



Double Helix

Biology Department Newsletter

Notes from the Chair

“Every one of these people has come from somewhere and is going somewhere, the same way I am.”

This quote from *An Altar in the World: A Geography of Faith*, has persisted in my mind all semester. As part of a Teaching Center reading group this spring, I read and discussed this wonderful book by Barbara Brown Taylor with colleagues from across the university. We gathered from our disparate academic disciplines: biology, nursing, physical therapy, religion, education, honors, social work, and accounting. Our common goal was to learn about and share various practices for “becoming more fully human ... exercise(s) that require a body as well as a soul.” Regardless of where the conversation started, we invariably found ourselves in discussion of our teaching and our students. A universal thread

throughout each conversation centered on a basic tenant: by allowing ourselves to acknowledge our own humanness and sharing this with our students we can foster powerful learning moments. Best practices in the classroom and laboratory center on the teacher-student relationship, but that relationship is really more like a partnership as we are reminded of where we have come from and where we are going. When students know that their professors are on a journey of learning and growing professionally and personally, they are encouraged to stretch for goals that seem initially out of reach but are, in fact, attainable. Dr. Thomas (spring 2012 sabbatical) and Dr. McGrew (fall 2012 sabbatical) model this as they take time for rest, renewal, and reflection at a different academic pace and in exploration of new ideas for teach-

ing and learning. The many alumni updates this spring, the news of our seniors’ acceptances into graduate programs, and the summer opportunities for our current students remind me that our students are most definitely “going somewhere!” We are especially excited to share that our department is, indeed, “going somewhere” in 2014 when we move into new facilities. In future issues of the newsletter, through Facebook, and on our website, we will keep you posted. Have an enjoyable summer!



Pauline Pawinski

Biology is moving!

May 5, 2012 was the official groundbreaking ceremony for the Wedgewood Building. Construction begins this May and the building is scheduled to open in the summer of 2014. With approximately 188,000 square feet of space this will be the largest building on campus. Along with the School of Religion, several departments from CAS, including Biology, will be housed in the new building. Biology will be on the third floor and welcomes the much needed space. Floor plans of the new building can be seen at Belmont’s website, www.belmont.edu/news.



Volume 7, Issue 2

Spring 2012

Special points of interest:

- Biology seniors graduate!!



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CAS Awards

Awards were held in Beaman A&B on April 16, 2012. Dr. Darlene Panvini, Department of Biology, and Dr. Rachel Rigsby, BMB Coordinator, made presentations to eight deserving students, from freshmen to graduating seniors.

Freshman Achievement Award in Biology

Alicia Hsu

Ronald M. Barrett Pre-Health Award

Crystal LeBlanc

Donald R. Ramage Award for Service to the Learning Community in Biology

Shea Harrison

Department of Biology Scholarship

Samera Berhane

Outstanding Student Senior in Biology

Megan DeVries

Freshman Achievement Award in Biochemistry and Molecular Biology

Paul Hanna

Benjamin Walloch Endowed Scholarship for

Biochemistry and Molecular Biology

Khang Van Tran

David R. Hill Environmental Science Award

Erin Pitts



Samera Berhane, Megan DeVries, Crystal LeBlanc, Erin Pitts, Alicia Hsu and Shea Harrison



Paul Hanna

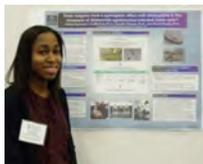


Khang Van Tran

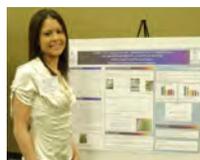


TAS Awards—Fall 2011

TAS announced the award recipients from the Fall 2011 meeting. Congratulations to our winners!



Ashley Newsome—3rd place Cell and Molecular



Kelly Casarez—1st place botany



Monique Parrish—1st place Cell and Molecular



Jordan Murray—2nd place zoology

Biology Faculty Update

Dr. Steve Murphree was elected to serve as the treasurer of the newly formed Tennessee Mosquito and Vector Control Association. TMVCA is a professional scientific organization dedicated to providing leadership, information and education leading to the enhancement of public health and quality of life through the suppression of mosquitoes and other vectors of pathogens causing diseases.

Dr. Jennifer Thomas was invited to Murray State University in Murray KY on February 24, 2012 to talk about her research in HPV, From Warts to Cancer: The Biology of Human Papillomaviruses. Dr. Thomas also described her most recent undergraduate research projects at the seminar.

