As this year draws to a close I want to congratulate the 60 students who have graduated since last May with a degree in Biology. This spring we have news that three of our 38 Spring Semester graduates have been accepted into dental school, one accepted to physician’s assistant school, four into pharmacy school, seven into M.S. or Ph.D. programs, and four into medical schools. Our exit surveys from last year indicated that 50% + of our graduates went to professional and graduate schools and of the remaining, 85% were employed in life science related jobs. We have had great success of our students in competitions with biology students winning awards at local, national and international meetings (C. Vee lenturf, L. McKenna, S. Kuznar, M. Khan, K. Joshi, J. Han, J. Price, J. Law, J. Bennett, X. Pablo & E. Stadig) and their best oral or poster presentations listed later in this issue. We had seven biology students (I. Gatchell, M. Khan, R. McComb, G. Ostermeyer, G. Romo, A. Sellan, C. Smith) who were picked for the Top 50 award. Our seven students rank second only to Business/ Management/Marketing’s 11 students in three different majors. Twenty-nine biology majors were inducted into Tri Beta the Biological Honor Society this past March and we look forward to their success upon graduation in the near future. To all our graduates, award winners and to all our majors who are going on to serve our community and the world as health professionals, life science professionals and teachers we urge you to keep in touch and let us know what you are doing so we can pass it along. Get involved and benefit from the world class education we offer here at IPFW Biology.

Have a safe and fruitful summer!

Frank V. Paladino Ph. D. FAAAS
Jack W. Schrey Distinguished Professor
Chair of Biology
CONGRATULATIONS TO THE 2015-2016 GRADUATES

The following students will receive the Bachelor of Science:

Candace Alexander  Talitha Gerke  Jessica Muldoon  Cecelia Smith
Allison Amstutz  Erin Gill  Samantha Niedermeyer  Dominic Snowball
Brian Boyer  Jessie Graves  Courtney Ogle  Crysta Terry
Shannon Brisbin  Anna Hartsuff Williams  Grayson Ostermeyer  Corey Tom
Kelsie Carlson  Bruce Herndon  Xyryl Pablo  Nicholas White
Kayla Chin  Kimberly Jones  Kasie Probst  Stephen Zahm
Russell Coonan  Dayna Klepper  Hannah Rasmussen  Chelsea Zahner
Lee Danels  Phat Lam  Diego Reymunde  
Logan Eicher  Hannah Lancaster  Tyler Shuman  
Trevor Furnish  Randall McComb  Alexander Silowsky  
Samantha Gary  Ariel Miller  Kourtney Simpkins  

These students will receive the Master of Science:

Alicia Conrad  Lynne Koepper  Michael Ravesi  Ashley Taylor
Lauren Cruz  Audrey Martin  Andrew Sellan  Mahanish Thapa
Tazin Fahmi  Lindsay McKenna  Abigail Schnelker  Adam Warrix
Md Ibrahim  Elyse Miller  Ryan Smith  Tyler Wood
Mursalin Khan  Jamie Price  Eric Stadig  

COURSE ANNOUNCEMENTS

Fall 2016 – Biology Electives

A Electives
BIOL 50100 – Field Botany – lecture and lab
BIOL 51810 – Biomedicine - lecture
BIOL 55600 – Physiology I – lecture
BIOL 57810 – Biology of Disease Vectors
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 50600 – Human Molecular Genetics – lecture
BIOL 51600 – Molecular Biology of Cancer - lecture
BIOL 53300 – Medical Microbiology - lecture
BIOL 55110 – Proteins Structure & Function – lecture
BIOL 58400 – Molecular Biology and Applications lab
2016 SCHOLARSHIP/AWARD WINNERS

Outstanding Senior Biology Award
Grayson Ostermeyer
Xyryl Pablo

Leo and Jack Jehl Memorial Scholarship
Janine Bennett

Emil R. Seidel Scholarship
Mitchell Berger
Destin Furnas

Bryson & Ernest Henebry Scholarship
Tyler Marshall
Sean O’Connor
Paul Roberts
Dominic Snowball

Honors in Biology
Shelby Reyes
Cecelia Smith

STUDENT AWARDS

IPFW TOP 50 STUDENTS AWARD 2016

The following seven biology students have been named among the TOP 50 IPFW Students for 2016. These individuals are not only highly engaged on the IPFW campus in their academics and co-curricular activities, they also make significant impacts in their own communities.

