**BIOC 631: Advance Molecular Biology**

**Genomes and genome stability**

**Who should take it?**

* Any student with an interest in understanding the mechanisms of life. It is a core course for students in the department of Biochemistry (Biochemistry track) and the curriculum in Genetics and Molecular Biology, and is recommended for applicants to the MiBio training program. It serves as an elective for almost all other departments.
* We will help you understand how genomes are organized, replicated, damaged, and repaired. One unit will emphasize the biology and mechanism of CRISPR, as well as its application to genome engineering.

**When is it?**

* 3 credit hours: Monday, Wednesday, and Friday for 1 hour in the morning, 9:05 to 9:50. Monday and Wednesday are whole-class lectures; we will be in-person, room 3106 Mary Ellen Jones, but will also have an online option. Friday will be small group sessions, and at least initially will be online. We’ll go in-person for small group too if there is interest in this option.

**Who teaches it?**

* Jack Griffith

National Academy member, and discoverer of telomeric T-loops

* Dale Ramsden (course director)

Netflix member. Discovered he has more gray hair this year.

* Aziz Sancar

National Academy member, Nobel prize winner for his pioneering work on DNA repair