

**DRUG-TARGET INTERACTIONS**  
**“CHROMATIN AND CHROMOSOMES”**  
**16:718:605**

**Course Directors:**

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**Course Description:** Textbook course gives background on various topics. Literature course provides new ideas and interpretations, as well as new techniques and approaches.

In addition, discussion of current literature helps appreciate:

How the scientist thinks?

How scientific investigation is conducted?

How mistakes are made and avoided?

**Presentations:**

Two papers will be presented each week. In the first half of the course, two students will present each paper. In the second half, one student will present each paper. All students are expected to read all papers and participate in presentations and discussions.

Students are encouraged to ask questions of the presenters. The instructor's role is to moderate and direct discussion.

<b>Topics</b>
CRISPR
Unusual Nucleosomes
Histone Modifications
Chromatin Remodeling
DNA Modifications
Post-Transcriptional Regulation of mRNA
Epigenetic Regulation of Heterochromatin
Chromosome Loops and TADs
Cohesin
Chromatin Assembly Factors
Kinetochores and Chromosome Segregation