



BioSynthesis

Volume 11, Issue 1 (May 2012)

BioSynthesis On-Line: <http://departments.bloomu.edu/biology/>

Important Dates

MAY 7—11: Free Coffee and Do-nuts, morning, 178 HSC.

MAY 11: Graduate Commencement, 6 p.m., Haas Center.

MAY 12: CoST Undergraduate Commencement, 3 p.m., Academic Quad.

MAY 21: Summer College, Sessions 1 and 2 begin.

JULY 2: Summer College, Session 3 begins

AUG 27: First Day of classes, Fall Semester 2012.



Look what's inside:

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Semester Reaches a Busy End!



Spring semester 2012 has been an exciting one, packed with events and activities from the first day of class in January up to the last day of finals in May. Students, faculty, and staff in the Department of Biological and Allied Health Sciences have been incredibly busy this semester. The BAHS Club hosted speakers on academic internships and applying to clinical programs, conducted fundraisers, engaged in community service efforts for the clean-up of Fishing Creek, and staffed a booth at the Renaissance Jamboree to support the SPCA. Pre-med students tried their hand at writing resumes and personal statements at our annual Pre-Med March Madness. Tri-Beta, the biology honor society, sponsored a regional convention that brought over 80 students and faculty from 11 institutions and 4 states to campus for a day of research presentations and workshops. Over 200 BAHS students checked out Career Day, an event sponsored by the College of Science and Technology featured alumni who shared their experiences on the job. Record attendance was noted at the 21st annual Health Sciences Symposium. This year's theme "Brain Enhancement: Personal and Societal Implications" provided the forum for a keynote speaker, wellness fair, concurrent paper sessions, and undergraduate and graduate student posters. What a semester!

We also celebrated our students' outstanding academic achievements. BAHS honor graduates and scholarship winners were saluted at the recent College of Science and Technology Honor Symposium. (photo above). The research labs were also humming. Students and faculty presented their research at conferences held by groups such as the Society for Comparative and Integrative Biology, Tri-Beta, and the Pennsylvania Academy of Sciences. Teams of 14 student researchers and 10 faculty members presented talks and posters at the recent College of Science and Technology Research Day. Medical Imaging and Clinical Lab Science students completed the final stages of the clinical application process and are looking forward to their year in the hospital. Seniors prepare for graduation and their next step pursuing a career, graduate school, or professional school. Graduate students have been busy polishing their thesis proposals and presentations. And faculty have been busy juggling it all! As a very busy semester winds down, it is a time to reflect and celebrate on a job well done. Please take a moment to read and enjoy. Best wishes to those who are moving on through graduation or into clinical programs.



BAHS Summer College Offerings

Session 2, six weeks, May 21 to June 29, 2012

Course Offerings: Cells, Genes, and Molecules (non-majors) (Biology 100), Concepts in Biology 1 (Biology 114), Anatomy and Physiology 1 (Biology 173), Microbiology (Biology 242), Immunology (Biology 343), Ecology (Biology 351).

Session 3, six weeks, July 2 to August 10, 2012

Course Offerings: Human Biology (Biology 101); Anatomy & Physiology 2 (Biology 174), Introduction to Nutrition (Biology 205), Medical Terminology (Biology 208), Field Zoology (Biology 252). Field Zoology is a 3 week course offered July 2 to July 20, 2012.

Attention BS/BA Biology majors: Ecology will NOT be offered in the spring of 2013. If you are planning on graduating in spring 2013, you must take ecology either summer or fall 2012.

Summer Chemistry and Physics Offerings

The Department at Chemistry and Biochemistry plans to offer the following courses this summer: Introductory Chemistry (Chem 101) and Chemistry for the Sciences II (Chem 116). The Physics Department will offer Intro. Physics I (Physics 111) during Session II and Intro. Physics II (Physics 112) during Session 3.



SEMESTER AT THE SHORE: Summer Classes at the Marine Science Center

Summer classes at the Marine Science Center are a great way to both take some unique courses not offered on campus and get ahead or catch up on number of credits earned, depending on your situation. **Courses at the MSC are taught by faculty from different colleges of the PA State System of Higher Education but ALL COURSES will transfer to BU WITH THE LETTER GRADE.** Courses run three weeks and meet morning, afternoon, and sometimes evening as needed for the course content. You would only take one course in three weeks.

New Facilities at the MSC: new dormitories and classrooms at the MSC are comfortable and air-conditioned.

Science Courses: Most of the science courses at the MSC are not offered at BU and many count as biology electives. Be sure to check with your academic advisor regarding the appropriateness of a class to your particular curriculum! Here is your chance to take courses such as Marine Biology, Marine Invertebrates, Coral Reef Ecology, Marine Ecology, Biological Oceanography and Estuarine Ecology, Molecular Biotechnology and Marine Ichthyology.

Need more information? Please contact Drs. Klinger (tklinger@bloomu.edu) or Hranitz (jhranitz@bloomu.edu) for more information. Directions for signing up for MSC courses can be found at the BU registrar's office: <http://www.bloomu.edu/summer/msc/> Complete information on the MSC can be found at their website: <http://msconsortium.org/#/registration-information/4536272159>

FALL SEMESTER 2012 Electives

Elective offerings for fall semester 2012 are:

Biology 222 Comparative Biology of Plants, Dr. Chamuris

Biology 253 Freshwater Biology, Dr. Rier

Biology 233 Human Genetics, Dr. Hansen

Biology 332 Genetics, Dr. Ardizzi

Biology 333 Molecular Biology, Dr. Davis

Biology 334 Molecular Biology Lab, Dr. Brubaker

Biology 343 Immunology, Dr. Brubaker

Biology 364 Vertebrate Histology, Dr. Hranitz

Biology 431 Developmental Biology, Dr. Hansen

Biology 474 Human Physiology, Dr. Hansen

Biology 478 Microbial Physiology, Dr. Kipe-Nolt

Biology 489 Current Topics in Biology (Cancer Cell Signaling)

Dr. Brubaker Note: you may only take Current Topics twice..



