**CSB 327H1F - EXTRACELLULAR MATRIX DYNAMICS AND ASSOCIATED PATHOLOGIES**

36L

**Lecturer:**

Prof. M. Ringuette [maurice.ringuette@utoronto.ca](mailto:maurice.ringuette@utoronto.ca)

**Prerequisite:** BIO 230H1/(240H1, 241H1)/255H1

The development, structural integrity and physiological functions of tissues in animals are dependent on dynamic reciprocal communications between cells and their extracellular matrix (ECM) microenvironments. The course examines the molecular organization, biomechanical properties, and functions of collagens, proteoglycans, glycoproteins, and elastomeric proteins. Emphasis is placed on how ECM remodeling promotes tissue morphogenesis and growth throughout life and how mutations in ECM genes are the underlying cause of a numerous pathologies.

**Evaluation:** Two term tests worth 30% each. A final exam worth 40%