Dr. John Niedzwiecki spoke at the Sudekum Planetarium at the Adventure Science Center on March 10, 2012. The title of his talk was "Taking the wonder and awe out of wonderful and awesome ideas: Demystifying Darwin's two biggest ideas!"

Dr. Steven Murphree at Adventure Science Center

On April 14, Dr. Steve Murphree participated in the Adventure Science Center's *Got Science?* program. Dr. Murphree educated visitors about ticks, human diseases carried by ticks, how to avoid and remove ticks. Libby Thorn-dike, one of Dr. Murphree's undergrad research students, also attended and described her research on tick repellency.

Dr. John Niedzwiecki will speak at The Frist Center for the Visual Arts on May 19. He will present a gallery talk "Connecting Disciplines: Mutation: Nature's Creative Force" in response to the current exhibit, *Fairy Tales, Monsters, and the Genetic Imagination*.

Sabbatical Leaves

Dr. Jennifer Thomas has been on sabbatical in Spring 2012 to write a science paper on her students' research with MRSA, write several teaching-related papers, and spend time observing colleagues in the classroom. Dr. Lori McGrew will be on sabbatical in Fall 2012 to research neuroscience programs at other universities, learn how to assess development in zebrafish embryos, and complete some of her research on zebrafish behavior for publication. Congratulations to these faculty!

Spring Semester Biology Speakers

This spring, students and faculty had opportunities to hear from numerous speakers, including:

Dr. Rand Carpenter, DVM, Tennessee Dept. of Health—"Junk in the Trunk and Other things You Learn as an Epidemiologist"

BIO/ENV alumni panel (Becky Adams, Lindsay Walker, Tricia Munigety, Julianna Bejama)—"What to do with a BIO or ENV Degree—Alumni Share Their Stories"

Dr. Joel Meyer, Assistant Professor of Environmental Toxicology with the Nicholas School of the Environment at Duke University—"Green Worms: Using the Nematode *C. elegans* in Protecting Us from Environmental Pollution"

Dr. Meyer talks with students.



Dr. Eric Skaar, Associate Professor in the Department of Pathology, Microbiology and Immunology at Vanderbilt—"The Battle

for Metal Between Bacterial Pathogens and Their Vertebrate Hosts". Dr. Skaar was the speaker at the Vaughn Science Lecture in March.



Dr. Vaughn, Dr. Skaar and Dr. Thomas

Additionally, several speakers and guests were on campus from health-related graduate and professional schools to talk about their programs.

Alumni: *if you would be interested in talking with current students about your career path and experiences, please contact us.*

Our seniors are going places!!!



"I am proud to announce that I have been accepted to, and will be attending, the University of Southern California's Doctorate of Physical Therapy Program in the fall!" – **Sylvia Chac**



"I am enrolling in an MD/PhD program at the University of Mississippi Medical Center in Jackson."— **Ashley Newsome**



"I was accepted to the accelerated BSN program at Union University." - **Ryan Baker**

"I got accepted into the Accelerated Nursing Program at the University of Tennessee Knoxville. I was 1 of only 16 accepted nationwide. It is an intensive one year program. Upon completion I then plan on pursuing a career in Nursing and become a Nurse Practitioner." -**Tristan Daniel**



"I will be headed to Bloomington, IN to attend graduate school at Indiana University. Specifically, I will be in the Molecular, Cellular, and Developmental Ph.D. program." - **Laura Muck**

Nick Kirk will be attending Veterinary School, UT Knoxville.



"I've been accepted into Belmont's pharmacy school. I'll be attending there in the fall!" -**Roxanne Musharrafeia**

Congratulations to our seniors! These are just a few of the places our seniors are headed. As more of our senior's plans are finalized, we will post them here. For more grad pics, visit our Facebook page, Serotonin Helix.



Alumni Corner



Abby Murphy (10)

"I will be starting my first year at William Carey University's College of Osteopathic Medicine in August 2012. It's been a life-long dream of mine to become a physician and to see it actualized is beyond thrilling! I'm VERY excited to begin this next chapter! Also, I'd like to give a special shout out to Dr. Panvini for all the support she gave me while I was applying to medical school. She rocks!"

