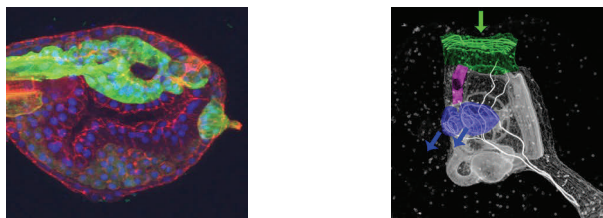


Undergraduate Summer Research Course at Dept of Molecular, Cellular, & Developmental Biology University of California, Santa Barbara

MCDB 161L: Research Immersion in Molecular Biosciences

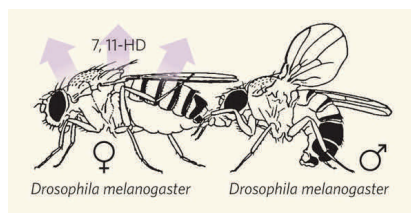
Developed as part of the UCSB-HHMI initiative, this is an intensive (6 unit) undergraduate laboratory course covering basic approaches to research in molecular biosciences using model systems. In addition to the laboratory techniques, students learn hypothesis building, experimental design, data analysis and interpretation, as well as presentation skills. The 6-week course (Summer Session A) is taught in three modules, each based on current interdisciplinary biomolecular and biomedical research being conducted on the UCSB campus. In each module students conduct mini-research projects under the guidance of faculty and postdoctoral scholars. The goal of the course is to prepare students for independent research in biomedical laboratories at UCSB and elsewhere.

Building and rebuilding tissues in ascidians



Immunostained head of a transgenic late tailbud stage *Ciona* embryo (left) and metamorphosed sessile adult pseudo-colored to highlight the siphons (right).

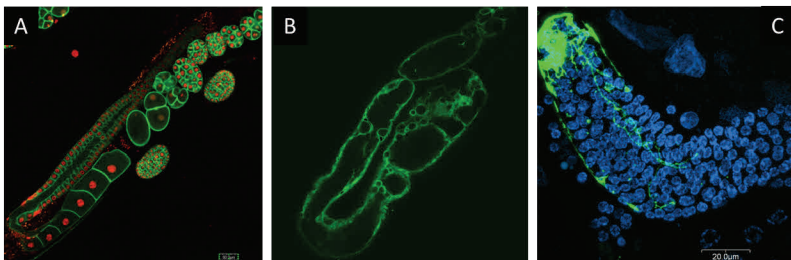
Behavioral Genetics in *Drosophila*



(From: Romple & Prud'homme, 2009. Nature 461: 887-888)

During courtship, male *Drosophila* sample pheromones that are present on the exoskeleton of the female. If males are attracted to these pheromones, they will court and try to mate with the female.

Regulation of cell proliferation and death in *C. elegans*



A. *C. elegans* germline and embryos expressing membrane targeted GFP and nuclear mCherry; B. Extensive germ cell death; C. Stem cell niche extending cytonemes. Notch ligand (GFP), DAPI-stained germline precursor cells (blue).

Course Information

Course Offered: Summer Session A
June 24 – August 2, 2013
<http://www.summer.ucsb.edu/>

Online Application Process at
<http://hhmi.mcdb.ucsb.edu>

MTWR 9:00 AM -3:00 PM
Final Presentations: Friday, August 2nd
6 units
Major applicable (check with advisor)

Course Coordinator: Professor Stephen Poole

Dept of Molecular, Cellular, and
Developmental Biology
University of California, Santa Barbara

For more information or questions about the
course, please contact:
poole@lifesci.ucsb.edu

Research Instructors:

Dr. Otto C. Guedelhofer IV
Professor William Smith Lab

Dr. Alison Pischedda
Professor Thomas Turner Lab

Dr. Pradeep Joshi
Professor Joel Rothman Lab



<http://www.ucsb.edu/>