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The

BioLogue

Department of Biological Sciences Student Newsletter



A Note From the Chair

There are things known and there are things unknown, and in between are the doors of perception...*

William Blake, the 18th century artist and poet, famously stated that “*if the doors of perception were cleansed everything would appear to man as it is, infinite.*” (You might recognize that quote as the source of the name for **The Doors** music group.) That quote reflects the limitations of the human brain and sensory system- we can perceive certain stimuli (particular wavelengths of light or frequencies of sound), but not others (magnetic fields, ultrasound, gamma rays, etc.). That restricted sensory range is probably functional-it prevents us from being overwhelmed by information (Blake’s infinity). But our sensory limitations also limit our behavior. For example, as animals largely reliant on our visual sense, we humans don’t feel so comfortable outside in the dark, and we tend to avoid exploring the natural world at night. **In the process, we miss a lot of interesting stuff! CONTINUED ON PAGE 4...**

Stay Connected!

Facebook & Bio Dept. Website

You already spend your day on FB, why not include some BIO to make you feel better about it? ‘Like’ us on FB and receive the most up-to-date news, job opportunities, & current events related to Biology. Search: Wright State University Dept. of Biological Sciences

You can also visit: wright.edu/biology for Dept. info!

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Fall Quarter ever!

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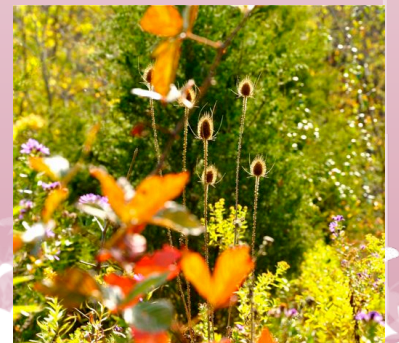
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Student Achievements

Research, Leadership and Scholarship—these students are going somewhere!

2011 Emerging Student Leader

The Office of Student Activities annually recognizes WSU student leaders. **Ronak Ghiya** is very involved with campus leadership activities including the Minority Association of Pre-medical Students (MAPS), Chemistry Club, Student Honors Association, PreMedical Society and Indian Students Dance Team. Ronak was also the 2010-2011 President of the Biology Club. **Congratulations on this award Ronak!**

2011 Distinguished Advanced Student Leader

This well-deserved award went to **Christen Johnson** for her work in various leadership roles across this campus & others. Christen is the President of both the Multicultural Association of Pre-Medical Students and Women Encouraging Each other. She is also President of the Village/University Park Community Council and voted onto the 2010 Homecoming Court. Christen enjoys her role as a UVC Peer Instructor and this summer she was proud to attend the Medical & Dental Education Program at Columbia University. Recently, Christen became the National Director for Women Encouraging Each other. **Great job Christen!**

2011 Brazil Research Experience

BIO students **Amma Boakye**, **Orly Leiva** and **Isaac Voehringer** traveled to Sao Paulo, Brazil in the spring to take part in an international research experience. They took classes and worked in a research lab, receiving degree credit for the experience. Amma said, *“For me, the most memorable part was the experience of being a foreigner in another country...and to see beyond the scope of where I’ve lived all my life. The insight I got was priceless.”*





Good Luck Spring & Summer 2011 Graduates!

Noor Al Shalal	Gerald Alcorn	Chelsey Housh	Thomas Hughes
Emily Brackett	Jessica Burt	Heather Hughes	Onome Ilenbiluan
Samantha Hunt	Amanda Kehres	Jennifer Jurcsisn	Amber Justice
Renee Albers	Mallory Alexander	Ashley Karns	Joel Kaser
Shandra Basil	Jennifer Bauer	Sarah Kash	Amber Kasmer
Linda Baumert	Amber Braddock	Timothy Kawsky	Emily King
Rachel Brame	Kendra Brown	Sai Kollipara	Kyle Leggett
Annie Bui	Erica Carey	Kyle Lewis	Lisa Ling
Andrew Cline	Craig Cole	David Malesko	Erin Naas-Welbaum
Amanda Cowell	Jessica Cox	Roopsi Narayan	Kelsi Nutter
Caleb Dukeman	Jillian Frasier	Ashley Randolph	Brittany Reinert
Kelsey Fultz	Sarah Garing	Samantha Ritzler	Allison Schumacher
Norman Glover	Leilani Gray	Abigail Schwartz	Esra Shermadou
Sara Greene	Chris Hall	Christopher Seger	Bridgett Severt
Mohanad Hamayel	Colleen Harrington	Corrine Shepard	Stephen Short
Brittany Harper	Ashley Hastings	Elizabeth Swartzwelder	Steven Tamborski
Courtney Hauer	Kiel Hawk	Pon Ti Tsou	Robbie Weller
Sarah Heinig	Brittany Hillock	Ashleigh Wilson	Zachary Yahl
		Thomas Young	

