

BIO 500-01 Epigenetics (3 Credits)

Course description: This course reviews the basis of epigenetics and epigenetic regulation of gene function. Course content includes epigenetic phenomena such as imprinting and dosage compensation, mechanisms such as DNA methylation, histone modifications and non-coding RNAs, and the architectural organization of the genome. The role of epigenetic regulation in normal cellular differentiation and function as well as their role in pathologies such as cancer are also covered. Assessments include written assignments, presentations and attendance at seminars and class meetings.