Message from the Department Chair

Punya Nachappa, Ph.D., will join the biology department in fall 2012 as a vector biologist and a replacement for James Haddock, who is retiring. Please also remember to stop in and wish Dr. Haddock good luck in his retirement and thank him for over 40 years of great teaching, research, and service to our students.

We have 41 biology majors receiving B.S. and M.S. degrees this May, and all faculty and staff offer congratulations and wish you the best of luck! There are also 14 students, listed below, who will receive biology scholarships ranging from $750 to $1500 for the 2012–13 academic year. It is noteworthy that most of these graduates and scholarship recipients have been involved in independent research with IPFW faculty during their careers in biology. Please remember to apply for scholarships through the financial aid office, which now serves as a central clearinghouse for all scholarships, including the Cornell scholarships that are worth $7,000 per year.

We successfully placed eight IPFW graduates in medical schools this year, three in pharmacy schools and at least two graduates in a Ph.D. program. These outcomes demonstrate that IPFW graduates are very competitive in advancing their careers by being admitted into top programs.

I wish all graduates my congratulations, and for those of you returning in fall 2012, a healthy, safe, and happy summer! Don’t forget to get involved with your professors’ research and make the most of the scholarship and academic opportunities we have here at IPFW!

Frank V. Paladino, Ph.D. FAAAS
Jack W. Schrey Distinguished Professor

Congratulations to May 2012 Graduates

Bachelor of Science:
Syed Ali
Katarina Aram
Kari Bauermeister
Devin Carr
Katie Crowe
Leticia Deardorf
Rochelle DeMel
Mary Dickow
Johnny Gerardot
Nicole Fuelling
Rachel Fuelling
Timothy Heath
Mindy Hicks
Stephanie Howe
Kelsey Jaxtheimer

Christina Johnston
Jeffrey Kaufman
Lynn Koepper
Whitney Lane
Justine LeBlanc
Katharine Leonard
Chloe Mack
Lauren McCracken
Hunter Miller
Jerome Morgan
Sara Murphy
Tara O’Toole
Brenda Odiwuor
Pavan Patel
Jennifer Rorick
Abigail Schnelker

Regina Shannon
Jacob Silveus
Ashley Sommer
Kim Tran
Tiffany Weems
Victoria Wesolowski
Leslie Westerhouse

Master of Science:
Kelly Boatright
Craig Lods
Erin McKinney
Kathryn Sanders
Robert Spencer
2011–2012 Scholarship/Award Winners

Outstanding Senior Biology Award
Kim A. Tran
Whitney C. Lane

Honors Degree in Biology
Kim A. Tran

Henebry Scholarship
Trevor M. Baugher
Laura A. Thoma-Dickinson
Melissa K. Garringer
Anthony J. Huffman
Catriona B. Allcock

Department of Biology Scholarship
Christopher S. Perry

Leo and Jack Jehl Memorial Scholarship
Loy G. Hochstetler
Anand Ramachandran

Student News

Kari Bauermeister has been accepted to the Indiana University School of Dentistry.

Wendy Chen has been accepted to the Manchester College School of Pharmacy.

Past student Michael Cooper is a medical student at Albert Einstein Medical School.

Elizabeth Hollingsworth has been accepted to the Indiana University School of Medicine.

Whitney Lane has been accepted to the Biomedical Sciences Ph.D. program at the University of Pittsburgh. Whitney has also been awarded a research assistantship that includes full tuition, health insurance, and a living stipend. She has also been selected to be an ARCS Scholar, which includes an additional award for each of her first three years. Whitney worked with Professor Robert Visalli in his research lab as an undergraduate.

Graduate student Sara Miller has been accepted to the Health and Human Biology Ph.D. program in Molecular Anthropology at University of Oklahoma in Norman, Okla.

Hitesh Mistry has been accepted to Manchester College School of Pharmacy.

Kevin O’Connor has been accepted to and will attend the Indiana University School of Medicine. As an undergraduate, Kevin worked with Professor Robert Visalli in his lab.

Pearl Pfiester has been accepted into the Manchester College School of Pharmacy.

Past student Michael Raftree is a third-year Ph.D. student at New York University.

Ashley Sommer has been accepted into the Indiana University School of Medicine and was assigned to the Fort Wayne campus.

Regina Shannon has been nominated for Who’s Who of American College Students.

Kim Tran has been accepted into the Indiana University School of Medicine.
Biology in Science Olympiad 2012
A record nine teams of high school students from six different schools converged on the IPFW campus, Saturday, February 4, to take part in the 2012 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. Associate Professor of Biology Ahmed Mustafa and Associate Professor of Education Jeff Nowak were the co-directors of this year’s event. Professors Bruce Kingsbury, Ph.D., Jordan Marshall, Ph.D., and Parveen Quarrar, Ph.D., from biology also participated as area/event coordinators.

Goodbye to Associate Professor Visalli
Associate Professor Robert Visalli has accepted a faculty position (Associate Professor of Biomedical Sciences) at the Mercer University College of Medicine in Savannah, Ga. He will leave IPFW at the end of the spring 2012 semester. He will be missed, and we wish him much luck in his new venture.

Retirement
Associate Professor James Haddock will retire from the biology department at IPFW effective Summer 2012. He has been with the biology department since 1972, and his expertise and experience will be missed.

New Associate Chair
Associate Professor Elliott Blumenthal has been named the new Associate Chair of the biology department.