Please contact the course instructor or your academic advisor if you are unable to schedule.



Congratulations to Graduating Seniors

All the best to our graduating seniors. We will miss you! Stay in touch and be sure to check out *Biosynthesis* online.

SPRING 2012

Jane Armitage, B.S. Health Sciences, pre-physical therapy
 David Bower, B.S. Biology
 Courtney Bush, B.S. Health Sciences, pre-physical therapy
 Derick Carr, B.S. Biology, pre-medical sciences
 Marisa Cipolla, B.S. Biology
 Lauren DiBernardino, B.S. Health Sciences
 Meghan Duell, B.S. Biology
 Brandon Dunbar, B.S. Biology, pre-medical sciences
 Aaron Emick, B.A. Biology, natural history
 Nicholas Faino, B.S. Biology
 Jessica Findley, B.S. Medical Imaging
 Anthony Forman, B.S. Health Sciences
 Alysha Frederick, B.S. Health Sciences, pre-physical therapy
 Marykate Gallagher, B.S. Health Sciences, pre-physical therapy
 Laura Gundlach, B.S. Health Sciences, pre-physician asst.
 Logan Hathaway, B.S. Health Sciences, pre-physician asst.
 Charmiane Henderson, B.S. Health Sciences
 Sean Jeffreys, B.S. Biology, environmental biology
 Larissa Johnson, B.A. Biology
 Lindsay Kupferschmidt, B.S. Health Sciences, pre-phys. therapy
 Kaitlyn Leeper, B.S. Health Sciences, pre-physical therapy
 Heather Love, B.S. Health Sciences, pre-physician assistant
 Erica Meola, B.S. Health Sciences, pre-physical therapy
 Cynthia Mirra, B.S. Medical Imaging
 Stephanie Mitchem, B.S. Health Sciences, pre-physical therapy
 Michael Molesevich, B.S. Health Sciences, pre-physician asst.
 Sarah Monaco, B.S. Biology
 D. Solomon Oliver, B.S. Health Sciences, pre-physical therapy
 Carolyn Ottaunick, B.S. Biology
 William Parry, B.A. Biology
 Anna-Lee Pflomm, B.S. Medical Imaging
 Amanda Pulsifer, B.S. Biology, pre-medical sciences
 Eliza Reed, B.S. Biology, pre-medical sciences
 Joshua Reedy, B.S. Biology, pre-medical sciences
 Jenelle Romig, B.S. Health Sciences, pre-physician assistant
 Elyse Ryan, B.S. Biology
 Michael Snyder, B.S. Medical Imaging
 Lauren Sosnoski, B.S. Health Sciences, pre-physician asst.
 Erin States, B.S. Health Sciences, pre-physician assistant
 Leah Subsak, B.A. Biology
 Kamille Sullivan, B.S. Biology, pre-medical sciences
 Oran Tansey, B.A. Biology
 Cassandra Thompson, B.S. Biology, pre-medical sciences
 Phung Kim Tran, B.S. Health Sciences, pre-physician assistant
 Sabrina Wagner, B.S. Biology, molecular biology
 Michael Wechsler, B.S. Health Sciences, pre-physician asst.
 Maura Williams, B.S. Medical Imaging
 Erica Winter, B.S. Biology, molecular biology
 Amber Zeisloft, B.S. Health Sciences, pre-physician assistant

SUMMER 2012

Jessica Albright, B.S. medical imaging
 Dixie Alexander, B.S. medical imaging
 Lyndsey Bainbridge, B.S. medical imaging
 John Blew, B.S. medical imaging
 Marcy Breymier, B.S. medical imaging
 Amanda Brunsetter, B.S. Health Sciences
 Ryan Cirocco, B.S. medical imaging
 Rebecca Conrad, B.S. medical imaging
 Melissa Edmondson, B.S. medical imaging
 Alaina Egger, B.S. clinical lab science
 Sarah Fogleman, B.S. clinical lab science
 Priscilla Fuentes, B.S. medical imaging
 Karmyn Gill, B.S. medical imaging
 Julie Heimbach, B.S. medical imaging
 Amber Kolk, B.S. clinical lab science
 David Kolk, B.S. medical imaging
 Jessica Lapinsky, B.S. medical imaging
 Jacqueline Masser, B.S. medical imaging
 Ashley Mattrazzo, B.S. medical imaging
 Robert Medon, B.S. medical imaging
 Patrick Miles, B.S. Health Sciences, pre-physical therapy
 Amanda Mull, B.S. medical imaging
 Kiana Payton, B.S. Biology, pre-medical sciences
 Daniel Sietsma, B.S. clinical lab science
 Whitney Smith, B.S. medical imaging
 Sara Taylor, B.S. medical imaging
 Jessica Terpstra, B.S. medical imaging
 Christopher Vital, B.S. medical imaging
 Dreka Williams, B.S. Biology, pre-medical sciences
 Karen Wray, B.S. medical imaging

2012 Honor Graduates

Summa cum laude: **Jessica Albright, Rebecca Conrad, Brandon Dunbar, Amber Kolk**

Magna cum laude: **Meghan Duell, Alaina Egger, Marykate Gallagher, Jason Kneller, Heather Love, Sarah Monaco, Amanda Pulsifer, Lauren Sosnoski**

Cum laude: **Marisa Cipolla, Tammy Franks, Karmyn Gill, Larissa Johnson, David Kolk, Lindsay Kupferschmidt, Robert Medon, Michael Molesevich, Jenelle Romig, Sara Taylor, Maura Williams.**

Bloomsburg University Honors Program Graduates:
Meghan Duell, Brandon Dunbar.



