

# CBMG - CELL BIOLOGY & MOLECULAR GENETICS

---

**CBMG613 Microbiomes in Health, Disease, and Application (2 Credits)**

Investigation of microbiomes in human and animal health, disease, and industrial applications, with an emphasis on underlying functional mechanisms. No prior programming experience required.

**CBMG626 Quantitative Modeling for Experimental Biologists (2 Credits)**

A toolkit for understanding processes through the generation of useful models constrained by data. Topics explored include Simulations, Information Theory, Dynamical Systems, and Control Theory.

**Prerequisite:** BIOL705; or permission of the instructor .

**Recommended:** Some familiarity with programming (NetLogo, R and/or Python) is helpful.

**CBMG688 Special Topics in Cell Biology and Molecular Genetics (1-4 Credits)**

Presentation and discussion of fundamental problems and special subjects in the topics of Cell Biology and Molecular Genetics.

**Formerly:** MICB688.

**CBMG699 Special Problems in Cell Biology and Molecular Genetics (1-3 Credits)**

Emphasis is placed on research and discussion of current problems in the area of Cell Biology and Molecular Genetics.

**Repeatable to:** 10 credits if content differs.

**Formerly:** PBI0699.

**CBMG789 Seminar in Cell Biology and Molecular Genetics (2 Credits)**

Cell Biology and Molecular Genetics Department Seminar.

**Repeatable to:** 4 credits if content differs.

**Formerly:** MICB789.

**CBMG799 Masters Thesis Research (1-6 Credits)**

Master's Thesis Research in Cell Biology and Molecular Genetics.

**CBMG898 Pre-Candidacy Research (1-8 Credits)**

Pre-candidacy Research.

**CBMG899 Doctoral Dissertation Research (1-8 Credits)**

Doctoral Dissertation Research.