Message from the Department Chair

I want to welcome all the ag, pre-vet, pre-pharm, and animal science majors back into the biology fold, where you will now have your advisors and also be able to earn an IPFW biology degree if you so desire. Over the next semester the department faculty will develop new “concentrations” in the biology degree that will allow biology majors in the areas listed above to make progress toward an IPFW biology degree, as well as complete the course requirements should they want to transfer to these programs at the West Lafayette campus. This exciting new option will serve the over 150 students who are interested in these programs at IPFW, and the students who want to transfer to Purdue. We want to welcome Dr. Vamsi Nalam as an advisor for biology majors in these ag specialties. We also welcome Dr. Carolyn Nersesian, who comes to us from Saskatoon, Canada, and is a new visiting faculty member at IPFW who will be teaching Biol 10000, 10900, 21600, 21700, and 21900 over the next few semesters. We in biology welcome you all to a new and exciting year at IPFW.

Have a great year!

Frank V. Paladino Ph.D. FAAAS
Jack W. Schrey Distinguished Professor
Chair of Biology

Congratulations to Fall 2012 Graduates

The following students received the Bachelor of Science degree:

Jenna Davidson
Homero Garcia-Vivar
Dennis Kirk
Robert Miller
Tyler Wood

These students received the Master of Science degree:

Kerry Bodie
Sahar Rizvi

BIOscope is an information bulletin published three times during the academic year by the IPFW Department of Biology. It is posted electronically in PDF format on the Department of Biology website (IPFW.edu/biology). Students wishing to submit items for the next issue should contact the editor, Professor Ahmed Mustafa, at 481-6328 or mustafa@ipfw.edu.
New Graduate Teaching Assistants

Chelsea Clyde-Brockway  
Christopher Culkin  
Sejuti Naurin  
Victoria Wesolowski

New Graduate Research Assistant

Jennifer Swiggs

Biology Scholarships

Each spring semester the biology department awards a number of scholarships for undergraduate biology majors. Two things are different this year—most of the awards will be for $1,000, and the Office of Financial Aid is requiring that all IPFW students seeking scholarships fill out a common online application found on the Financial Aid website that can be reached by selecting “Paying for College” at the top of the IPFW home page. Then click on and fill out the “common scholarship application.” The application takes approximately 10–15 minutes to complete.

As chair of the department committee that awards biology scholarships, Professor DeMott wants to encourage every biology major to fill out the common scholarship application before the Feb. 1 2013, deadline. If you missed the deadline, you can contact the Financial Aid office to see if you can still apply. This will make you eligible for a variety of university scholarships as well as the biology scholarships. These scholarships do not require information about your parents’ income or other evidence of financial need. The biology scholarships require a minimum GPA ranging from 2.5 to 3.25 on a 4-point scale. They also require that you will be a full-time student at IPFW both semesters during the 2013–14 school year and that you have completed at least 20 credit hours at IPFW before the 2013 fall semester.

Course Registration

Students should have already registered for and be attending classes for the spring 2013 semester. Students were also able to register for Summer Sessions I and II at the same time. The last days to register for Summer I Session are Thursday, May 16 and Friday, May 17, 2013, and the last days to register for Summer II session are Thursday, June 27, and Friday June 28, 2013.

The Web-based version of the IPFW Schedule of Classes for fall 2013 will be available online Wednesday, Feb. 27, 2013. Printed schedules will be available March 18.

We strongly encourage you to speak to your advisor before registering for classes.
Registration for Fall Classes

Seniors, grad students, fall degree candidates: begins April 1, 2013
Juniors, honors students, student-athletes, students with disabilities: begins April 8, 2013
Sophomores: begins April 15, 2013
Freshmen: begins April 22, 2013

Registering Online

Some students are registering for the wrong courses and getting off schedule. We strongly encourage you to speak to your advisor. If you are a senior registering online and expect to graduate at the end of this semester, be sure to check the box to initiate a graduation audit.

