Philip Shaul, M.D.
- Andrew Zinn, M.D., Ph.D.

The MoD Application

(Feb., 1st graduate school year)

- 1st year graduate students apply for admission to the MoD track
- 8 students per year will be accepted
- Acceptance will be based on multiple criteria, including the students' passion for medically oriented research, and commitment to the additional demands of the MoD curriculum

The MoD Curriculum

- Didactic Curriculum
- Clinical & Translational Research Modules
- Clinical Experience Modules

Didactic Curriculum

- Human Physiology (5 weeks, 1.5 credits):
Summer between 1st/2nd year
- Human Biology & Disease (16 weeks, 3 credits):
Fall 2nd year

Summer Immersion in Clinical & Translational Research (summer between 1st/2nd year)

- Clinical Translational Research Rotation (4 weeks; 3 credits)
 - Mentored clinical research
 - Patient oriented research at the Clinical Translational Research Center
 - Institutional Review Board meeting
 - Hospital ward teaching rounds
- Clinical Research Biostatistics Course (DCS, 7 weeks; non-credit)
- Clinical Research Questions & Methods (DCS; 6 weeks; 1 credit)

The MoD Qualifying Exam

(May 1st graduate school year)

- Develop a research proposal based on the student's dissertation research.
- The first two specific aims should be hypothesis driven and use basic science approaches.
- The last specific aim must have a translational emphasis. Design studies that are do-able and establish feasibility. Use human-derived materials to test the hypothesis.
- The qualifying exam committee must include at least one clinician scientist.

Dissertation Research

- Types of research: Students are encouraged to do research on topics relevant to human biology or disease
- Primary lab mentors are affiliated with DBS graduate programs
- Clinical co-mentors
- Dissertation committee must include at least one clinician scientist

Bedside to Bench Clinical Clerkship (Spring 3rd year; 1 credit)

- Student proposes a clerkship that focus on a disease related to his/her dissertation research
- First hand clinical experience
 - Hospital rounds
 - Outpatient clinics
- Attend disease oriented clinical and research conferences
- Report experience in a one page document

Student Feedback Re Clinical Clerkship

- So for my bed to bedside clerkship. I shadowed Dr. Ufret-Vincenty at the Aston Ophthalmology clinic. It was awesome and he let me play with his toys. I am also in the AMD journal club/WIPs which is very interesting. It involves mostly PIs who present different lines of research looking at AMD. I will be presenting in November. Also, I have been sitting on brainstorming AMD sessions with Dr. Ufret-Vincenty and Dr. Niederkorn. I hope to continue the AMD JC and brainstorming until I graduate.

The MoD Informal Small Group Learning Curriculum/Opportunities

(in addition to those required by the students' Graduate Programs)

- Annual MoD student poster/research presentation
- MSTP medical grand rounds (several times a year)
- Convergence exercises with the medical student College System
- Selected clinical and translational research seminars, WIPs, medical grand rounds