Welcome Clinical Lab Science

Class of 2011-2012

James Allen	David Jones	Brett Oetzel
Estefany Castro	Marina Lakner	James Powell
Bryan Dooley	Tai Lam	Amber Severt
Angela Hart	Christie LaVoy	Liz Wehri
Nate Johnson	Brian Metcalf	



Note from the Chair Continued...

I was reminded of this several times this summer. **Most recently, a “creature of the night” showed itself at my home.** A night-blooming cereus that for many years had grown but never flowered, finally did its thing: for one (and just one night), its fantastic bloom opened, and the rich fragrance that it emits to attract pollinating moths filled the

air on my back porch. The flower opened at 9:30 p.m., and by morning it was closed and drooping. No doubt, the nighttime air is full of chemical cues, many of which are beyond our sensory powers.

Perhaps more obvious to us are the critters that communicate

at night with sound, many of which I am enjoying as I write this essay. I happen to know that many of those sounds come from crickets and katydids. But to see those insects in action takes some effort. **Have you ever gone “prospecting” for nighttime animals, exploring forest & field with flashlight in hand?**

I did a midnight “swamp stomp” earlier this summer. In my lab, I study gray treefrogs; I am interested in how their physiology responds to dehydration and cold. To see these animals in the wild, I had to go looking for them. For most of the year, gray treefrogs are cryptic, up in the trees and silent. But in summer, especially after the rain, the frogs come down to ponds to breed- and as darkness sets in, the males vocalize to attract females. I managed to get a nice photo of one male in mid-call; what a display! To think that this goes on practically in our backyards, yet most of us will never see the show.

When the nighttime action occurs under water, it’s even harder to catch the action. This summer, Dr.

Yvonne Vadeboncoeur and research team (including BIO undergrad Ryan Satchell, highlighted elsewhere in this newsletter) traveled to Tanzania, where they studied nutrient flow in this very large lake with its tremendously diverse fish community. I was interested to read in the blog: *“The team has now gone diving and snorkeling at one of our main study areas at night on two occasions- and what a difference it has made! Whereas we had believed that zooplankton are scarce in this lake, we were amazed to find that on a nearly moonless night, the water along the coast was heaving with small shrimp, tiny copepod crustaceans, and larval sardines.”* A

major element of the food web in this lake had gone unseen, revealed only under the cloak of darkness.

As scientists, we work in many ways to develop good observational skills, and to expand our range of perception. We overcome some of our sensory limitations by designing tools-electron microscopes, Geiger counters, radiotelescopes-that help us to perceive otherwise undetectable signals. But sometimes, just changing our behavior, and finding new ways to look, is what’s needed. **So, while the weather remains warm, grab a flashlight and head out for a nighttime walk in the woods.** Or, as Jim Morrison might have stated it: *Break on through to the other side!*

*Quote attributed to Ray Manzarek and/or Jim Morrison



Dr. David Goldstein,
Chair, Dept. of Biological Sciences



Faculty and Staff News

Research Funding

Dr. Kate Excoffon received a National Institutes of Health (NIH) R21 grant for her work titled “Molecular evolution of AAV vectors for anti-HIV gene therapy.” **Dr. Paula Bubulya** also recently received notification that her R15 grant from NIH titled, “Gene regulatory functions for the nuclear speckle scaffolding protein Son,” has been approved for funding. Both women also received funding through the Research Incentive program. **Congratulations to both!**