Allied Health Updates

21st Annual Health Sciences Symposium Examines the Personal & Societal Implications of Brain Enhancement Drugs

Thanks to all of you made the 21st Annual Health Sciences Symposium a huge success. The keynote speaker, Dr. Martha Farah, a neuroscientist from the University of Pennsylvania, delivered a timely message about the impacts of brain enhancement drugs. The symposium also included undergraduate and graduate student posters, presentations, and a wellness fair. Many BAHS folks participated in the event. Shown at right are BAHS students, **Libby Shober** and **Lauren Yurick** showing off their poster on multiple sclerosis. **Dr. Coleman** presented the talk "Learning from Chickens: in vivo electrophysiological characterization of an inhibitory auditory nucleus" and **Drs. Kipe-Nolt, Venditti, and Surmacz** served on the planning committee. Special thanks to the cheerful poster hanging committee from Dr. Kipe-Nolt's Microbiology class and the amazing clean-up committee from Anatomy and Physiology II. Special thanks to **Marykate Gallagher** and **Amanda Pulsifer**, BAHS student poster judges. Congratulations to student poster winners from Anatomy and Physiology II: 2nd prize: Celiac Disease: **Monica Maggs, Haley Pollick, Courtney Wesley** and **Chelsea Sonneliter** 3rd prize: Congestive Heart Failure: **Brittane Fetterman, Samantha Fields, and Kelly Gregg**. Check out the photos from the symposium at: <http://www.flickr.com/photos/76510916@N03/sets/72157629924450935/show/>



IMPORTANT NOTICE FOR MI AND CLS STUDENTS

ALL CLS and MI students who applied for clinical programs this year must see Dr. Kipe-Nolt. This includes those who have been accepted into clinical programs and those who have not.

BAHS Students Accepted to Clinical Programs. So far, the following students have signed-up (completed paperwork) with Dr. Kipe-Nolt :

Bucks County Community College: **Kimberly Gerlach (RT)**

John Hopkins: **Lauryn Belcher (RT), Andrew Christman, (RT), Samuel Eberling (NM, CT), Rachael McColl (RT), Valerie Niedelman (S), Josh Ruffner (RT) , Moira Sheridan (S).**

College Misericordia: **Katherine Brandolino (S), Leah Gaydos (S), Ashley Kalage (S), Claey Nevin (S), Erin Roberts (S).**

Crozer Chester Medical Center: **Katherine Buchanan, (RT) Megan Murphy (RT).**

Geisinger Medical Center: **Alyssa Butkiewicz (RT), Jacob Conklin (RT), Raymond Fragassi (RT), Thomas May (RT) Ellen Meisel (RT), Amy Neitz (RT), Kaitlyn Tange (RT), Shaina Wagner (RT).**

Lackawanna College: **Kaitlin Feik (S)**

Lancaster General Hospital: **Katherine Sweger (S)**

Long Island University: **Christopher Bowman (S)**

Reading Hospital & Medical Center: **Brianne Fazio (RT), Britney Klinger (RT), Christine Michalski (RT), Sarah Pagni (RT), Heather Ressler (CLS), Samantha Snyder (RT), Samantha Snyder (RT), Danielle Strausbaugh (RT), Alexander Thai (RT)**

Thomas Jefferson University: **Melissa Montgomery (CLS), Laura Perchy (S)**

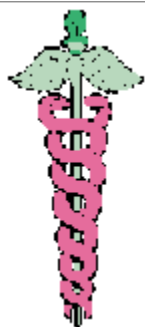
University of Pennsylvania Hospital: **Nathan Heltebridle (RT), Jena Herner (RT), Brian Marshall (RT), Sebastian Ramirez (RT), Angela Sansoni (RT), Michelle Weigle (RT), Hilary Zellner (RT)**

York Hospital: **Emily Bachel (RT), Nicole Martin (RT)**

South Hills: **Sara Lech (S)**

St. Christopher's Hospital: **Bridgette Mooney (RT); St. Francis Medical Center: Lisa Magulak (RT)**

Key: RT = Radiography; CT = computerized tomography; S = sonography; NM = nuclear medicine; CLS= Clinical Lab Science.



Pre-Professional Committee News

JAN PLAN Participants Gain an Insiders View of Medicine

Geisinger Medical Center's Jan Plan brings students into the hospital for an intensive 9-day experience that provides a first-hand look at the medical profession. Participating in Jan

Plan this year were, pictured from left to right, biology, pre-medicine majors **Kelsey Matthews**, **Jessica Willis**, and **James Redinski**. Jan Plan provides opportunities for students to interact with medical students, residents, and physicians during rounds, case study discussions, and observations while rotating through various medical departments. All participants highly recommend the Jan Plan program to any student considering a career in the medical sciences.



Pre-Med Students Catch March Madness!

Pre-medical science students headed over to the Science and Health Science Living Learning Community in Columbia Hall for three Mondays in March to attend workshops sponsored by the pre-professional committee. Pre-professional students attended sessions on the application process, resume writing, and preparing a personal statement. **Brandon West** and **Adrian Brandau** shared their first-hand experiences with the application process. Students who are applying for admission to begin professional school in Fall 2013 should see **Dr. Ardizzi** as soon as possible to begin their pre-professional portfolio. **The deadline to have all materials submitted for early consideration by the pre-professional committee is July 1, 2012.** The fall deadline is September 15, 2012. You are encouraged to apply as early as possible to maximize your chances for success. Delays affect competitiveness in the application process.

Congratulations!

