PLEASE DO NOT PRINT THIS!

International Studies: SU Biology Students Travel to Iceland (Pp. 8-9)



Back (left to right): Dr. Eugene Williams, Jordan Krock, Jason Boos, Greg McNew and Ben Groves **Front**: Jon Thiel, Sabrina Kunciw, Shaun Hutchins, Brittni Rice, and Stacey Willey

ANNOUNCEMENTS AND AWARDS

Sandy Ramses, Program Management Specialist in the Biological Sciences Department, has been selected as the Salisbury University Employee of the Month for September 2010! Sandy and SU President Dr. Janet Dudley-Eshbach are shown right.

Photo by Kathy Pusey.



Check out the new Master of Science degree in Applied Biology! http://www.salisbury.edu/biology/MS_Applied_Biology.html

This fall semester, after many years of planning, the Department of Biological Sciences began its Masters Degree program in Applied Biology, and the department now has its first graduate students! The three full-time graduate students are Leo Cabrera, Roie Cordrey, and Kyle Wilhite (shown below); Sean McIntyre and Aeli Hartmann are part-time students in the program. Leo will be conducting research with Dr. Les Erickson on identifying and characterizing protein:protein interactions involving the Arabidopsis p80 protein. He is also a teaching assistant (TA) for BIOL 216. Roie is doing research with Dr. Mark Holland on microbial symbionts of Eelgrass, and she is a TA for BIOL 215. Kyle is doing research on frog behavior with Dr. Ryan Taylor, and is he a TA for BIOL 101.







Left to right: LeoCabrero, Roie Cordrey, and Kyle Wilhite.

The MS degree in Applied Biology addresses the growing need for a technologically trained workforce with special skills in laboratory, biotechnology and environmental science. The curriculum emphasizes skills development in a research setting and relates practical experiences to a strong background in theory. An optional thesis and an accelerated "4+1" MS option for advanced undergraduates will allow highly qualified SU Biology majors to apply some of the courses they take in their senior year towards their graduate degree.

For more information about the program and an application, please contact Dr. Mark Holland the Biology Graduate Program Director (<u>MAHOLLAND@salisbury.edu</u>).

Check out the Alpha Omega Biology Club!

AO is a social and service club open to all students. Past activities have included dog walking for the Humane Society, beach cleanups, tutoring, and biology department socials. If you're interested in joining, please contact the club advisor, Dr. Emmert, via email (<u>eaemmert@salisbury.edu</u>) for more information.

ANNOUNCEMENTS AND AWARDS cont.

Lauren Brenneman (SU Dual Degree graduate, 2010) was named Capital Athletic Conference Softball Player of the Year.

Justin McGrath (SU Biology Graduate, 2010) was selected as the 2010 Capital Athletic Conference Co-Male Scholar Athlete of the Year.

Dr. Ellen Lawler was recently recognized by a Certificate of Appreciation from the Ward Museum for her contributions to the museum over the past year. These include writing text and providing photographs for the museum's nature trail brochure, researching and writing the interpretations for their current exhibit, "Birds of the Louisiana Coast", leading bird walks and serving on the museum's education committee.

Dr. Miriel (Chair of the Medical Careers Society) raised money for The Relay for Life.



The following SU graduates were accepted into Health Professions graduate programs:

Matthew Balish, Pharmacy (UMES); Kimberly Bowen, Pharmacy (Maryland); Donald D'Aquila, Pharmacy (UMES and St. Georges); Sharon Esonu, Pharmacy (Howard); Michael Gessaman, Pharmacy (UMES); Zach Haupt, Medicine (Maryland); Melissa Kellner, Occupational Therapy (Towson); Ashley Lawrence, Pharmacy (UMES); Cara Montesano, Physical Therapy (New York); Matthew Ng, Medicine (Rosalind-Franklin); Michael Palmer, Physical Therapy (UMES); James Park, Pharmacy (UMES); Thomas Pefok, Medicine (Ross); Brandon Phillips, Pharmacy/PhD Dual Program (Maryland); Keith Polizois, Dentistry (Univ Florida, Indiana Univ, UMDNJ, and Nova Southwestern); Stephanie Pollitt, Physical Therapy (UMES); Steven Swann, Physical Therapy (UMES); Kellie Washington, Dentistry (Maryland)

Biology and Chemistry Seminar Series

All are welcome. Seminars are held on Thursdays at 4:00 pm in Henson 243. Please join us for cookies and coffee at 3:30 in Henson 213. A full list of this semester's seminar speakers is available on the following website: <u>http://faculty.salisbury.edu/~rlgutberlet/biology_seminars.html</u>

Salisbury University environmental studies majors **Emily Thorpe** and **Jonné Woodard** will have a rare chance to study alongside some of the most knowledgeable environmental scientists in the United States as recipients of the Environmental Protection Agency's 2010 Greater Research Opportunity fellowships. Full story: <u>http://www.salisbury.edu/newsevents/fullstoryview.asp?id=4299</u>

UPCOMING EVENTS



The Ward Museum 909 South Schumaker Drive Salisbury, MD 21804 410.742.4988 Hours: Mon-Sat. 10a.m.-5p.m. Sun. Noon-5p.m.

Visit <u>MapQuest</u> for detailed directions to The Museum from your location.

