CSB 328H1F - DEVELOPMENTAL BIOLOGY

24L, 24P

**This course has a lab fee of $25.**

**Lecturers:**

TBA

**Prerequisites:**

BIO 230H1/255H1, BIO 260H1/HMB 265H1

You are a highly organized collection of functionally diverse cells that were derived from a single fertilized egg. The fundamental question of development is how differences arise between cells and tissues in the embryo. In a common analogy used to describe development, embryonic cells read and execute developmental programs that are stored in their DNA. How can a biologist gain access to these programs in order to dissect and understand them?

This course approaches the problem of development from both a descriptive and experimental point-of-view. Examples will be drawn from the most intensively investigated organisms, including both invertebrates and vertebrates. These embryos are amenable to a wide range of experimental manipulations of their tissues, cells, and molecules. We will explore the major events leading to the formation of the embryo, and examine how various experimental manipulations help to define the mechanisms involved in generating different cell types and embryonic structures.

The course will be presented in two lectures and two tutorial/practical hours each week. The tutorials/practicals will be used in a variety of ways. In some, you will examine living and fixed embryos related to the lectures. In others, you will present seminars and discuss relevant journal articles.

**Evaluation**: There will be a mid‑term test (30%), a final exam (40%), and tutorial assignments (30%).