

Spring 2022 BCMB 3600/H - Genomics and Bioinformatics

Tues/Thurs, 12.45 – 2.00 pm: Life Sciences Bldg., Rm C114

Instructors: Mike Adams (adamsm@uga.edu)
Natarajan Kannan (nkannan@uga.edu)
Mike Terns (mterns@uga.edu)

Text: No text is recommended

Examinations:	Type	Date	Coverage	% of Grade
Adams	Paper #1	02/16 (due)	01/14 - 02/11	11.1
	Papers #2 and #3	03/25 (due)	01/14 - 02/16	22.2
Terns	Written Exam 1	03/04	02/18 - 03/02	15.0
	Written Exam 2	03/23	03/09 - 03/18	18.3
Kannan	Assignment 1	04/13 (due)	03/30 - 04/08	15.2
	Assignment 2	04/29 (due)	04/15 - 04/27	18.1

There will not be a final exam during Final Exam week (05/05-05/11)

INSTRUCTOR: MIKE ADAMS

The History of Genomics

Jan. 11 The Genomics Revolution (#1)
Jan. 13 Genomics and You

Jan. 18 Genome Databases
Jan. 20 The Human Genome Project

Jan. 25 Individual Human Genomes
Jan. 27 The Human Encyclopedia

Feb. 01 Human Evolution & Eukaryotic Genomes
Feb. 03 Metagenomes

Feb. 08 DNA Sequencing (#2 and #3)
Feb. 10 Synthetic Life/DNA Storage (#1 due)

INSTRUCTOR: MICHAEL TERNS

Functional Genomics

Feb. 15 Functional Genomics Overview
Feb. 17 Eukaryotic Gene Expression

Feb. 22 Gene Expression Regulation
Feb. 24 Chromatin Structure and Epigenetics

Mar. 01 Written Exam 1
Mar. 03 The CRISPR Revolution

Mar. 07 – 11: SPRING BREAK

INSTRUCTOR: MICHAEL TERNS

Functional Genomics (cont)

Mar. 15: Gene Editing
Mar. 17 Other CRISPR-Based Technologies

Mar. 22 Biological and Biomedical Applications
Mar. 24 Written Exam 2

INSTRUCTOR: NATARAJAN KANNAN

Introduction to Bioinformatics Methods

Mar. 29 Introduction (*Adams #2 and #3 due*)
Mar. 31 Sequence alignment methods

Apr. 05 Structure prediction and comparisons
Apr. 07 Function prediction methods

Apr. 12 Assignment #1
Apr. 14 Bioinformatics applications

Apr. 19 Data integration methods
Apr. 21 Ontology and data resources

Apr. 26 Breakout Session-1
Apr. 28 Assignment #2

May 03 ??????????????