The pre-professional committee sends its heartiest congratulations to students who successfully gained admission to professional schools in medical fields. You did it! Congratulations to **Adrian Brandau** and **Amy Schultz** who will attend Lake Erie College of Osteopathic Medicine, **Brandon Dunbar** who will head to the Pennsylvania College of Optometry, **Brandon West** and **David Yovik** who will attend dental school at the University of Maryland, and **James Kearns** who will attend dental school at Midwestern University. We hope to hear more good news and details when decisions are finalized.

Pre-Medical Science Club Updates

The Pre-Medical Sciences Club kept busy this semester. In addition to attending March Madness, the group had a bake sale fundraiser, hosted a speaker, and has purchased MCAT review books that are available on reserve at Andrus Library. The Pre-Medical Sciences Club recently met to elect officers for next academic year. Leading the way are President, **Jessica Willis**; Vice President, **Adam Bertino**; Secretary, **James Redinski**; Treasurer, **Ashley Cameron**; and Public Relations, **Martina Drew**. The club wishes its graduating members the best of luck in all of their future endeavors and is looking forward to the upcoming year.

Summer MCAT

The MCAT is a standardized exam required for admission to allopathic, osteopathic, and many veterinary schools. The exam assesses mastery in biology, general and organic chemistry, physics, scientific problem solving, critical thinking, and writing skills. Summer MCAT exams are offered May 12, 19, 24, 31; June 21; July 6, 14, 26, 27; August 3, 4, 10, 16, 17, and 23. To register go to: <http://www.aamc.org/students/mcat/start.htm>

Summer Vacation Ideas

The committee wishes all pre-professional students a rewarding, relaxing, and rejuvenating summer. Remember summer is a great time to job-shadow. Many students also choose to do their volunteer work during the summer. Rising juniors are reminded to submit their completed application packets to the committee by midsummer for an early fall letter.

Meet our Outstanding Seniors

Outstanding Biology Senior: Meghan Duell

Meghan Duell will graduate in May 2012 magna cum laude with a B.S. Biology, chemistry minor. Meghan conducted research on campus in BU's Honors program and traveled to Turkey and Greece as part of the REU program of the National Science Foundation. She has presented her research at the national meeting of the Society for Integrative and Comparative Biology in Salt Lake City, Utah. She received the Frank G. Brooks Award for the top oral presentation at the Northeast District 2 Convention of Tri-Beta. She has received the Continuing Honors Scholarship, the BU Trustee Award, the PASSHE Study Abroad Scholarship, and the Kozloff Undergraduate Research Award. Meghan is the president of Tri-Beta, historian of the Biology and Allied Health Sciences Club, and a member of Phi Kappa Phi. Meghan will pursue a Ph.D. in biology at Arizona State University.



Outstanding Allied Health Senior: Amber Kolk

Amber Kolk, a B.S. Health Sciences, clinical laboratory science major, will graduate summa cum laude in summer 2012. Amber is enrolled in the clinical lab science program at Williamsport Hospital. Amber, a dean's list student, is a member of Phi Kappa Phi Honor Society and Tri-Beta. Amber served her country for 8 years in the U.S. Army, including a 16-month deployment in Afghanistan. She has served as a team leader squad leader, a company level training non-commissioned officer, and a company and battalion level chemical, biological, radiological and nuclear defense noncommissioned officer. She received the Horatio Alger Veteran's Scholarship.

Heather Ressler receives James E. Parsons Scholarship in Clinical Lab Science/Microbiology

Heather Ressler, a Clinical Lab Science major, is the recipient of the James E. Parsons Scholarship. This scholarship has been established in honor of emeritus faculty member, Dr. James Parsons. Dr. Parsons taught microbiology courses and served as the Allied Health Coordinator at Bloomsburg for many years. Anyone interested in contributing to Parsons Scholarship Fund, please contact Mr. John Karas, Development Office, jkaras@bloomu.edu, 570-389-5144. Heather (pictured at right) is the president of the Biology and Allied Health Club. She is a member of Tri-Beta Honor Society and dean's list student. She has conducted research on heat stress responses in the aquatic worm *Lumbriculus variegatus* and has presented her work at the TriBeta Convention and at the annual meeting of the Pennsylvania Academy of Sciences.



BAHS Scholarships

Meredith Salmon (at left), a secondary education in biology major from Clarks Summit, PA, and **Renee Risaliti** (at right), a biology major from Ebensburg, PA, will receive BAHS scholarships for the 2012-2013 academic year. Meredith is a member of BU Honors program, a community assistant, and a member of Developing Ambitious Student Leaders, the Bloomsburg Community Orchestra, and the BHAS Club. She has an extensive record of volunteer community service activities that include assistance with flood relief, Operation Christmas Child, freshman move-in, and bingo night at the Danville State Hospital. Renee is the vice-president of the Presidential Leadership Program, a member of Developing Ambitious Student Leaders, Colleges Against Cancer, and the Pre-medical Sciences Club. She has volunteered extensively in the community. Congratulations to Meredith and Renee!

Margaret Till Physiology Award presented to Brandon Dunbar

Brandon Dunbar is this year's recipient of the Margaret Till Physiology Award. Dr. Margaret Till, faculty emerita and former BAHS chairperson, established a physiology award to be granted to a junior or senior who is currently enrolled or has successfully completed at least one senior physiology course and integrated physiology lab. Candidates wrote an essay describing the impact of physiology on their career or on their perception of biology. **Brandon Dunbar** is a B.S. Biology major, pre-medical sciences option and chemistry minor and will graduate summa cum laude. Following graduation, Brandon will enter the optometry program at the Pennsylvania College of Optometry at Salus University. In the department, Brandon served as a lab assistant in microbiology. He completed BU's Honors Program where he conducted research on the suppression of soil-borne fungal diseases in cultivated lilies under the direction of Dr. Barry Nolt. Brandon presented his research at the recent northeast district convention of Tri-Beta receiving second prize in the poster division. Brandon has been inducted into Phi Kappa Phi as a junior and received the organization's Outstanding Freshman Award. Brandon is the treasurer of Tri-Beta Biology Honor Society, a recipient of a Board of Governor's Scholarship, and is a member of the pre-medical sciences club and Developing Ambitious Student Leaders. His community service activities include volunteer work at the Bloomsburg Theater Ensemble, Relay for Life, Habitat for Humanity, and AGAPE.