Fall 2013-Biology Electives

A Electives
BIOL 44500 – Aquatic Biology (lecture and lab)
BIOL 50100 – Field Botany (lecture and lab)
BIOL 51810 – Biomedicine (lecture)
BIOL 59500 – Insect Vector-Borne Diseases (lecture)
ENTM 20600 – General Applied Entomology (lecture)
ENTM 20700 – General Applied Entomology (lab)

B Electives
BIOL 21500 – Basic Human Anatomy (lecture and lab)
BIOL 38100 – Cell Biology (lecture)
BIOL 43700 – General Microbiology (lecture and lab)
BIOL 53300 – Medical Microbiology (lecture)
BIOL 55900 – Endocrinology (lecture)

Department News

New Faculty:

Dr. Carolyn Nersesian has joined the biology department as a visiting instructor in spring 2013. She has an undergraduate degree in environmental science and an Honours (cf. Masters) research degree in Environmental Policy and Law from Murdoch University, Perth, Western Australia. In 2010 she earned a Ph.D. in biological sciences from the University of Sydney, Australia. There she investigated the influence of plant toxins on predation risk, nutritional ecology, and the spatial scale heterogeneity of food resources to determine how these factors influenced foraging behaviors of a generalist mammalian herbivore. Most recently, Dr. Nersesian has completed a post-doc in the laboratory of Daniel Fortin at the Université Laval, Québec, Canada. The principal focus of her project was to quantify the factors that influence fine-scale predator and prey movement in heterogeneous environments on patterns of animal spatial organization at multiple scales. She has also had the opportunity in her academic career to teach a diverse array of interdisciplinary courses such as general biology, zoology, ecology, and biostatistics.
Post-Docs:

In association with the IPFW Environmental Resources Center, two Pakistani postdoctoral research scholars have been in residence in the department over the winter. Dr. Muhammad Rais has been working in association with Professor Bruce Kingsbury, learning about geographic information systems and herpetological field sampling techniques. Dr. Sayeda Ali is working with Professor Robert Gillespie analyzing factors influencing local river water quality in an effort to determine if conservation practices have been effective. They will be with us into March. We have enjoyed their presence in our halls and wish them the best in future endeavors.

Development of Course Materials:

Continuing lecturers Marilyn Shannon and Karen McLellan have recently published lecture notes and laboratory guides for BIOL 20300 and 20400 Human Anatomy and Physiology. Karen McLellan has also published Photo Atlas for these courses.

Science Olympiad:

Seven teams from different schools converged on the IPFW campus Saturday, February 2, to take part in the 2013 Science Olympiad. Twenty-three varied events, each of which contained one or more elements of Science, Technology, Engineering, and Math, were undertaken by the student teams. Professor of Biology Ahmed Mustafa and Professor of Education Jeff Nowak were the co-directors of this year’s event. Professors Bruce Kingsbury, Jordan Marshall, Punya Nachappa, and Parveen Quarrar from biology participated as event coordinators.

Biology Faculty and Student Recognition

In recent letters of congratulations (sent to Professors George Mourad, Ahmed Mustafa, and Frank Paladino) Cheryl Truesdell, dean, Walter E. Helmke Library, wrote:

“Hundreds of universities and colleges providing open access to peer-reviewed journal articles, book chapters, dissertations, working papers, conference proceedings, and other original scholarly work have developed a Digital Commons Network that identifies by discipline and subject area the most popular institutions and authors based on monthly download statistics. In November 2012, IPFW was recognized as one of the most cited institutions within the Digital Commons Network in the area of Physiology and Plant Breeding and Genetics (see Popular Institutions in right navigation column). This achievement not only promotes the goal of Opus (opus.ipfw.edu) to raise the academic profile of IPFW, but to move toward an open society where all can benefit from the collective wisdom of the world’s scholars and researchers.”
Recent Biology Publications


Recent Biology Presentations

- Nalam, V. J. Lipoxigenases in plant response to plant pests and pathogens. Invited seminar, Department of Biology, University of St. Francis. Fort Wayne, Oct. 12, 2012.


Recent Grant Awards

Faculty:
- Nachappa, P. 2013. Efficiency of salicylate and jasmonate signaling elicitors in conferring acquired systemic resistance against soybean aphid and soybean mosaic virus. Purdue Research Foundation Grant, $8,000.
- Nachappa, P. 2013. Dissecting the ecological and molecular interaction between the plant pathogen, Candidatus Liberibacter solanacearum and the potato psyllid, Bactericera cockerelli (Hemiptera: Triozidae). USDA-Agriculture and Food Research Initiative Competitive Grants Program, Sub-award from Texas A & M University, $10,000.
- Paladino F. V. 2012 NGO Leatherback Trust (for seven different projects), $204,000.
- Soule, T. 2013. Impacts of ultraviolet radiation and oxidative stress on slime production in cyanobacteria. IPFW Summer Research Grant, $8,000.

Students: