ME.800 (INTERDEPARTMENTAL)

Courses

ME.800.300. DDP Research Practicum/Special Studies. 18 Credits.
N/A

ME.800.603. Independent Study - Step 1.

ME.800.605. Independent Study - Step 2.

ME.800.616. Longitudinal Ambulatory Clerkship - 1st year.

ME.800.617. Longitudinal Ambulatory Clerkship - 2nd year.

ME.800.618. Transition to Residency and Internship and Preparation for Life.

ME.800.621. Clinical Foundations of Medicine.

ME.800.623. Scholarly Concentrations.

ME.800.624. Translational Science - Metabolism.

ME.800.633. Scholarly Concentrations - 2nd year.

ME.800.634. Transition to the Wards.

ME.800.637. Foundations of Public Health - Epidemiology, Ethics & the Health Care System.

ME.800.638. Scientific Foundation of Medicine.

ME.800.640. Topics in Interdisciplinary Medicine - Health Care Disparities.

ME.800.641. Topics in Interdisciplinary Medicine - Nutrition and Behavior Change.

ME.800.642. Topics in Interdisciplinary Medicine - Global Health.

ME.800.643. Topics in Interdisciplinary Medicine - Pain.

ME.800.644. Topics in Interdisciplinary Medicine - Disaster Medicine.

ME.800.645. Topics in Interdisciplinary Medicine - Substance Use Disorders.

ME.800.646. Topics in Interdisciplinary Medicine - Patient Safety.

ME.800.647. Topics in Interdisciplinary Medicine - End of Life/Palliative Care.

ME.800.648. Translational Science - Metabolism.
Translational Science - Metabolism

ME.800.649. Translational Science - Immunology.
Translational Science - Immunology

ME.800.650. Translational Science - Infectious Disease.

ME.800.651. Translational Science - Cancer.
Translational Science - Cancer

ME.800.652. Translational Science - Introduction to Regenerative Medicine.

ME.800.653. Integrative Medicine.

ME.800.655. Topics in Interdisciplinary Medicine - High Value Healthcare.

ME.800.657. Primary Care Leadership Track 1.

ME.800.658. Primary Care Leadership Track 2.

ME.800.659. Primary Care Leadership Track 3.

ME.800.661. Translational Science - Genomic Medicine.

ME.800.665. Advanced Clerkship in Critical Care.

ME.800.666. Research in Advanced Studies Program.

ME.800.696. Research Elective in Interdepartmental.

ME.800.699. Interdepartmental Elective.

ME.800.702. Introduction to Cellular and Molecular Medicine. 5 Credits.
The focus of the course is an overview exposure to the organ systems of the human body. Class has histology oral presentations

ME.800.703. CMM Core Discussion. 1.5 Credits.
In section One: 3R online modules with class discussionsIn section Two: Students present a journal article and lead the class discussionIn section Three: Compliments Intro to Clinical Research course content.

ME.800.705. Method, Logic and Experimental Design. 1 Credit.
Students meet in small groups with faculty members to read and discuss current research articles. The goal is to learn to critically evaluate experiments and results and to design controlled experiments. The papers often include controversial aspects so the focus of the discussion is on seeing how more rigorous experimentation and/or analysis could have improved the strength of the conclusions. ?BCMB students only.

ME.800.708. BCMB Core Discussion. 0.5 Credits.
These weekly sessions are integrated with the BCMB core courses. Students meet in small groups with faculty members to discuss relevant literature that corresponds to the core course lectures. The small group atmosphere facilitates active and critical discussions of the merits of the work from perspectives of experimental design, data evaluation, and the soundness of conclusions. The faculty discussion leaders will encourage students to think carefully about scientific process and outcome.

ME.800.709. Cellular and Molecular Basis of Disease. 3 Credits.
The emphasis of this course is the cellular and molecular aspects of the pathogenesis and treatment of human diseases

ME.800.713. BCMB Responsible Conduct of Research. 0.5 Credits.
This discussion course focuses on responsible conduct of research in science. Topics include issues of diversity and inclusion, mentoring, misconduct/fraud, authorship, conflict of interest, scientific record keeping, animal and human experimentation. For BCMB students only.

ME.800.717. Grant Writing: Nuts and Bolts. 1.5 Credits.
Will give a general overview of the grant writing process to include the significant components of a hypothesis driven scientific grant application and its peer review process. Proposals for this course will be based on each student's current thesis work and will be developed as the thesis proposal.

ME.800.718. Topics in Cellular and Molecular Medicine. 1 Credit.
This course introduces first year students to CMM faculty research and ongoing laboratory research projects.

ME.800.723. Computational Genomics Methods.
Hands-on elective course discussing computational methods (including R, Unix and Python) for manipulating and exploring high throughput datasets.

