Translational Medicine/ Evidence Based Practice

Year I
Translational Medicine I

Year 1 lecture topics that provide a Translational Medicine knowledge base for Evidence-Based Practice:
• Translational medicine, the social imperative
• Measurement and design
• Research methodologies, strengths and weaknesses
• Basic research designs
• Basic statistical concepts
• Types of variables and the format of data
• How data is represented numerically and measures of variance
• Clinical epidemiology diagnostics and therapeutics
• Putting evidence into practice within a social context
• The complete physician, the social role of doctors
• Anticipatory guidance, the experiences of medical school
• Ethics in research
• The doctor-patient relationship
• Clinical epidemiology for diagnostic papers
• Clinical epidemiology for therapy papers
• Critical appraisal of the medical literature diagnostic and therapeutic studies
• Practice sessions using topics related to Clinical Medicine 1 clinical scenarios

Year II
Translational Medicine 2

Year 2 students practice the Translational Medicine skills learned in first year in small group journal discussions with clinical research faculty.
Objectives of Translational Medicine 2:
• Assess and critique research as it is reported in major medical journals, based on how data are derived
• Identify important clinical research questions as they relate to case presentations
• Understand the ethics of good clinical practice in research with human participants
• Apply the scientific method to determine causation in health and sickness
• Define the “meaning response” (placebo effect) and its role in health and sickness

Year III Clinical Education
Continuity Clinic Clerkship and Internal Medicine

Year 3 students apply the principles of Translational Medicine and Evidence Based Practice during their Continuity Clinic Clerkship and Internal Medicine Clerkship.

In Continuity Clinic Clerkship, Year 3 students prepare a case report with the following objectives:
Identify:
• Clinical case, clinical problem, clinical question

Describe:
• Clinical application, clinical outcome, take-home points

Apply:
• Critical appraisal of pertinent literature, interpretation of clinical research to lay language for patients, Principles of lifelong learning to stay abreast of relevant scientific advances

The Internal Medicine clerkship has a required assignment to demonstrate the ability to ask and answer a clinical question of their choosing (self-directed learning) and complete an evidence-based translational assignment to identify literature to answer their clinical question.