Ian Gatchell
Md Mursalin Khan
Randall McComb

Grayson Ostermeyer
Gabriela Romo
Andrew Sellan

Cecelia Smith


Md Mursalin Khan, graduate student, won “First Place - Student Oral Presentation Award” for his presentation titled “In-vitro analyses of lymphocyte proliferation extracted from spleen and thymus of Nile tilapia using natural elderberry” at the World Aquaculture Conference-Aquaculture 2016 held in Las Vegas, Nevada in February. As the first place winner, Mursalin received a $600 cash prize and a certificate. His photograph and a short bio and project description will be published in The World Aquaculture Magazine. This project has been supervised by Professor Ahmed Mustafa and Associate Professor Elliott Blumenthal.

International Sea Turtle Society Award 2016

Callie Veelenturf, graduate student, won “Best Poster Award” for her poster titled “Human use and potential impacts to the Green Sea Turtle (Chelonia mydas) in Key In-Water Habitat of Southeast Florida” at the ISTS Annual Meeting held in Peru in February, 2016. This project has been supervised by Professor Frank Paladino. Callie received a $300 cash prize and a certificate.
Three Minute Thesis Competition 2016
The following biology students have been awarded first and second places in the ‘Inaugural Three Minute Thesis Competition’ held in March, 2016:

Kumud Joshi – First Place
Project Title: “Rag5 Mediated Resistance to Soybean Aphids”
Faculty Mentor: Assistant Professor Vamsi Nalam

Jinlong Han – Second Place
Project Title: “Soybean Vein Necrosis Virus: A New Face to Soybean Diseases”
Faculty Mentor: Assistant Professor Punya Nachappa

Shannon Kuznar – Second Place
Project Title: “Oceanic Foodies: Scalloped Hammerhead Diet Shift”
Faculty Mentor: Professor Frank Paladino

American Society for Microbiology, Indiana Branch Award 2016
The following biology students have been honored with the following awards from ASM, Indiana Branch for their poster presentation at the 2016 Annual Meeting held in April, 2016.

First Place M.S. Division: James Price “Juvenile Green Turtle (Chelonia mydas) Microbial Community Structure Throughout an Ontogenic Shift” (Mentors: Professor Frank Paladino and Assistant Professor Tanya Soule).

Second Place M.S. Division: Jamison Law “Biochemical Characterization of a Mycobacterial Glycerol-3-Phosphate Aeryltransferase” (Mentor: Assistant Professor Jaiyanth Daniel).

First Place Undergraduate Division: Janine Bennett “The Response Regulator Npun_F1278 is Essential for Scytonemin Biosynthesis in the Cyanobacterium Nostoc punctiforme ATCC 29133” (Mentor: Assistant Professor Tanya Soule).

Second Place Undergraduate Division: Xyryl Pablo “Mycobacterial Protein mEttA and its Role in Resuscitation from Stationary Phase” (Mentor: Assistant Professor Jaiyanth Daniel).

The first place winners (Jamie and Janine) received $150 while the second place winners (Jamison and Xyryl) received $100 each.

International Association for Great Lakes Research Award 2015
Eric Stadig, graduate student, has won the “Best Poster Award” for his poster titled “Monitoring long term trends in the St. Joseph River Watershed” at the IAGLRS’s 58th Annual Conference held at the University of Vermont. This award carries a check for $250 and free membership in IAGLR for 2016. Eric’s project has been supervised by Associate Professor Robert Gillespie.
2016 HONORS SHOWCASE

The following biology/psychology students have presented their honors research at the 2016 IPFW Honors Showcase on April 08, 2016:

Grayson Ostermeyer
Project Title: "Effects of Nutraceuticals on Proliferation of Spleen Cells of Tilapia In-Vitro"
Faculty Mentor: Professor Ahmed Mustafa

Alexander Silowsky
Project Title: "Two-Stage Channel Design on Water Quality"
Faculty Mentor: Associate Professor Robert Gillespie

Crysta Terry
Project Title: Search Strategy of Tilted Mice on a Barnes Maze
Faculty Mentor: Associate Professor Ryan Yoder (Psychology)

2016 SUMMIT SCHOLAR SHOWCASE

The following Summit Scholars (Discipline-Biology) have presented their research at the 2016 Summit Scholar Showcase on April 9, 2016:

Kelsie Carlson
Project Title: “Preventing Dementia by Decreasing Concussion Rates in Athletes”
Faculty Mentor: Associate Professor Elliott Blumenthal

Dusty Gremaux
Project Title: “Where Do All the Biology Majors Go?”
Faculty Mentor: Associate Professor Robert Gillespie

STUDENTS MOVING FORWARD

Caleb Alley has been accepted into the Liberty University College of Osteopathic Medicine.

