

# TBMM Students At Baylor College of Medicine: Community Building Activities

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# Building & Maintaining Student Engagement in Medically Relevant Research

- TBMM Student interactions with:
  - Clinicians & clinical research staff
  - Medical students
    - Method & Logic
    - Introduction to Leadership
  - Other TBMM students
    - Bench to Bedside
    - TBMM Seminar series
    - Qualifying examination preparation (mock exam)
    - TBMM Student seminars
    - Graduate School Symposium
    - Recruitment events
    - TBMM Program retreat
  - Faculty (Visiting and Baylor)

# **TBMM Student Interactions with Clinical Care and Research Staff**

# Clinical Projects – Overview

- Required for 2<sup>nd</sup> and 3<sup>rd</sup> year students
- Average of one half day/week
- Directed by clinical mentor
- Exposure to clinical medicine
- Experiences vary depending on mentor and setting and prior experience

# Features of Clinical Projects

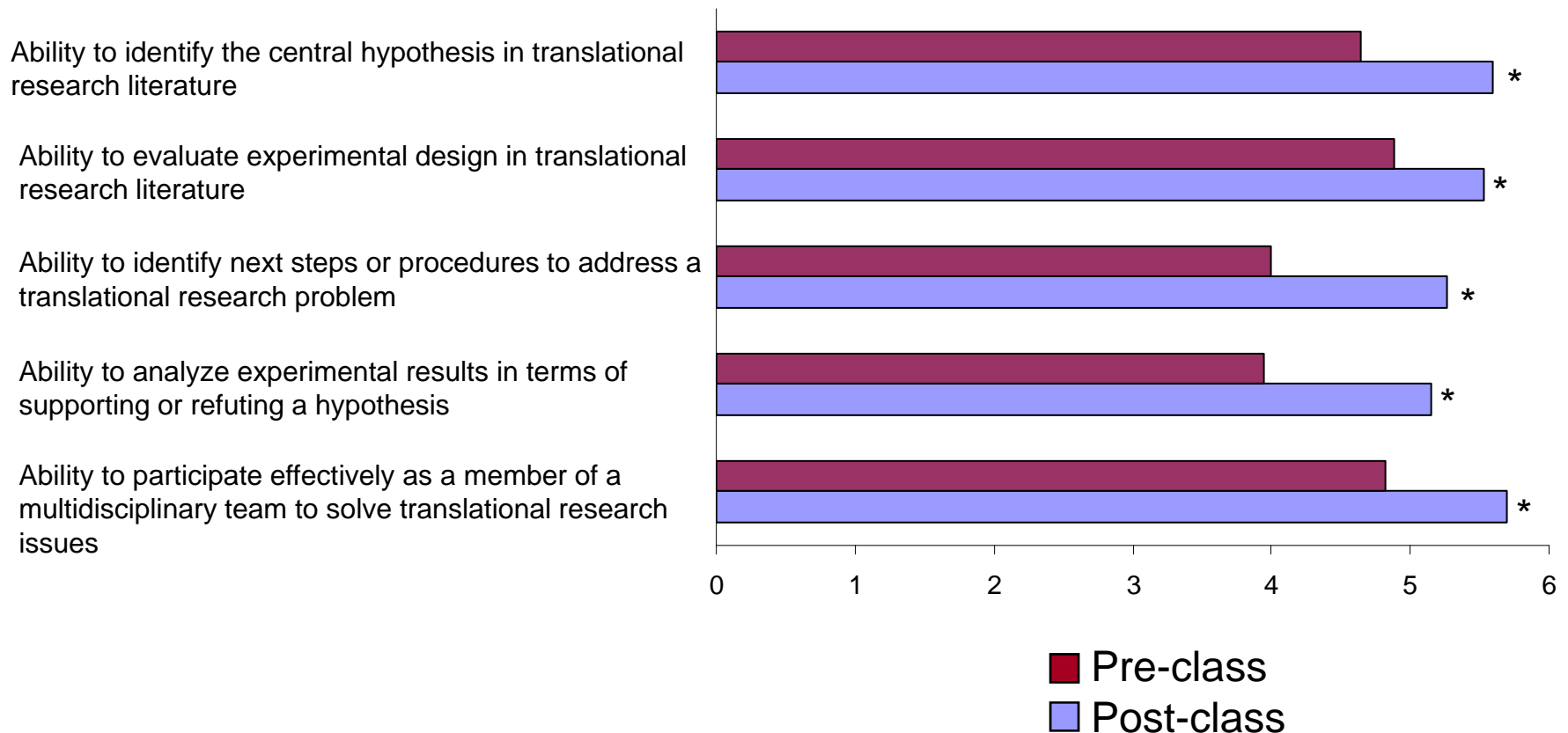
- Three required elements:
  - Exposure to clinical medicine, i.e. patient care
    - **Clinical mentor, pathologist, residents**
  - Attend diagnostic consensus conferences, grand rounds, research meetings
  - Exposure to at least one clinical research project
    - Participate in protocol development
    - Informed consent process
    - Systemic data collection and data coding
    - Data management procedures
    - Quality assurance and confidentiality procedures
    - Biostatistical approaches
    - Creation of scientific reports and presentations
    - **Clinical mentor, pathologist, research coordinators, clinic nurses, fellows, medical students**