ME.800.724. Introduction to Clinical Research. 1.5 Credits.
Understand the steps involved in conceiving, conducting and translating clinical research. Prepare and review a clinical research project in groups.

ME.800.725. Medical Scientist Training Program in Research Ethics. 2 Credits.
N/A

ME.800.726. Electron Microscopy: Principles and Practices. 1 Credit.
This course is designed to provide an opportunity for students to learn principles and practices of electron microscopy so they can use then for their thesis projects. The course has two components: lectures and hands-on experimental sessions. Lectures will cover history, principles, and techniques. In the hands-on sessions, students will learn how to process samples for electron microscopy, including, fixation, plastic embedding, high-pressure freezing, freeze-substitution, imaging and image analysis.*Instructor approval is required prior to registration and the student must be in their 2nd year or later, and have a thesis advisor. The lab course fee will be charged to the thesis advisor.

ME.800.727. Foundations in Biomedical Science: Biochemistry. 1 Credit.
As part of the first-year curriculum for all CMM students, Foundations in Biomedical Science: Biochemistry focuses on three core concepts: amino acids, enzyme kinetics, and metabolism. Students will apply their understanding to prescription drug development and drug screening.

ME.800.728. Foundations in Biomedical Science: Molecular Biology. 1 Credit.
As part of the first-year curriculum for all CMM students, Foundations in Biomedical Science: Molecular Biology focuses on core concepts of genes, genomes, chromosomes, and DNA replication. Students will apply their understanding to prescription drug development and mRNA vaccines.

ME.800.781. Scientific Foundations of Medicine: Macromolecules. 1.5 Credits.

ME.800.782. Scientific Foundations of Medicine: Cell Physiology. 1.5 Credits.

ME.800.783. Scientific Foundations of Medicine: Histopathology. 1.5 Credits.

ME.800.784. Scientific Foundations of Medicine: Metabolism. 2.5 Credits.

ME.800.785. Scientific Foundations of Medicine: Genetics. 2.5 Credits.

ME.800.786. Scientific Foundations of Medicine: Pharmacology. 2.5 Credits.

ME.800.787. Scientific Foundations of Medicine (inc. Macromolecules, Cell Physiology, Metabolism and Genetics).

ME.800.789. 3B's: Bench to Bedside and Back. 1 Credit.
Students in years 3 and 4 will gain further expose and education about the clinical opportunities and translational implications associated with their thesis research.

ME.800.801. Cellular and Molecular Medicine Research. 1 - 18 Credits.
First year students perform 3 lab rotations. Upper-class students in conjunction with thesis advisor perform focused research on his/her thesis project

ME.800.802. Biochemistry, Cellular and Molecular Biology Research. 1 - 10 Credits.
Laboratory Research

ME.800.803. Biomedical Sciences Practicum. 1 - 18 Credits.
N/A

ME.800.804. AstraZeneca Scholars Thesis Research. 9 Credits.
Graduate students engaged in the MedImmune Scholars Program will spend 50% of their time during their thesis work at MedImmune which is located in Gaithersburg, MD. This program enrolls students from multiple departments / graduate programs and there will be interdivisional registrations (WSE, SPH, KSAS) for this SOM course. Registration for this course is restricted to students who have been selected for the program.

ME.800.805. BCMB Quantitative Biology Lab. 1 Credit.
These weekly sessions are integrated with the BCMB core courses. They provide hands-on work to reinforce and further develop computational concepts and material students learn didactically in the corresponding course sessions. Experimental design, and concepts of rigor and reproducibility will also be emphasized. BCMB students only.

ME.800.806. BCMB Computational Biology Bootcamp. 1 Credit.
This intensive one week course is meant to immerse student in computation, and to provide them with the foundational tools to be able to apply modern computational techniques and appropriate statistics to their data. BCMB Students Only.

ME.800.807. Research in Biomedical Science. 1 - 18 Credits.
Research course for students in the Crossdisciplinary Program for Biomedical Sciences (XDBio)

ME.800.810. Seminar Course. 1 Credit.
During this course, students will read and analyze papers on different topics (related to biochemistry, molecular and cell biology), and will further discuss them with the scientists who led the work. Specifically, these will be selected invited speakers for the various seminar series running on campus by different departments. BCMB students only, 3rd year and above.

ME.800.811. Introduction to Responsible Conduct of Research. 1 Credit.
This first-year course incorporates discussion on topics such as: (a) the scientist as a responsible member of society, (b) research misconduct, (c) data acquisition and management, (d) authorship and publication practices, (e) mentor and trainee responsibilities, (f) use of animals in research, (g) conflicts of interest, (h) collaborative research and (i) human subjects protection. By inviting graduate students from a variety of training programs, the course provides a forum for students to share their experiences. Attendance is required for all sessions.