Tri-Beta Faculty of the Year
Professor Deborah Ross has been named the recipient of the Faculty of the Year Award 2012 by Tri-Beta Biological Honor Society, Xi-Epsilon Chapter.
Course Offered and Not Published in the Schedule of Classes

**FNR 10300-01** Introduction to Environmental Conservation, taught by Professor Jordan Marshall. This course is an introduction to ecological principles, history of conservation, natural resource management, human impacts on the environment, and environmental ethics. Course is open to all students interested in an introductory natural resource/environmental science elective. No prerequisites are required.

Additional Courses Offered

Addition of **BIOL 59500-01** Biomedicine as an A elective, taught by Professor Ahmed Mustafa. This course will develop an understanding of the applications of the principles of natural sciences, especially biology and physiology, to modern medicine through evaluation of pre-clinical research. Prerequisites: 21900 and CHM 25500 or CHM 26100, or permission of instructor.

Addition of **BIOL 59500-02** Prokaryotic Diversity and Molecular Identification as a B elective, taught by Professor Tanya Soule. This course will address modern techniques in prokaryotic identification and phylogenetic analysis. Molecular methods in culture-dependent and culture-independent prokaryotic identification will be discussed, and students will learn how to integrate such results into a large phylogenetic context. Advanced characterization of several prokaryotic phyla will also be discussed. Prerequisites: BIOL 21800, C: BIOL 437, or permission of instructor.

Addition of **BIOL 59500-03** Comparative Biomechanics as an A Elective, will be taught by Professor Jennifer Taylor. Course will study how organisms function mechanically in their environment. Main focus is how the physical properties of solids and fluids govern form and function in plants, invertebrates, and vertebrates. Prerequisites: BIOL 21900 and PHYS 22100, or permission of instructor.

Addition of **PHIL 35100** as an Area IV General Education course for Biology with Life Sciences majors. This course covers material at the intersection of science and philosophy. Topics include the scientific method, the nature of scientific change, science and pseudoscience, and science and ethics. This course will be required by all science teaching certification programs. Students entering after this term will be required to take this course.

What do these things mean for you? When our curriculum changes while you are at IPFW, you can elect to follow the new requirements or go with the previous ones. If we add a course that you did not have to take before, then you don’t have to take it now. However, if the pre-reqs for a particular course changes, then that is in-force immediately regardless of which year you joined the department. Have questions? Contact your advisor or Frank Paladino, biology chair.

Catalog/Bulletin Changes are necessary if a student no longer wants to follow the old bingo sheets that require ETCS 10600 and CHM 32100. Students need to contact the biology office at 481-6305 to change to the new bingo sheet.

FALL 2012 BIOLOGY ELECTIVES

**A Electives**
- BIOL 55600-01 – Physiology 1
- BIOL 59500-01 – Biomedicine
- BIOL 59500-03 – Comparative Biomechanics
- ENTM 20600-01 – General Applied Entomology
- ENTM 20700-01 – General Applied Entomology lab

**B Electives**
- BIOL 21500-01 – Basic Human Anatomy (w/lab)
- BIOL 38100-01 – Cell Biology
- BIOL 43700-01 – General Microbiology (w/lab)
- BIOL 51600-01 – Molecular Biology of Cancer
- BIOL 59500-02 – Prokaryotic Diversity and Molecular Identification

**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. Students wishing to submit items for the next issue should contact the editor, Associate Professor Ahmed Mustafa, 481-6328 or mustafaa@ipfw.edu.
Training for Intervention Procedures

TIPS for the University is a 2.5 hour program that helps students make sound choices when faced with difficult decisions about alcohol use. Working together with administration, students address drinking behaviors specific to their schools and develop intervention techniques appropriate to their campuses. TIPS for the University provides students with the knowledge and confidence necessary to reduce high-risk drinking behavior among their peers. Associate Professor Ahmed Mustafa provides this training program to our students as a part of our BIOL/PSY 317: Addiction—Biology, Psychology and Society course. The training was done on March 30 this year. Mustafa is the official certified trainer at IPFW and he trains IPFW staff on an infrequent basis.

Recent Biology Presentations

**Thomas Backof.** Characterizing the inter-nesting behavior of loggerhead turtles (Caretta caretta) at Kyparissia Bay, Greece. The 32nd International Sea Turtle Symposium held in Oaxaca, Mexico, March 11–17, 2012.


**Erin Keene.** Bacteria and fungi cultured from sand, cloacal fluids, and unhatched eggs of Lepidochelys olivacea and standard testing of antimicrobial properties of cloacal fluids. The 32nd International Sea Turtle Symposium held in Oaxaca, Mexico, March 11–17, 2012.


**Nathan Robinson.** Factors influencing the timing of the nesting season for Pacific and Atlantic leatherback turtle. The 32nd International Sea Turtle Symposium held in Oaxaca, Mexico, March 11–17, 2012.

2012 Beta Beta Beta New Member Induction Ceremony

Tri-Beta Inductees:

This year 23 outstanding biology students from IPFW have been honored with lifetime membership of the Beta Beta Beta Biological Honor Society. The students received their membership at the induction ceremony held March 28. The inductees are Heidi Askren, Landers Barber, Parker Booth, Srikanth Dasari, Alicia De Leon, Deavin Eviston, Rane Gascoyne, Aldane Hoilett, Stephanie Howe, Philip Huynh, Stacy Keough, Lindsay McKenna, Molly Miller, Ariel Miller, Kathryn Mossburg, Heidi Nissley, Shannon Pyle, Natalie Singleton, Maja Sljivar, Nicolette Theurer, Vi Tran, Tyler Wood, and Michael Zijlstra.

Photo: 2012 Tri-Beta inductees and officers with Xi-Epsilon Chapter Advisor, Associate Professor Ahmed Mustafa (Photo: Elmer Denman).