# **TBMM Student Interactions with Medical Students**

# Method & Logic in Translational Biology

- Graduate and medical students have differing skills when approaching issues in basic, translational and clinical investigation. For successful translation of basic discoveries to clinical application, it is essential that individuals with these differing skills work together.
- Method & Logic in Translational Biology was developed in 2007 to provide an opportunity for graduate and medical students to learn and work together.
- First year graduate and medical students work together on the analysis of clinical cases and related primary literature describing basic and translational investigations.

# Survey of Students Before and After Taking Method & Logic in Translational Biology



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# Student Feedback: What was the value, if any, in learning within interdisciplinary teams with students from both the medical school and graduate school?

- Learning environments with students from diverse disciplines allow the students to learn more about the other biomedical fields indirectly, how other biomedical professionals think, and how they can best work together. By exposing each group to each other **early on**, they can appreciate each other's strengths more when they begin thinking about collaboration later in their careers.
- It was very helpful because everyone had a unique perspective based on his/her background. Thus the medical students taught the grad students and vice-versa.
- It is always beneficial to practice working as a team and listening to the perspectives of other. I especially enjoyed our group project during the last class.

# Leadership Skills

- Class composed of graduate and medical students
- Introduction to Leadership concepts, time management skills, conflict resolution
- Lectures on Team Building and Interdisciplinary Teams
- Students work as groups for case discussion
  - Assessing leadership relative to the voluntary withdrawal of Vioxx by Merck

**Interactions Between TBMM  
Students, Different Clinical and  
Basic Scientists and National  
Translational Research Speakers**

# Bench to Bedside Seminar Series

- Designed to expose 1<sup>st</sup> and 2<sup>nd</sup> year students to clinical and translational research topics
- Each term (5/year) covers a single topic
  - Changing topics involves many faculty from different disciplines/centers. TBBM program faculty collaborate with non-TBMM program faculty.
  - Examples: gene therapy, breast cancer, reproductive research, aging research, ...
- Faculty define topics and relevant papers
- Students meet themselves to pre-review papers
- Students meet with faculty once a week to discuss papers/topic
- Faculty facilitate the discussion, rather than lecture.
- Each term, students work in small groups to design and present a research project that includes a clinical research aim and is related to the Term's discussed topic and papers

# Bench to Bedside Seminar Series

- In term 1, 2<sup>nd</sup> year students guide 1<sup>st</sup> year students in preparing for class, analysis of the literature, preparing research ideas
- In term 5, 1<sup>st</sup> year students give presentation of their proposed thesis topics. Second year students organize this session, and provide guidance and feed-back to 1<sup>st</sup> year students as they begin to prepare for their first thesis advisory committee meeting.

# Bench to Bedside Seminar Series

- Each term there is a school-wide seminar by an invited, translational researcher on the term's topic
- Audience 50-100 (includes faculty and trainees from all clinical and basic science departments)
  - Students meet with speaker and discuss needed areas of research, career development, etc.
  - TBMM leadership faculty meet with speaker for feedback on program

# Translational Biology Student Seminar Series

- Presentations of thesis research by students in third and higher year of the TBMM program
- Seminars held twice/month
- All TBMM students attend these seminars
- Students and faculty complete evaluation of each student presentation
- Opportunity for junior students to see translational aspects of various thesis projects
- Forum for students to network

# Other interactions

- Graduate School Symposium
  - Planned by graduate student council. Each program has representative on grad school council.
  - Platform presentations by one student from each of 14 grad programs
  - Awards to top 2 speakers by outside judges
  - Students posters with awards
  - Student invited keynote speaker
- Recruitment events

# Planned: TBMM Program Retreat

- First retreat will be held in May 2009
- TBMM students and faculty will attend
- Students involved in retreat planning
- Student presentations of research
  - Talks and Posters – selected by student requests and abstracts
- Invited National Keynote Speaker
- Break-out sessions for students:
  - With keynote speaker
  - With other faculty/invited participants about career options & development
  - With senior TBMM students about developing thesis proposals and beginning clinical projects
- Break-out sessions for faculty:
  - Perspectives and training on mentoring TBMM students
  - Clinical and Basic Science mentors