BAHS students inducted into Phi Kappa Phi



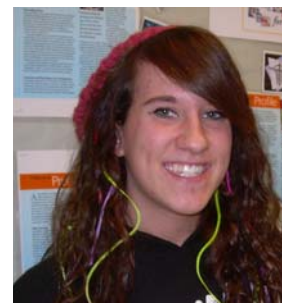
Phi Kappa Phi is the nation's oldest, largest, and most selective honor society that recognizes and promotes academic achievement in all fields of higher education. Only the top 7.5% of juniors and the top 10% of seniors are eligible to join the society. The following BAHS students were inducted on April 15 at a ceremony attended by faculty, administrators, and family members: **Gabriel Barrile, Brittany Carper, Robert Dorosky, Marykate Gallagher, Jason Kneller, Lindsey Kupferschmidt, Heather Love, Kelsey Matthews, Kaitlynn Nale, James Redinski, Renee Risaliti, and Stephen Taylor.** Meghan Duell was nominated to represent the chapter in the Phi Kappa Phi National graduate fellowship competition. BAHS students who were inducted previously into Phi Kappa Phi include: **Jessica Albright, Meghan Duell, Brandon Dunbar, Alaina Egger, Larissa Johnson, Amber Kolk, Sarah Monaco, Amanda Pulsifer, Lauren Sosnoski, and Ryan Dorkoski.**

BAHS Scholar Athletes Recognized

Six BAHS students were among those honored at the recent Scholar-Athlete Luncheon for their excellence on the field, in the pool, on the track, and in the class room. Congratulations to **Kelsey Harm**, a health science, pre-physical therapy major and a member of the cross country and track team; **Shawn Smith**, a pre-pharmacy student and football team member; **Lindsay Kupferschmidt**, a health science, pre-physical therapy major and lacrosse team member; **Amber Shifflett**, a health sciences, pre-physician assistant major and lacrosse player; **Jacque Glaser**, a health sciences, pre-physical therapy major and member of the swim team; and **Bobby Turner**, a biology major and member of the track and field team. Congratulations to all our scholar-athletes!

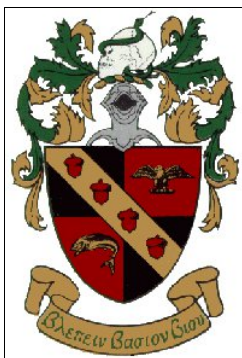
James E. Cole Scholarship Winner Announced

Jennifer Sabin (at right) is the recipient of the James Cole Scholarship. Dr. Cole is a retired professor who taught the freshmen biology course for majors for many years, served as department chairperson and allied health coordinator, and was instrumental in developing allied health programs at BU. Jennifer is a medical imaging major from Montgomery, PA. She is the president of the Health Occupation Students of America where she has organized fundraisers for sick children, promoted disease awareness, assisted with blood drives, and, spread some cheer in nursing homes. She is a member of the Helping Others Club and participates in the Social Justice and Sustainability Living Learning Community. Congratulations Jennifer!



Who's Who?

Selection to *Who's Who Among American Students in Colleges and Universities* is an honor based on scholarship, leadership, and service. BAHS students selected for inclusion this year include: **Courtney Bush, Brittany Carper, Leslie Cope, Darrin Doran, Meghan Duell, Brandon Dunbar, Alaina Egger, Marykate Gallagher, Charmiane Henderson, Heather Love, Brian Marshall, Jr., Michael Molesevich, Sarah Monaco, Samantha Oakes, Eliza Reed, Heather Ressler, Libby Shoer, and Cassaundra Thomson.**



Tri-Beta Spring Happenings

Tri-Beta, the biology honor society, had an extremely busy and productive semester. The group continued weekly tutoring sessions for students in introductory biology courses at ABLE. Thanks to all Tri-Beta members who volunteered their time to tutor. Wasn't it fun to revisit some of those good ol' topics like osmosis, metabolism, and protein synthesis? Tri-Beta celebrated spring with a successful bake sale fundraiser in Hartline lobby. Tri-Beta delighted youngsters in the Academic Quad during "Bloomasaurus", the dinosaur themed carnival for Siblings' and Children's Weekend. A group of enthusiastic volunteers provided a "Day as a Dinosaur" that included a "bone dig," a dinosaur walk, foraging, and even an almost working volcano. Tri-Beta received first prize for best booth at the Carnival! Congratulations to the many who participated in making "Walter", blowing up palm trees, building volcanos, and playing in sandboxes!

Tri-Beta sponsored a reception for graduating seniors and graduate students that included a slide show, banner, prizes, and plenty of food. Check out the photos on the next page. Tri-Beta will continue their "Free Coffee and Donut Fest" during final exams to help wake everyone up and to relieve the stress! Please stop by the biology conference room (178 Hartline).

All Tri-Beta members are reminded to pick up their honor cord for graduation from Dr. Surmacz. T-shirts, featuring a "Find Your Locus" theme, will be available for pick up during Finals Week. Please check your e-mail for information. Special thanks to our wonderful group of outgoing officers **Meghan Duell, Heather Love, Marykate Gallagher, Brandon Dunbar, and Sarah Monaco**. Leading Tri-Beta next year are President, **Steve Taylor**; Vice-Pres., **Jessica Willis**; Secretary: **Jessica Fisher**; Historian: **James Redinski** and Treasurer, **Steve Paliswiat**.

