A Note from the Chair.....

Science is research: the process of asking questions and seeking answers. Our classes often teach you about the results of that enterprise, and in labs you learn some of the applicable techniques. But you can also become more actively engaged in the process of science while you are pursuing your education in Biology.

During Winter quarter, 2005, you will have the opportunity to hear from some of the top young researchers in several areas of biology. The Department is seeking to hire several new faculty members, and so more than a dozen candidates will be visiting Wright State and presenting seminars about their work. These seminars will be in areas of ecology, invertebrate biology, cell and molecular biology, and science education. Watch for the announcements! In the process, get in the habit of coming to departmental seminars—they will continue even after the job search is completed!

For more active engagement, consider working on a research project in a faculty laboratory. This can be done for pay (based on availability of funding from the faculty member) or for credit (e.g., BIO 499). You can look at the sorts of ongoing research by looking through the faculty listings on the Department web site. Working in a research lab puts you in close contact with faculty, graduate students, and fellow students—it’s a great way to make connections while learning Biology.

You don’t have to limit your sights to Wright State, either. There are lots of research opportunities available if you set out to find them. As a couple of examples: The National Science Foundation funds various sites around the country to bring in groups of undergraduates for paid summer research programs (the “Research Experience for Undergraduates” programs). You can explore these at http://www.nsf.gov/home/crssprgm/reu/start.htm. If you are interested in fieldwork, especially with birds, take a look at http://birds.cornell.edu/OSNA/ornjobs.htm. This is the jobs listing site for the Ornithological Societies, and has lots of positions, some paid and some not, for assistants on projects in the US and overseas. Does the Panamanian jungle, or the Sierra Nevada Mountains of California sound enticing?

Expand your horizons, both intellectual and geographic! Get involved in research!

--David Goldstein
Winter Quarter Calendar of Events

Jan 3  Winter quarter classes begin
Jan 7  Last day: to register or add classes
Jan 17  University Closed – MLK day
Jan 19  Bio Club meeting – ALL biology students invited; 4:30 – 5:30 pm Room 204 BH
Jan 21  Last day for ALL students to drop a class without a grade
Feb 18  Last day for ALL students to drop a class with a grade of “W”.
Mar 1  Last day to apply for June 2005 graduation
Mar 10  Lunch with the Chair; 12-1 pm, 235B BH
Mar 12  Last day of winter quarter classes
Mar 14-19  Final Exams
Mar 28  Spring Quarter begins

FUTURE DATES:
Spring Quarter, 2005  March 28 – June 11, 2005
Summer Quarter, 2005  June 13 – August 18, 2005

Department News

Tammy Bash, one of our lecturers who taught introductory biology and M&I 220, has left our department for a new position in the Registrars office. Tammy’s new job will be to oversee DARS, our degree audit reporting system, and to successfully implement this system throughout the University. We appreciate the hard work and dedication Tammy has given our Department the past 14 years and wish her well in her new job. Good Luck Tammy!!

Other News…..

Curriculum Changes

BIO 194, “Careers in Biology”, has been added to the spring schedule. This course is for first or second year biology students who would like more information about the different degrees and options our department has to offer. The course will discuss the Biology degree (B.S./B.A.) as well as Environmental Health, Clinical Laboratory Sciences and Exercise Biology. The course will be co-listed with EXB 194, EH 194 and CL 194.

Bio Club

The next Bio Club meeting is scheduled on Wednesday, January 19th from 4:30-5:30 pm in room 204 BH. We will welcome the new officers and provide information on career outlooks, grad school opportunities, research opportunities within the department (BIO 499), other club information, etc. We will also be discussing our agenda for Winter quarter. Membership dues will be collected at the meeting ($5/quarter). Please try to attend and bring a friend!!

Our website now includes a list of courses to be offered each quarter. This will help you plan out your schedules. Check it out at…

http://wright.edu/biology

Biology Internships

Students interested in completing an internship (BIO 490) as part of their life science electives should check with the Biology Department or Career Services for opportunities currently available. All internships must be approved by the Department and have a faculty advisor, and the credit hours would count toward your independent studies. If you are interested, please contact the department office for more information.

Department Seminars

Our Department will be hosting a variety of seminars during Winter quarter. Candidates for our Asst/Assoc Professor position will be visiting our campus and giving presentations about their research. Areas of expertise include Cell/Molecular Biology, Ecology, Invertebrate Biology, Immunology, and Physiology. In addition, we will be inviting Alumni to talk to our students about their careers and success stories. Please keep your eyes out for the dates and times of these seminars. We hope you will attend!
Faculty Spotlight

**Don Cipollini** (Associate Professor)

**EDUCATION AND EXPERIENCE:**
- University of Chicago, Postdoctoral Research Associate, 1997-1999
- Indiana University of Pennsylvania, 1993, M.S. Biology, Advisor: Sandra J. Newell
- Indiana University of Pennsylvania, 1990, B.S. Biology