CLS in the Dayton Daily News

The DDN recently wrote about the healthcare industry with a focus on the field of Clinical Laboratory Sciences. Our CLS program director, **Dr. Cheryl Conley** was quoted in the article, *“it’s a well-hidden profession- these are highly trained scientists and we have got to fill those positions with highly qualified individuals.”* Demand for clinical lab scientists is strong and it will continue to grow. Read the article at: <http://tinyurl.com/42mkhl3>

Lake Tanganyika & Research Blog

Dr. Yvonne Vadeboncoeur and her team of research scientists spent their summer in East Africa working on the Lake Tanganyika Littorial Project. Included in Dr. Vadeboncoeur’s team was **Ryan Satchell** (pictured above right) who is a WSU Biology student. The team documented the experience in this blog: <http://tanzania-lkenyon.blogspot.com/>. The trip included scuba diving, boating and meeting Jane Goodall among other things. Science, culture, photography....you simply must read this blog- it is amazing!

New Office Staff Member

The Department of Biological Sciences would like to give a warm greeting to our new Administrative Support Coordinator **Janet Franklin**. When you see Jan at her desk in the front office be sure to say ‘hello’! Welcome to the Bio Department Jan!



Tanganyika Photos by E. Gaines

Winter 2012 Class Offerings

BIO 111	Human Biology
BIO 112	Cell/Molecular BIO
BIO 211	Genetics
BIO 213	Molecular Biology Lab
BIO 305	Animal Physiology
BIO 370	Bioethics
BIO 380	Conservation Biology
BIO 401	TBA
BIO 402	TBA
BIO 406	Evolutionary Biology
BIO 420	Designing Biological Expt.
BIO 442	Adv. Molecular Biology
BIO 443	Histology
BIO 447	Population Ecology
BIO 476/7	Human Parasitology
BIO 492	Various Titles & Sections
EXB 451	Clinical Ex. Physiology II

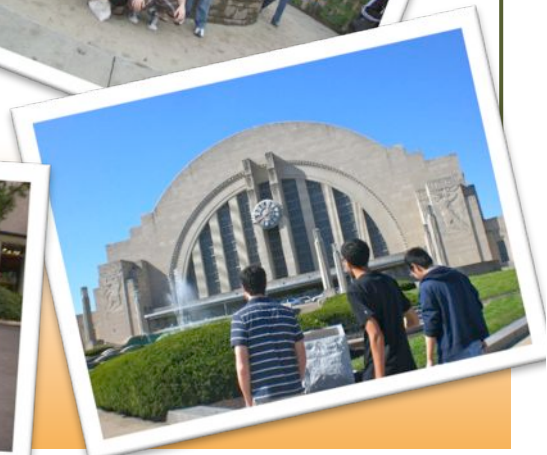
Important Fall 2011 Dates

Sept. 26	Last day for all students to drop a class without a grade
Oct. 24	Last day for all students to drop a class with a grade of W
Nov. 11	Veteran's Day; WSU Closed
Nov. 12	Last day of Fall Quarter classes
Nov. 14-18	Fall Quarter Final Exams
Nov. 19	Fall Commencement
Nov. 24-25	Thanksgiving; WSU Closed
Nov. 29	Intersession classes begin
Dec. 5	Last day to drop Intersession class with a grade of W
Dec. 7	Last day to submit application for Winter Quarter graduation
Dec. 22	Last day of Intersession classes
Dec. 23-26	Winter Break; WSU Closed
Jan. 3	First day of Winter Quarter

2011-2012 Biology Club Officers

If you are a BIO major and looking to get connected with other BIO students and get more involved on campus, you must join the BIO Club!

