Biological Chemistry 650 focuses on high impact concepts and topics in eukaryotic gene expression. The topics covered include transcription by RNA polymerases, co-transcriptional RNA processing, chromatin structure and remodeling, DNA methylation, histone modifications, epigenetics, and gene regulation by transcription factors. The course seeks to develop the students’ understanding of recent progress in the investigation of eukaryotic gene expression that is based on advances in biochemical, structural, molecular, cellular, and genomic approaches.

The class is designed to complement and expand upon survey courses by emphasizing cutting edge discoveries and their impact on future directions of the field. Lectures consist of a brief presentation on various topics in eukaryotic transcription followed by a discussion of primary research articles that are pertinent to the topics being explored. To integrate learning throughout the semester, each student prepares a short review summarizing a topic of their choice that was covered during the semester.

For questions about Biological Chemistry 650, please contact Dan Bochar (dbochar@umich.edu) or Ray Trievel (rtrievel@umich.edu).