I study the physiology, ecology, and evolution of plant defenses to herbivores, pathogens and other environmental stresses, in the context of phenotypic plasticity. Research in my lab has focused on mechanisms, costs, and benefits of inducible chemical defenses in wild and agricultural *Brassica* species, in the model plant *Arabidopsis thaliana*, and in the invasive weed *Alliaria petiolata*. Current foci include cross-effects between inducible response pathways in *A. thaliana*, interactions between inducible responses to competitors and herbivores, and the chemical ecology of *A. petiolata* and its interactions with beneficial and pathogenic fungi, herbivorous insects, and competing plants. Other projects include the chemical ecology of inducible defenses in woody plants, including Austrian pine, ash, and bush honeysuckle (*Lonicera mackii*) in response to attack from insects and pathogens. Where possible, our studies are placed in a cost-benefit framework and incorporate genetic mutants, transgenic plants, and phenotypic manipulations (using phytohormones, for example) into studies in order to better address ecological questions. Work in my laboratory includes the isolation and quantification of plant chemical defenses at the biochemical and molecular level, bioassays of the effect of plant defenses on insects, pathogens, and other plants, and the manipulation and measurement of experimental plant material in the greenhouse and in the field. I am a member of the Graduate Faculty and participate in the Biology M.S. program and the interdisciplinary Environmental Sciences Ph.D. program.

Featured Alumni

**Dave Nolin** (B.S. 1980, M.S. 1984) was recently promoted to **Deputy Director of the Five Rivers MetroParks** (former Dayton-Montgomery County Park District). Dave’s childhood enjoyment of camping and fishing led him to major in Biology at Wright State. As a Master’s student, Dave studied seasonal movements and nest box use by kestrels (small falcons) in several area parks. Shortly after graduation he became the Park District’s first land stewardship specialist, and then Director of Land Stewardship in the late ‘90’s. He continued exploring local natural areas and was instrumental in the recognition of two such areas by the greater community: the Huffman Prairie in WPAFB and the Beavercreek Wetlands. He has received many honors for such work, including a Public Service Award from the Ohio Chapter of Nature Conservancy and an Up and Comers Award from Price Waterhouse. While working with the MetroParks he has encouraged and facilitated many research projects by faculty and graduate students at Wright State and elsewhere. He is on frequent call for talks, sometimes accompanied by his own quirky guitar music and hilarious PowerPoint presentations. He continues to enjoy the parks and often visits them on weekends with his wife, Catherine Queener, also a WSU alum, and his son Jacob. Dave’s contributions were well summarized by Charlie Shoemaker, MetroParks Executive Director, in Sep/Oct 2004: “Dave’s expertise in understanding the inter-relationships between the land, air, water and their inhabitants has served MetroParks and the citizens of this region extremely well for a long time. David will have direct oversight over all park operations, programming and planning so his infectious passion for our natural surroundings will continue to influence all disciplines of MetroParks. Congratulations, Dave!”

www.metroparks.org
SPRING QUARTER – Sneak Peeks

Schedule for BIO 492:
Section 01: Dr. Krane: Molecular Evolution (9:45-10:35 W)
Section 03: T. Bash: (TBA)
Section 04: M. Wendeln: (TBA)

Schedule for BIO 800:
Section 01: Dr. Mamrack: Biology of Aging (4:10-5:00 T)
Section 02: Dr. Carmichael: Harmful Algae Blooms
                                      (2:45-3:35 F)
Section 03: Dr. Amon: Wetlands for Bioremediation
                                      (2:45-3:35 W)

Biology Quote for the Quarter:

I fully realize that I have not succeeded in answering all of your questions. Indeed, I feel I have not answered any of them completely. The answers I have found only serve to raise a whole new set of questions, which only lead to more problems, some of which we weren’t even aware were problems. To sum it all up . . . In some ways I feel we are confused as ever, but I believe we are confused on a higher level, and about more important things.

-- Unknown

Fall 2004 Graduates

Undergraduate Students
Regina Adamson
Alia Ansari
Dustin Davies
Laura Davis
Robert G. Funa
Elidio Gil
Melanie Kingsborough
Nicholas A. Lehman
Camille Limbert
Brandon L. Lowry
Timothy Musser
Christina Neidhard
Lara Olseson
Carey Raines
David Reynolds
Paul Seely
Aaron Strueming
Ryan Whitesell

Graduate Students
Katie Ruetenik
Jennifer Rutkiewicz

Lunch with the Chair

Congratulations to Corey Scheadler, Shane England, Christina Carter, Stephen Johnson, Richard Brudzynski, Brandon Witters and Mike Hess on winning a free lunch with the Chair. We appreciate the feedback you provided and enjoyed meeting each of you! The next luncheon is scheduled for Thursday, March 10 from 12:00 – 1:00 pm in room 235B BH (A&P Conference room). If you are interested in winning a free lunch, please email your name, phone number and major to jacqueline.neal@wright.edu by Monday, February 28th. We will contact the winners via email March 1st.

Degree Audit Reporting System (DARS)

If you would like to review your degree audit through ROX just follow these simple steps:

1. Enter into ROX
2. Click on Current Student ROX menu
3. Click on DARS (Degree Audit Reporting System)
4. Enter your SS and pin #
5. Click on “Advisor reviewed” (*if this is not present, please contact Jacqui Neal to have your student file reviewed). Once you click on the “view” button, your audit will show you what degree and calendar year you have been entered into our department. Your requirements will either say “yes” or “no” depending if you have fulfilled the required area. If you have not successfully completed an area, your report will list what courses you have left to take.
6. If you would like to review the requirements of another degree, simply click on the “What if” button, choose the College of interest, scroll down within that College and select your degree of interest. You will then click on “Request What if Audit”. After about 20 seconds, click on the refresh button until the icon reads “view”. Click on the “view” button and review your audit.
7. Don’t forget to LOGOFF when you are finished