For more information about Tri-Beta, check out the bulletin boards opposite 99 Hartline, the national organization's website <http://orgs.bloomu.edu/betabeta> or our local chapter's Facebook page. Membership invitations to juniors and seniors will be sent by the end of September 2012.

Tri-Beta hosts

Northeast District Convention

Bloomburg University was the site of the 2012 Northeast District 2 of Tri-Beta. The meeting included over 80 participants from 13 schools in 4 states. Participating schools were: Bloomsburg University, Cabrini College, Drew University, Elizabethtown College, Elmyra College, Lincoln University, Monmouth University, Moravian College, Otr Dame of Maryland University, Stevenson University, Ursinus College, The College of New Jersey, and Wilkes University. The meeting featured 10 oral presentations and 20 poster presentations by Tri-Beta members on topics ranging from ecology to molecular biology. The keynote address, *CSI: Ancient Egypt*, was delivered by Stephen R. Phillips, Ph.D., Research Assistant, Egyptian Section, University of Pennsylvania Museum of Archaeology and Anthropology, Philadelphia, PA. A special workshop was held for students on *How to Succeed in Graduate or Medical School*. The workshop was led by **Dr. Coleman** and featured BAHS alumni **Jason Nolt** and **Laura McCourt** as panelists. Jason and Laura are currently enrolled at Philadelphia College of Osteopathic Medicine. Special thanks to the BAHS team of 11 faculty members and 30 students who made this happen!



We saw you at..... Bloomasaurus

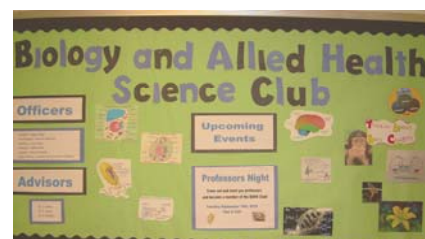


Send-off for Graduating Seniors and Graduate Students



BAHS Club

The BAHS Club invites everyone to get involved in the club next academic year. The group will be rewriting the constitution over the summer and are hoping to restart trips next year. Leading the club will be: President, **Stephen Paliswiat**; Vice President, **Heather Kinney**; Treasurer, **Katrina Rohr**; Public Relations, **Jeff Daily** and **Amanda Naugle**; Historian, **Katrina Conrad**. **Drs. Hranitz, Corbin, and Brubaker** are the club's advisers.





Spotlight on BAHS Research

Pennsylvania Academy of Science Conference at Cedar Crest College



BAHS sent an enthusiastic contingent to the Pennsylvania Academy of Science meeting in late March to meet with scientists from across the state and to present research results. In attendance were: students **Andrew Ackerman, Brandon Gray, Lauren Lowenberger, Diana Pierce, Heather Ressler, and Cassandra Thompson** and Drs. **Hess, Corbin, Fallahian, and Surmacz**. The groups take a moment from the action to pose at Crest College, the host institution. The following talks and posters were presented:

In vitro effects of low-dose ionizing radiation on primary skin cells. **Ackerman, Andrew*, Kelly N. Barko, Naz Afarin Fallahian, and Angela R. Hess.**

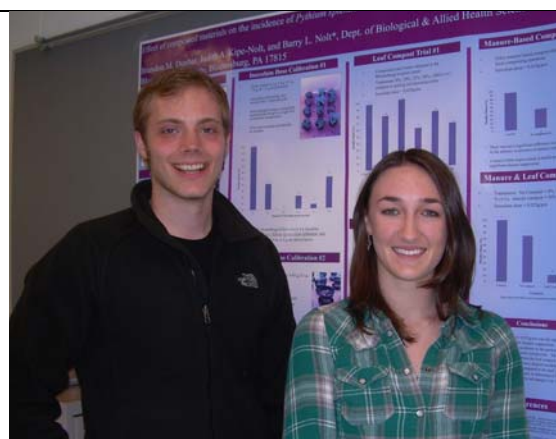
Eph receptor and ephrin ligand expression in human keratinocytes, melanocytes and melanoma cell lines. **Pierce, Diana H.* and Angela R. Hess.**

Morphology, Bite-Force, and Bill Closing Velocity in North American Birds. **Lowenberger, Lauren K.*, Brandon L. Gray, and Clay E. Corbin.**

*Protease Inhibitors Reduce Degradation of the Cellular Stress Marker HSP70 in *Lumbricus variegatus*.* **Thompson, Cassandra*, Heather Ressler*, Cynthia Surmacz, and John M. Hranitz.**

BAHS Students win research awards at Tri-Beta Convention

Meghan Duell, a senior biology major won the Frank G. Brooks Award, the first place prize in the oral presentation category at the Northeast District 2 Tri-Beta Convention. Meghan won a travel grant to compete at the national Tri-Beta Convention held in Puerto Rico in May. Her presentation was entitled "Honeybee Stress: Behavioral & Physiological Implications of Flumethrin Treatment." **Dr. Hranitz** is her mentor. **Brandon Dunbar**, a senior biology major, received second prize in the poster category. He presented "Effect of Composted Materials on the Incidence of *Pythium splendans* induced-root rot disease." His mentors are **Drs. Nolt and Kipe-Nolt**,



BAHS hosts Visiting Scholar

BAHS welcomed **Dr. Nazimye Güneş**, a veterinary biochemist from the Beekeeping Development-Application and Research Center at Uludağ University in Turkey. Dr. Güneş spent part of spring semester working in the lab with **Dr. Hranitz**. Their work involved dissecting bees' brains to observe the levels of stress protein that result from

the use of various pesticides. The ultimate goal of the project is to determine the pesticide levels that cause sublethal stresses that impairs the behavior and physiology of the bees. Honeybee populations are currently facing world-wide declines.



