

BICD123: Plant Molecular Genetics Laboratory

Spring 2021 **Prof. Martin Yanofsky and Yunde Zhao (with Julian Schroeder)**

Note: All Class Sessions will be recorded and made available asynchronously.

March 29 (M)	Lab Overview, GMO Discussion, Harvest of Fear Video	Yanofsky
March 31 (W)	Mutant Screen/Performing an Allelism test	Yanofsky
April 5 (M)	Seed Storage Protein Expression/Protein gels	Yanofsky
April 7 (W)	How to write a Scientific Manuscript: Lab Report 1; Plant Domestication	Yanofsky
April 12 (M)	Mutant PCR/Transformation/Minipreps/Digests/Gels/ Sequence Analysis/Introns and Exons	Yanofsky
April 14 (W)	Agrobacterium/CRISPR-Cas9 Genome Editing	Yanofsky
April 19 (M)	Stomatal Development	Schroeder
April 21 (W)	Leaf Patterning Image Analyses	Schroeder
April 26 (M)	Light signaling 1	Zhao
April 28 (W)	Light signaling 2	Zhao
May 3 (M)	DNA markers and Positional cloning 1	Zhao
May 5 (W)	DNA markers and Positional cloning 2	Zhao
May 10 (M)	Genetic Screen in Grasses: Brachypodium	Schroeder
May 12 (W)	Infra-red Thermal Imaging and Bulk Segregation Analysis	Schroeder
May 17 (M)	Auxin signaling 1	Zhao
May 19 (W)	Auxin signaling 2	Zhao
May 24 (M)	Allelism/Mutant Screen/Flower Development	Yanofsky
May 26 (W)	GUS staining vs. In situs/Fruit Development	Yanofsky
May 31 (M)	Holiday	Yanofsky
June 2 (W)	Final Exam	Yanofsky

Teaching Assistants

Adelaida (Addii) Estrada-Cardenas: ale004@ucsd.edu

Filipe Hoffman: faraujoh@ucsd.edu

Grading policies

Course Grade: Grades will be determined by a combination of the 3 written lab reports (60%) and a Final exam (25%). We will also have a number of Short Assignments (15%). There will also be extra-credit assignments to earn bonus points.

Late lab reports: All lab reports must be turned in on time to receive full credit. A late lab report will be assessed a 10% penalty for each day it is late.

Class Attendance: All classes will be held online via Zoom.

UCSD Policy on Academic Integrity Academic Misconduct Policy:

Students are expected to do their own work, as outlined in the UCSD Policy on Academic Integrity. **Academic misconduct** is broadly defined as any prohibited and dishonest means to receive course credit, a higher grade, or avoid a lower grade. Academic misconduct misrepresents your knowledge and abilities, which undermines the instructor's ability to determine how well you're doing in the course. Please do not risk your future by cheating.