Bruce Herndon was accepted into the Manchester School of Pharmacy.

Shaun Herron has been accepted into the Indiana University School of Dentistry.

Md Ibrahim has been accepted into the Oklahoma State University Ph.D. Integrative Biology program.

Phat Lam has been admitted into the Purdue University School of Pharmacy.

Lauren Lamboley has been accepted into the M.S. in Marine Science Program at Savannah State University working at the Skidaway Institute of Oceanography.
STUDENTS MOVING FORWARD (CONTINUED)

Grayson Ostermeyer has been accepted into Washington State University with a teaching assistantship position at the Franceschi Microscopy and Imaging Center to assist students and faculty run micrographs using various kinds of electron microscopes.

Jamie Price has been accepted into Ohio State University Ph.D. program.

Shelby Reyes has been accepted into the Burrell College of Osteopathic Medicine.

Nathan Schreiber has been accepted into the Manchester School of Pharmacy.

Miloslava Shustova has been accepted into the University of Minnesota Twin Cities to pursue a M.S. in Biological Sciences.

Mahanish Thapa has been accepted into North Dakota State University Ph.D. program in Genomics and Bioinformatics.

Stephen Zahm has been accepted into the Indiana University School of Dentistry.

2016 TRI-BETA INDUCTEES

This year 29 outstanding biology students from IPFW have been honored with the life time membership of Beta Beta Beta - Biological Honor Society. These students received their membership at the induction ceremony held March 21, 2016. The inductees are: undergraduate students Rachel Beery, Drake Bowers, Jessica Camarena, Abbigayle Dunlavy, Andrea Funk, Samantha Gary, Dusty Gremaux, Connor Hamilton, Samuel Henry, Alyssa Hoffman, Aaron Jones, Luke Landrigan, Gavin Lehmann, Amanda Martin, Brittany Mason, Geral'n McGee, Yar Thet Pan Naing, Xyryl Pablo, Alexia Parra, Hannah Rasmussen, Gabriela Roma, Kenneth Saillant, Alexander Silowsky, Kourtney Simkins, Corey Tom; and graduate students Megan Kelley, Elizabeth Sinclair, Luna Wahab and Amanda Warren.
ALUMNI NEWS

Micah Rapp has been offered and accepted an offer of admission with Research Assistantship support to the Ph.D. program at Columbia University in their Cellular Molecular, and Biochemical Program starting fall 2016.

Yvonne Gicheru is finishing her second year towards her Ph.D. at Case Western Reserve. She passed her qualifying exams and started her research on ligand gated ion channels specifically the mechanisms that underlie gating and how lipids and drugs allosterically modulate these channels. She employs different techniques including X-ray crystallography, Cryo-Electron microscopy, Electrophysiology and EPR.

Kevin Ann Hunt is in her 3rd year Ph.D. molecular biology program at the University of Chicago.

Jessica Schein is in her 3rd year Ph.D. program at Michigan State University.

FACULTY AWARDS

Tri-Beta Awards

The 2016 Faculty Award has been awarded to Assistant Professor Punya Nachappa for her dedicated contributions to student research. Associate Professor Shree Dhawale has been awarded with a special award for her contributions to biology students during her tenure at IPFW. Dhawale will retire from IPFW at the end spring semester 2016.

Promotion with Tenure

Assistant Professor Jordan Marshall has been awarded a promotion to Associate Professor with tenure. His promotion with tenure will be effective fall 2016.
The following biology faculty have received 2016 COAS Summer grants:

Punya Nachappa  
Project Title: “Factors Determining Vector Competence in Three Thrip Species Ability to Transmit Soybean Vein Necrosis Virus”

Vamsi Nalam  
Project Title: “Evaluation of Soybean Transgenics Expressing a Host Defense Regulation Gene, PHYTOALEXIN DEFICIENT4 (PAD4) for Enhancing Resistance to Soybean Aphid”

RECENT BIOLOGY PUBLICATIONS


RECENT BIOLOGY PRESENTATIONS

19th IPFW Annual Student Research and Creative Endeavor Symposium

The following biology students presented their research at the 19th Annual Student Research and Creative Endeavor Symposium held in March, 2016:

Janine Bennett
Melissa Beaty
Alicia Conrad
Tazin Fahmi
Jinlong Han
Md Ibrahim
Kumud Joshi
Md Mursalin Khan
Min Jung Kim
Phat Lam
Hannah Lancaster
Jamison Law
Audrey Martin
Lindsay McKenna
Xyryl Pablo
James Price
Abigail Schnelker
Andrew Sellan
Cecelia Smith
Eric Stadig
Ashley Taylor
Tyler Wood
Callie Veelenturf

