



Yale PhD Program in Plant Sciences

Plant Molecular Biology

Admission Requirements :

- A Bachelor's degree prior to matriculation at Yale
- A statement of purpose
- Unofficial transcripts for each prior college or university attended
- Three letters of recommendation
- TOEFL is required of all applicants whose native language is not English. Applicants must achieve a score of at least 100 on the internet-based exam.
- GRE (optional)

For more information visit:

<https://medicine.yale.edu/bbs/plantmolbio/admissions/>

Who should apply:

Students interested in in cross-disciplinary approaches to plant biology.

International Applicants encouraged

Financial Support:

All students receive a stipend (\$36,550 in 2019-20), full tuition coverage, and health insurance.

Contact Info:

Yale University
mcdb.graduateregistrar@yale.edu

Joshua Gendron, Plant Molecular Biology Director
joshua.gendron@yale.edu

Link to Apply:

<https://apply.grad.yale.edu/apply/>

Application Deadline: December 1st .

Areas of Research in Plant Molecular Biology



Joshua Gendron

Plant circadian clock and protein degradation

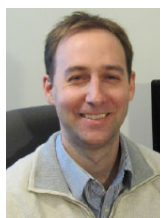
The Gendron lab uses genetics and mass spectrometry to study how protein degradation controls the circadian clock and environmental sensing in plants.



Vivian Irish

Plant Development, stem cells and organogenesis

The Irish lab utilizes a variety of systems to address questions of organogenesis, cell type differentiation, and the evolution of plant development.



Yannick Jacob

Epigenetic regulation and genome engineering

The Jacob lab is studying how the epigenome can be engineered to understand the interplay between chromatin and DNA replication. We are also very interested in studying how genome engineering technologies like CRISPR can be improved in plants.



Farren Isaacs

Microbial –plant synthetic biology

The Isaacs lab is focused on developing foundational cellular and biomolecular engineering technologies to understand and engineer biological systems. Our approaches integrate engineering and evolution through the construction of genes, gene networks and whole genomes alongside quantitative models to gain a better understanding of whole biological systems.



John Carlson

Plant-insect interactions

Plants interact with insects in ways that are critical to both. Many of the interactions depend on chemical communications, which we study with molecular, genetic, physiological, computational, and behavioral approaches.



Stephen Dellaporta

Genetic diversity and genome engineering

Dellaporta lab develops genetic and genomic methods for plant population studies together with novel computation and predictive statistical methods to identify and characterize useful genetic diversity in plants.



Scott Strobel

Fluoride transport and toxicity

The lab is investigating the plant homolog of a recently characterized bacterial fluoride channel for its mechanism, regulation, and role in fluoride detoxification.



Gary Brudvig

Studies of Natural and Artificial Photosynthesis

Our research aims to define how nature has solved the difficult problem of efficient light-driven, four-electron oxidation of water to O₂ and to use this understanding to develop new artificial processes for solar energy conversion.