SPRING 2014 PMCB JOURNAL COLLOQUIUM TOPICS

1. PCB 7922 Biochemistry, regulation, ecology and economic impacts of plant terpenes
   Section 1592

Terpenes are critical to plant interactions with other organisms and are of economic interest due to their uses as pharmaceuticals, in flavor and fragrance and their potential as a biofuel substrate. We will discuss papers from the literature covering the following aspects of terpene neology:

- Biosynthesis and regulation of terpenes and terpenoids,
- Identification of candidate pathways via genomic and biochemical approaches
- Roles in interactions with pests and pathogens,
- Applications in human health and pharmaceuticals
- Contributions to flavor and fragrances
- Utility in biofuel production

INSTRUCTORS: Alisa Huffaker (alisa.huffaker@ars.usda.gov) and Gloria Moore (gamoore@ufl.edu)
ORGANIZATIONAL MEETING: January 8, Wednesday, 2:00-3:00 p.m., 2318 Fifield Hall
REGULAR MEETING TIME: Wednesdays, 2:00-3:00 p.m., 2318 Fifield Hall
CLASS SIZE LIMIT: 10 students
REGISTRATION: Departmentally controlled, request registration with elianak@ufl.edu
CLASS SYLLABUS: Online at http://pmcb.ifas.ufl.edu/journalcolloquium

2. PCB7922 Plant Membranous Organelles
   Section 1597

Membranes are essential for cells’ existence. Eukaryotic cells contain many membrane-bound organelles in which distinct sets of biochemical reactions are catalyzed by specifically targeted proteins. Many cellular processes are dependent on cell membranes and proteins embedded in the membranes. In this journal colloquium, we will explore recent advances in our understanding of the architectures, functions, and biogenesis of membranous organelles in plant cells.

INSTRUCTORS: Byung-Ho Kang (bkang@ufl.edu) and Ken Cline (kcline@ufl.edu)
ORGANIZATIONAL MEETING: January 6, Thursday, 3:00-4:00 p.m., 2316 Fifield Hall
REGULAR MEETING TIME: Thursdays, 3:00-4:00 p.m., 2316 Fifield Hall
CLASS SIZE LIMIT: 10 students
REGISTRATION: Departmentally controlled, request registration with elianak@ufl.edu
CLASS SYLLABUS: Online at http://pmcb.ifas.ufl.edu/journalcolloquium
3. PCB 7922 Epigenetic regulation in eukaryotes: plant connections
   Section 1599

The goal of this journal club is to explore the topic of epigenetic regulation in eukaryotes, with an emphasis on connections with plant regulation. Discussions will address current methodology, general mechanisms of epigenetic regulation, and the implications/potential use of epigenetics for plant bioengineering. Papers should be selected from high-impact journals (e.g. Nature, Science, Cell) in order to facilitate discussion. Each week, there will be a primary Presenter and two assigned Readers for each paper. Each participant will be responsible for one primary presentation and serve as Reader for two presentations. This is a student-run class, and will be sponsored by Dr. Gurley to ensure academic integrity. Grading will be based on participation and presentation quality.

INSTRUCTORS: Joe Collins (jcoll86@ufl.edu) and Bill Gurley, faculty advisor (wgurley@ufl.edu)
ORGANIZATIONAL MEETING: January 9, Thursday, 4:00 - 5:00 p.m., Microbiology and Cell Science Room 1054 (main conference room)
REGULAR MEETING TIME: Thursdays, 4:00 - 5:00 p.m., Microbiology Room 1054
CLASS SIZE LIMIT: 10 students
REGISTRATION: Departmentally controlled, request registration with elianak@ufl.edu
CLASS SYLLABUS: Online at http://pmcb.ifas.ufl.edu/journalcolloquium