

BIOLOGY

NEWSLETTER

Millersville University, Department of Biology ♦ www.millersville.edu/~biology ♦ Spring 2006

Student - Faculty Research

In the Biology Department, we especially enjoy working on research projects with students and we currently have 48 student-faculty research investigations in progress. Many students conduct these projects as part of university or departmental honors, some enroll for independent study credits and others participate in research simply for the experience. These investigations are funded by a variety of intramural and extramural grants and in a typical academic year, our department procures about \$250,000 - \$500,000 to support research. The following is an overview of these faculty sponsored investigations.

Dr. Julie Ambler

Tunicate population studies in Virginia coastal waters

Dr. Jean Boal

Conditional discrimination learning in cephalopods
Chemical communication and chemical sensation in mollusks

Dr. James Cosentino

Hormone receptor histochemistry
Development of nanoscale biosensors

Dr. Susan DiBartolomeis

Chlorella virus studies

Dr. David Dobbins

Periderm formation in woody vines

Dr. Shawn Gallagher

(Dr. Gallagher is a neurobiologist in the Psychology Department and often works with biology majors.)
Clinical eye research
Mydriatics and tear formation

Dr. Christopher Hardy

Ecology, biogeography and antimicrobial properties of *Commelina*
Illustrated guide to invasive species of 'the Bush'
Botanical illustration

Dr. Carol Hepfer

Genetics and genetic recombination studies with yeast
Mechanism of sex determination in octopuses

Dr. David Zegers

Effect of meadow voles on streamside forest restoration
Avian diversity in riparian restoration areas

Dr. John Hoover

Design-based stereology in neuroscience

Dr. Timothy Ladd

Bacterial biofilm investigations

Dr. Jay Moné

Chlorella virus neutralization bioassays
Bovine leukemia virus studies

Dr. Joel Piperberg

Effects of cholesterol and ethanol on the stability of the red blood cell membrane

Dr. Larry Reinking

Inner ear development in zebrafish
Calcium channels and behavior in *Paramecium*
Response of *Daphnia* to hypoxic conditions

Dr. Ryan Wagner

Time lapse photography of plant tropisms

Dr. John Wallace

Queen snake as a biological control for invasive crayfish
Algal growth as a measure of postmortem submersion interval
Forensic entomology investigations
Impact of clandestine reptile shows on herpetofauna populations
Mosquito population dynamics in southern Alabama

Dr. Daniel Yocom

Streamside forest restoration studies
Studies in arthropod diversity

For more information about recent activities in the Biology Department, please check out our online newsletter at the following website: <http://muweb.millersville.edu/~biology/bionews2005.pdf>

Alumni Weekend

Please consider a visit to campus during Alumni Weekend, May 5-6. Many of our student-faculty research projects will be featured at the Fifth Annual Spring Student Research Poster Display on Friday and Saturday from 8:00 a.m. to 4:00 p.m. in the main lobby of Caputo Hall. At 1:00 p.m. on Saturday, there will be an Undergraduate Research Recognition Ceremony for students participating in research projects. You may wish to join us at this event.