Jimmy Bertaud (06)

Jimmy will be in residence in Neurology at Tulane University this fall. Jimmy was also elected into the Alpha Omega Alpha Honor Medical Society as of November 2011. This is the only academic honor society of the medical profession and 11 seniors were elected for the 2012 year, including Jimmy.

Alaina Reagan (09)

"I am in grad school now at OUHSC (Oklahoma University Health Science Center)! Things have been pretty crazy since school started last August. Thankfully I was not too surprised (but no less stressed) at the workload after spending a lot of time with grad students at Vandy. I am in an interdisciplinary program and am currently doing my third rotation. If I don't choose to do an optional 4th rotation, I will decide where I want to be in March. I did my first rotation at OMRF, (Oklahoma Medical Research Foundation) a private research facility that is on campus and works closely with OU, doing cell cycle work. My second rotation was at Dean McGee Eye institute (which also works closely with OU), looking at retinal mutations/macular degeneration, etc. My current lab is actually officially part of OU and predominantly looks at the effects of brain aging."

Annie O'Steen (06)

Annie was accepted into the Physical Therapist Assistant Program at Chattanooga State.

Julie Malkowski (11)

"I have been accepted into Trevecca's PA program which starts in May, so now I am waiting to hear back from Albany's PA program which does not start until next January! I am definitely excited to get back into the routine of having classes and a set schedule... which I never thought I would say."

Julianna Bejma (11)

Julianna graduated in May 2012 with her MS in education as part of the 5+1 program here at Belmont.

Dr. Ritchie Taylor (89)

"It is wonderful to see all of the exciting things happening in the Department of Biology at Belmont. I graduated from the program in 1989. The experiences I had while attending Belmont were amazing. It is great to see that undergraduate research is continuing. Today, I am a professor at Western Kentucky University because of the research opportunities I had as an undergraduate. Thank you so much."

Current Students Update

Crystal LeBlanc (Biology) was accepted to the RiSE Program at Rutgers University. She will be spending the summer doing research in biology, chemistry and/or engineering.

Erin Pitts (ENV) was accepted to the Byron Fellowship program this summer in Indiana. The Byron Fellowship is an interdisciplinary course in sustainable communities that engages participants through place-based learning.

Kim Harris will graduate from the **Medical Technology Program** in August. Kim is the first student in many years to do this.

Amy Nesius (Biology) was inducted into Alpha Chi this spring. Alpha Chi membership is the highest academic honor awarded by Belmont University. It is an international, interdisciplinary honors society open to junior and senior university students who rank in the top 10 percent of their class.

Libby Thorndike (Biology) was accepted into the ETSU Medical Horizons program. Libby will be shadowing doctors and working in the clinic for the month of June.

Andrey Borisyuk (Neuroscience) has been awarded a RISE internship for this summer. Andrey will be attending RWTH Aachen University in Germany. RISE is a summer internship program for undergrads from the United States, Canada and the UK in the fields of biology, chemistry, physics, earth sciences and engineering.

Samara Berhane (Biology) will be at the University of California in San Diego under the Medical Science Training Program from June 25, 2012 - August 17, 2012.

Biology Department

Dr. Robert T. Grammer, Professor

Dr. C. Steven Murphree, Professor

Dr. Lori L. McGrew, Associate Professor, ICORD Fellow and Neuroscience Coordinator

Dr. John Niedzwiecki, Assistant Professor and Gulf Coast Research Lab Coordinator

Dr. Darlene Panvini, Associate Professor, Environmental Science Coordinator and Chair

Dr. D. Nicholas Ragsdale, Associate Professor and Pre-Health Advisor

Dr. Jennifer T. Thomas, Associate Professor

Ms. Terri Templeman, Administrative Assistant

Mr. Ray Seely, Laboratory Manager and Chemical Hygiene Officer

Contact Us!

- Have any comments about the newsletter or the Department?
- An alum with an update on activities?
- Like further information about the Department, its offerings or activities?

Please contact us by one of the following e-mail addresses or by postal service.

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Dr. Darlene Panvini, Chair, darlene.panvini@belmont.edu

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We're on Facebook! Join us at Serotonin Helix

**Check out our website:
www.belmont.edu/biology**

Biology Alumni Update

We want to hear from you! Please take a moment to fill out the information below and send to us.

Name _____ Graduation Year _____

Address _____

City _____ State _____ Zip Code _____ Phone _____

Email address _____

Employment _____ Title _____

Recent promotion, honor, award, family activity? _____