19th Annual Student Research and Creative Endeavor Symposium (Photo: Collegium. News from COAS)

131st Annual Meeting of the Indiana Academy of Science

The following biology students presented their research at the 131st Annual Meeting of the Indiana Academy of Science held in Indianapolis in March, 2016:

Alicia Conrad
Tazin Fahmi
Jinlong Han
Md Ibrahim
Kumud Joshi
Md Mursalin Khan
Kedric Milholland
Abigail Schnelker
Patrick Selig
Tyler Shuman
Ashley Taylor
Adam Warrix
Anna Hartsuff Williams
Tyler Wood

19th Annual Student Research and Creative Endeavor Symposium (Photo: Collegium. News from COAS)
Aquaculture 2016 Annual Meeting of the World Aquaculture Society

The following biology students presented their research at “Aquaculture 2016” Annual Meeting of the World Aquaculture Society held in Las Vegas in February, 2016:

Tazin Fahmi               Md Mursalin Khan
Destin Furnas            Grayson Ostermeyer
Md Ibrahim

Guest Presentations

Dr. Wesley Swingley, Assistant Professor of Biology at Northern Illinois University, presented his research on “The microbiome of a prairie restoration” on January 29, 2016. Dr. Swingley graduated with a B.S. in Biochemistry from Case Western Reserve University and then went on to complete his Ph.D. in Microbiology at Arizona State University. Following graduation he had two Postdoc positions, first at Hokkaido University in Japan and then at the University of California-Merced. Dr. Swingley’s research focuses on three approaches to tackle the central challenges in analyzing complex environmental communities: 1) to develop novel computational techniques to inform a new generation of genomic and community genomic data; 2) to model the co-evolution of organisms and the environment; and 3) to illuminate the evolutionary origin and history of phenotypes and environmental adaptation. If you are interested in learning more, visit the Swingley Lab Website http://www.bios.niu.edu/swingley/swingley.shtml or email Dr. Swingley at wswingley@niu.edu.

Dr. Brett DeGregorio, a Wildlife Biologist for the Army Corps of Engineers and an IPFW Alumnus, returned to campus January 22, 2016, to present some of his doctoral research. The talk highlighted IPFW’s contribution to environmental research and herpetology. DeGregorio received his masters degree in Biology from IPFW in 2008. During DeGregorio’s time at IPFW he studied under Professor Bruce Kingsbury, the director of the Environmental Resource Center, specializing in ecology, conservation and herpetology. DeGregorio went on to the University of Illinois Urbana-Champaign for his doctorate. For his dissertation DeGregorio studied the predatory relationship of rat snakes and songbirds, according to the Sperry-Weatherhead Lab website. In his talk, Dr. DeGregorio explained the role of climate change in the possibly increased predation of birds by snakes.
FACULTY PRESENTATION

During spring break Winfried Peters, associate professor of biology, presented his work on coastal ecology at the Centro de Investigacion en Ciencias del Mar y Limnologia (CIMAR) of the Universidad de Costa Rica, Costa Rica’s largest university and main institution of higher education. The university is located in San Jose, Costa Rica.

His research focuses on the ecology of marine mollusks. In particular, he is studying predator-prey relationships among gastropods, food webs on sandy beaches, and the intriguing phenomenon of ‘autotomy’ in some of the snails (‘autotomy’ is the voluntary shedding of body parts, best known to laypeople from lizards that will shed their tail when attacked by a predator).

FACULTY IN FOCUS

On April 1-2, 2016, students from IPFW and across the state presented their research on the IPFW campus at the Indiana Branch of the American Society for Microbiology annual meeting. Guests included esteemed speakers from ASM national as well as the Allen County Health Commissioner. There were 27 abstracts in microbiology and immunology presented by 15 undergraduate, four M.S. graduate, and eight Ph.D. students. IPFW was well represented with student abstracts by Xyryl Pablo, Justin Lothamer, Janine Bennett, Phat Lam, Melissa Beaty, James Price, and Jamison Law. Congratulations to all of the award winners and participants! Special thanks go to Assistant Professor Tanya Soule, President-Elect of the American Society for Microbiology, Indiana Branch for organizing such an event at IPFW and to Dean Eric Link and Professor Frank Paladino for providing financial support for this meeting.

Assistant Professor Tanya Soule with the guests (Photo: Stefano Bertuzzi).
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