Dr. Hranitz Receives Research Award

Dr. John Hranitz, professor of Biological and Allied Health Sciences, was honored at the recent College of Sciences Honor Symposium for his outstanding research contributions. Dr. Hranitz was recognized for his commitment to undergraduate and graduate research, grant funding, and numerous

publications and presentations with student co-authors. Dr. Hranitz has recently received a Strategic Plan Grant for \$24,680 for initiation of a Center for Undergraduate Research and Education in Science, Technology, Engineering and Mathematics.

CoST Research Day

BAHS student and faculty research was on display at the recent College of Science and Technology Research Day in Hartline Science Center.

Tom Blass: *The cloning and characterization of anti-FRO2 antibody genes.* Mentor: **Dr. Davis**

Elisa Busada: *Avifaunal diversity of field and disturbed forest habitats.* Mentor: **Dr. Corbin**

Charmiane Henderson: *Evaluating the cytotoxic effects of novel compounds as potential spermicides.* Mentor: **Dr. Venditti** (photo: top right)

Sean Jeffreys: *Grazing and clipping induced changes in leaf silicon contents of the grass Agnostis gigantea.* Mentor: **Dr. Williams**. (photo: middle right)

Larissa Johnson: *Characterizing individual variation in HSP70 in blackworms.* Mentors: **Drs. Hranitz and Surmacz**

Keith Kinek. *Storm runoff and polyphosphate storage in periphyton communities inhibiting autotrophic and heterotrophic streams.* Mentor: **Dr. Rier**

Lauren Lowenberger and Brandan Gray: *Morphology, bite-force, and bill closing velocity in North American birds.* Mentor: **Dr. Corbin**.

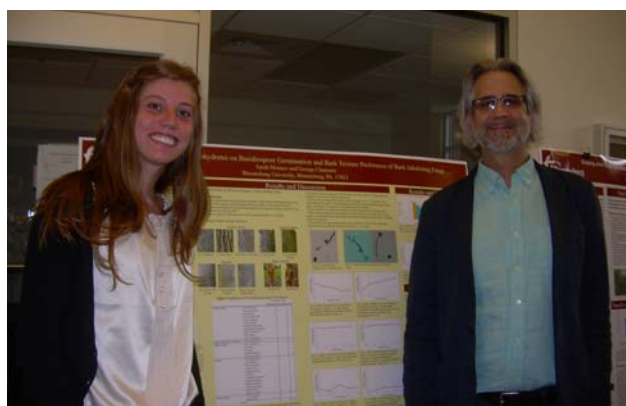
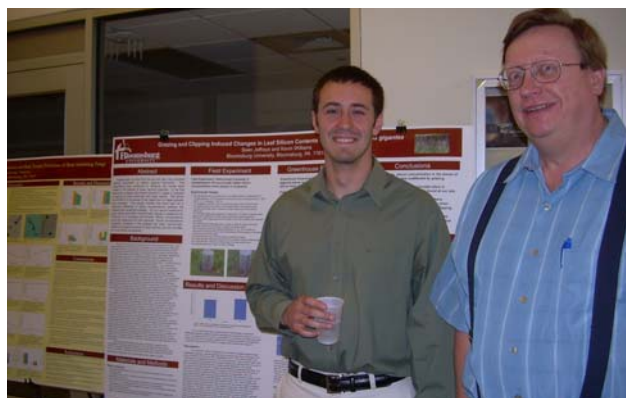
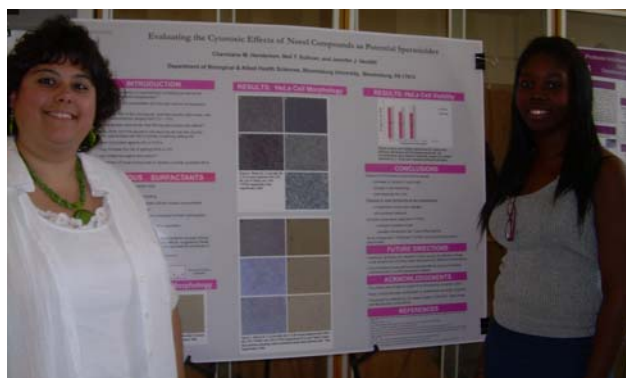
Kelsey Matthews: *Investigation of signal transduction pathways in fluconazole resistance in Candida glabrata.* Mentor: **Dr. Henry**

Sara Monaco: *Effects of exogenous carbohydrates on basidiospore germination and bark texture preference of bark-inhabiting fungi.* Mentor: **Dr. Chamuris** (photo: lower right)

Cassandra Thompson and Heather Ressler: *Protease Inhibitors reduce degradation of the cellular stress marker HSP70 in blackworms.* Mentors: **Drs. Hranitz and Surmacz**

Sabrina Wagner: *Functional analysis of a putative iron/phytosiderophore transporter from oats, Avena sativa.* Mentor: **Dr. Davis**.