President	Matt Johnson johnson.828@wright.edu
Vice President	Arlene Maliekal maliekal.2@wright.edu
Treasurer	David Jensen jensen.24@wright.edu
Secretary	Jimmy Reader readler.3@wright.edu
Events Coordinator	Samantha Young young.240@wright.edu
House of Reps	Dan Hyman hyman.6@wright.edu



2011 Fall Departmental Seminars

Sept. 12, 2011	Dr. Don Cippollini, Wright State University <i>"Invasive species, at-risk plants and insects, and a trip to Costa Rica: reflections on a year"</i>	Host: Dr. Rooney
Sept. 19, 2011	Dr. Akua Asa-Awuku, UC Riverside <i>"Is there a silver lining in air quality? Understanding cloud droplet formation"</i>	Host: Dr. Excoffon
Sept. 26, 2011	Dr. Marvin Nieman, Case Western <i>"Thrombin receptor dimerization: Implications for antiplatelet therapy development"</i>	Host: Dr. Bubulya
Oct. 3, 2011	Dr. Elizabeth Rhoads, University of Dayton <i>"Landscape genetics of the small-mouthed salamander in Ohio fragmented forests"</i>	Host: Dr. Krane
Oct. 10, 2011	Dr. Leo Obitas-Acurio, University of Andidad-Cusco <i>"The role of natural history in tropical forest conservation"</i>	Host: Dr. Rooney
Oct. 17, 2011	Dr. Brian Kaspar, Nat. Children's Hospital <i>"Gene targeting of cells involved in motor neuron disease"</i>	Host: Dr. Excoffon
Oct. 24, 2011	Dr. Brian McGill, University of Maine <i>"The effects of climate change on organisms"</i>	Host: Dr. Bahn
Oct. 31, 2011	Dr. Caroline Turner, Michigan State <i>"Interactions between ecology and evolution in a 50,000 generation experiment with E.coli"</i>	Host: Dr. Goldstein
Nov. 7, 2011	Dr. Andrew Hipp, Morton Arboretum <i>"A bug's-eye view of oak evolution"</i>	Host: Dr. Rooney

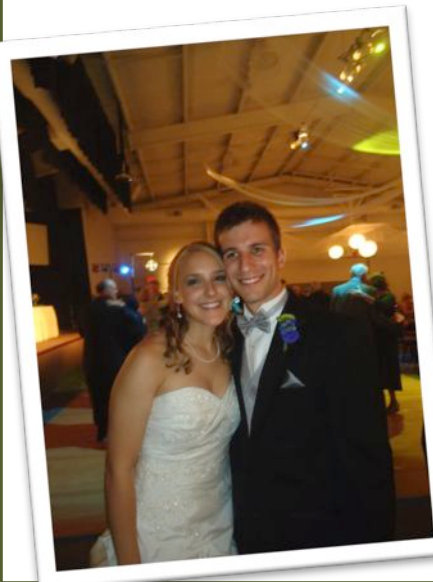
Seminars are at 1:30 p.m. and meet in 103 Biological Sciences Building I

Alumni Spotlight- Love in the Lab

As BIO majors, **Deanne Duval** and **Bryan Jacobs** knew that working in the WSU Freshman Bio Labs as lab preps would be a great experience. What they didn't know is that it was where they would meet each other and fall in love. They were married this summer.

Deanne and Bryan are both currently medical students at WSU's **Boonshoft School of Medicine**. The Dept. of Biological Sciences wishes these two talented people the best.

Congratulations Mr. & Mrs. Jacobs!



Semesters are coming!

In case you didn't know, WSU is transitioning to semesters in the Fall of 2012. There are numerous resources available for you to learn more about this.

Visit the following websites to stay informed:

www.wright.edu/semesters & <http://www2.wright.edu/semesters-advising>

One of your best resources is your academic advisor. Do not hesitate to meet with your academic advisor if you have questions about semesters!



WRIGHT STATE UNIVERSITY

Academic Advising

Please call the Advising Line at (937) 775-4226 to schedule an appointment with an advisor. When scheduling, be sure to include your major and/or concentration and describe your questions.

Undergraduate Degrees:

Jacqui Neal ~ Dr. Patti Roberts ~ Courtney Smith

Clinical Laboratory Sciences: Bev Schieltz ~ Dr. Cheryl Conley

Graduate Degrees: Laura Buerschen



EDITOR: COURTNEY SMITH
THE BIOLOGUE IS A QUARTERLY STUDENT NEWSLETTER THAT CONTAINS IMPORTANT INFORMATION FOR STUDENTS IN THE DEPARTMENT OF BIOLOGICAL SCIENCES. PLEASE EMAIL COURTNEY.SMITH@WRIGHT.EDU WITH QUESTIONS OR COMMENTS.

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