

MOLECULAR ENTOMOLOGY ENTO 8570

Fall Semester 2010

Faculty: Mike Adang	Entomology
Mark Brown	Entomology
Don Champagne	Entomology
Judy Willis	Cellular Biology

The course is designed to provide an in depth understanding of the utility and limitations of the molecular techniques that are being used to probe fundamental questions in insect biology. Each class period will have two parts – a critical discussion by the entire class of a paper handed out the preceding week and an introduction to the paper chosen for the next week.

Introductory Component: Faculty or students, working with guidance from a faculty member, will select a current paper on an important topic that has employed state-of-the art molecular techniques. The person in charge will present a lecture giving sufficient background that sets the work in perspective and explains the methodology used. At the end of the presentation the selected paper will be distributed to the class along with a set of questions to guide the reading.

Discussion Component: The following week, the same student who presented the background lecture will lead the class in an in depth discussion of the paper. Emphasis will be placed on understanding and critiquing all of the figures, and learning how the results have advanced the field, i.e. both the nitty-gritty details and the big picture. Strategies will be instituted to assure that everyone in the class participates in these discussions.

Typically each class will consist of an hour-long discussion of the selected paper, followed by a lecture introducing the next topic.

There will also be instruction and opportunities to use websites that are relevant to the material we discuss.

One or more of the papers may coincide with topics covered by upcoming speakers during the Entomology Department seminars (Mondays at 11-12 am). Certainly, students are expected to attend the seminars related to Molecular Entomology. We will devote some time during our weekly meeting to a discussion of each seminar.

Grading in this course will be based on the student's participation. Each student will be expected to present a background lecture, lead the discussion of a paper and participate **fully** in each discussion. It is expected that students will earn an "A" in this course. If your participation is inadequate you will be counseled and remedial work may be assigned.