Erica Winter: *Partial cloning of the Nrf2 gene from Megachile rotundata.* Mentor: **Dr. Brubaker**



Graduate Student Research

Congratulations to **Lauren Lowenberger** for successfully defending his M.S. thesis entitled: “*Morphology, bite-force, and bill closing velocity in North American birds.*” **Dr. Corbin** is her advisor.” Everyone is invited to the following:

Thesis Defenses: **Ryan Dorkoski.** *Using extracellular enzymes to monitor water quality in streams.* Thursday, May 10, 2012. 1:00 p.m. G49 HSC. Advisor: **Dr. Rier; Diana Pierce.** *Comparative expression profiles of EPH receptors and ephrine ligands in human keratinocytes, melanocytes, and melanoma cell lines.* Weds., May 16, 2012, 10:00 a.m., G38 HSC. Advisor: **Dr. Hess.**
Departmental Paper: **Tye Patchana.** *Influenza A (H5N1): Implications for Dual-Use Research & Biosecurity.* Thursday May 10 at 3:00 p.m. in HSC 157. Advisor: **Dr. Nolt.**

The following graduate students recently presented thesis proposals to the department: **Neil Sullivan** (advisor **Dr. Venditti**), **Ghaith Ibrahim** (advisor **Dr. Henry**), **Brendan Gray** (advisor **Dr. Corbin**). We look forward to hearing the results of your thesis research.



STUDENT RESEARCH GRANTS AVAILABLE

CPUB AWARD: The Commonwealth of Pennsylvania Biologists (CPUB) is awarding grants of up to \$400 to undergraduate and graduate students to fund equipment and supplies for research. The deadline is September 14, 2012. Application materials are available on the CPUB website <http://academics.sru.edu/cpub> **TRI-BETA RESEARCH GRANT:** Students who are members of Tri-Beta are eligible to apply for a student research grant. Deadline is early November. See www.tri-beta.org for more details

BAHS Alumni Share Experiences at First CoST Career Day

BAHS students recently had the opportunity to meet with alumni who have pursued careers in biology and health science. It was inspiring to learn where you can go and what you can do with a BAHS degree. Biology panelists were **Stephanie Rider**, B.S. Assistant Manager, Gleim Environmental Group (pictured at right with moderator **Dr. Corbin**), **Joseph Bernardo**, M.S., Laboratory Manager/Technical Advisor, Virology Laboratories -- Merck & Co.; **Lois O'Boyle**, M.S., Aquatic Biologist, Wildlife International; **David Kolb**, B.S., Genetic Analyst, Connective Tissue Gene Tests; and **Megan Dager**, B.S. Research Scientist, Infection Prevention, Teleflex Medical/Arrow International. Members of the Health Sciences panel moderated by **Dr. Kipe-Nolt** were: **Ronald Byerly**, PA-C, Director, Advanced Practice Council, Physician Assistant, Geisinger Health System; **Debon Kolb**, MLS (ASCP), Clinical Lab Scientist, Health Network Laboratories/Lehigh Valley Hospital; **Michael Getz**, PT, MS, Physical Therapist, Phoenix Rehabilitation and Health Services; **Susan Wade**, Diagnostic Medical Sonographer, Sunbury Community Hospital (General) and Penn State Hershey Medical Center (Maternal Fetal Medicine).



BAHS Students Moving On!

Congratulations to all of our graduating seniors and master's students. We are proud of you! Here's what some of our graduating students and recent graduates have planned. For those of you who are not certain of your plans, please send an e-mail to Dr. Surmacz in the future so we may share your good news! (csurmacz@bloomu.edu)

Courtney Bush will pursue her doctorate in physical therapy at Neumann University and will work as a therapy technician for Drayer Physical Therapy

Nicole Chinnici is an assistant swim coach at East Stroudsburg University and plans to obtain her masters in biology at ESU.

Marisa Cipolla will enter the accelerated nursing program at Johns Hopkins University.

Megan Dager will enter the physician assistant program at Shenandoah University, Virginia

Darrin Doran is employed as clinical research assistant at Geisinger Medical Center in the Dept. of Health Sciences Research. He is involved in outcomes-based research with pediatric patients, assessing what factors contribute to the efficacy of therapy and other behavioral interventions. He plans to attend medical school and pursue his interests in neurology and psychiatry.

Ryan Dorkoski plans to enter a doctoral program in botany at Ohio State University.

Meghan Duell will pursue a doctoral degree in biology at Arizona State University. She is interested in investigating how sensory perception affects behavior, specifically how olfaction influences cognition, foraging, and social behaviors in insects.

Brandon Dunbar will enter the Doctor of Optometry program at the Pennsylvania College of Optometry at Salus University.

Marykate Gallagher will enter the doctoral physical therapy program at Sacred Heart University in Connecticut.

Lindsay Kuperferschmidt will attend Drexel University to pursue her doctorate in physical therapy.

Lauren Lowenberger will intern in marine mammal training at the Clearwater Marine Aquarium in Clearwater Florida and hopes to as a marine mammal trainer, zoo keeper, or an environmental educator.

Sarah Monaco will conduct a Co-Op at Merck for in vivo pharmacology research and then will attend Drexel's masters program in Neuroscience in the fall.

Kiana Payton plans to go to graduate school at Bloomsburg University.

Diana Pierce will enter the Pathologist Assistant program at Quinnipiac University.

Heather Ressler will attend a clinical laboratory science program at Reading Hospital and plans to marry her fiancé in April 2014. Eventually she would like to attend graduate school to get a masters in Pathology Assistant.

Lauren Sosnoski, Jenelle Romig, and Mike Molesevich will enter the physician assistant program at Lock Haven University.

Leah Subsak will pursue a doctorate in Audiology at Bloomsburg University.

Caitlin Tunkel and Justine Okuroski will enter physician assistant programs.

Sabrina Wagner is pursuing job options with the Merck company in Durham, NC as an environmental monitoring analyst.

Dreka Williams plans to take a year off to apply for optometry school.

BAHS Students head to Summer NSF-REU Programs:

Keith Kinek will investigate stream ecology and nutrient criteria in an National Science Foundation (NSF) Research Experience for Undergraduates (REU) with the Coweeta Hydrologic Laboratory and the University of Georgia.

Robert Dorosky will conduct botanical research in an NSF-REU at Texas A & M University.