Ward Museum Activities

- Woodcarving Club (Ongoing): First and third Tuesdays, 4-7 p.m. Carve, learn, share and socialize at the Ward Museum's new Woodcarving Club. Club participants must be current members of the museum.
- **Bird Banding Demonstrations (Ongoing):** First Saturday of Each Month, 9-11 a.m. Join Ward Museum staff at The Nature Conservancy's Nassawango Creek Nature Preserve to see songbirds being banded for scientific study. Participants will see professionals capture, process and band songbirds. Pre-registration is required.
- **Discovering the Domestic Arts of Maryland's Eastern Shore:** Through September 26 Inspired by folklore research done through the Ward Museum's Lower Shore Traditions program, this exhibit reveals a rich tradition of domestic activities on the Eastern Shore, including quilting, knitting, spinning, and beekeeping.
- Family Nature Club (Canoeing): September 18; (Hiking): October 16 All outdoor gear is provided; just show up and experience time outdoors with your friends and family. Enroll by the month or for the year. Space limited. Registration required. (*Member\$20, Nonmember\$25 per family unit per outing*)
- **Hunting and Trapping:** September 21 Learn how Delmarva's unique hunting, trapping and eating traditions have influenced our economy. Find out how Eastern Shore decoys were used in hunting and trapping traditions and later became collectors' items and works of art. This special event will be held at the Deal Island Senior Center at 10:00 a.m.
- Gyotaku Fish Printing: September 21

This class allows participants to learn the history and technique of Japanese fish printing using saltwater and local coastal fish models. Seniors will create a print and bring their art work home at the conclusion of this session. This special event will be held at the Deal Island Senior Center at 10:45 a.m.

• Gyotaku – Fish Printing: September 28

This class allows participants to learn the history and technique of Japanese fish printing using saltwater and local coastal fish models. Seniors will create a print and bring their art work home at the conclusion of this session. This special event will be held at the Wicomico Senior Center at 10:00 a.m.

• A New Generation of Wildfowl Carvers: September 10-November 28 The Welcome Gallery features an outstanding selection of decoys and decorative carvings created

by young artists; several of these youth have won the A. Danner Frazer award for youth carvers at the Ward World Championship Wildfowl Carving Competition.

- Homeschool Days: October 1 (1-3 p.m.); November 5 (1-3 p.m.) Children ages 5-12 enjoy a captivating lesson including a take-home craft, outdoor lesson, and interactive games and activities. Space is limited to 25 participants. Pre-registration is required. Topics vary each month. (\$5 per child).
- The Decoys of Massachusetts: October 1-January 23

The sandy coast of Massachusetts attracts many species of wildfowl. At the turn of the century, gale force nor'easters forced entire flocks over the outlying coasts of Cape Cod, providing gunners with rich hunting opportunities. Massachusetts craftsmen created decoys of a wider variety of shorebird species and forms than any other region. This exhibition showcases many species and techniques, allowing for examination of the works of both well known and unidentified carvers. **Annual Pig Roast – Reception:** October 8 4:30-6:30: The Annual Pig Roast is held in conjunction with the exhibit opening of The Decoys of Massachusetts.

• Chesapeake Wildfowl Expo: October 8-9

Friday and Saturday the parking lot of the Ward Museum becomes a market place for buy, sell and trade of antique and contemporary waterfowling items. Free appraisals of decoys available both days. Friday evening is a pig roast. Tickets for the pig roast may be purchased in advance at the museum gift shop. Saturday the Chesapeake Challenge and 'Old' Decoy Competitions are held along with carving demonstrations, and children programs.

Catching Shadows: Tintype Portraits and Recorded . Voices of Native Americans on Maryland's Eastern Shore: December 3, 2010-February 6, 2011 Reception: December 3, 5-7 p.m. In the 19th century, Native Americans called the white men's large cameras "shadow catchers." Photographer Anne Nielsen and oral historian Marc Dykeman combine their talents to present a collection of images and recordings that link the past and present. The Nause Waiwash, Accohanock, Pocomoke and Assateague tribes still live on Maryland's Eastern Shore, which was, until quite recently, a relatively isolated peninsula. Today's tribe members are ordinary citizens fully integrated with their local communities and engaged in all walks of life, but most are deeply committed to keeping their traditions alive.



Photo by Anne Nielsen.

OPPORTUNITIES

Environmental Protection Agency:

Science to Achieve Results (STAR) Fellowships for Graduate Environmental Study The sponsor offers graduate fellowships for master's and doctoral level students in environmentally related fields of study. The fellowship program provides up to \$42,000 per year of support. Deadline: 11/05/2010 For more information, follow the link below: <u>http://www07.grants.gov/search/search.do;jsessionid=zGP8MGGX18pCBRfpn7G2yQnlQMSZRscqpMTx</u> <u>TQHTp20GJnDSW4LL!-1941321387?oppId=57119&mode=VIEW</u>

Pasteur Foundation: Undergraduate Internship Program

Web Site: <u>http://www.pasteurfoundation.org/internships.shtml</u>

Program URL: <u>http://www.pasteurfoundation.org/documents/PasteurInternshipApp2011.pdf</u> The sponsor offers support for U.S. undergraduate students to participate in a ten-week internship program at the Institut Pasteur, to encourage students in the pursuit of a scientific career and to expose them to an international laboratory experience. Deadline(s): 12/10/2010

Mayo Graduate School: Molecular Pharmacology & Experimental Therapeutics Ph.D. Program Web Site: <u>http://www.mayo.edu/mgs/mpet.html</u>

During the first two years students complete didactic course work required for a Ph.D. The core curriculum courses provide a broad foundation of knowledge needed to interpret current research findings and successfully perform laboratory research. Additional classes focus on the basic principles of drug action and metabolism and the rapidly evolving concepts of receptor and signal transduction mechanisms relevant to pharmacology and all of biology. The most important part of the Ph.D. program is thesis research leading to a significant contribution to the body of scientific knowledge. Deadline(s): 12/01/2010

Center for Plant Conservation: Catherine H. Beattie Fellowship

Program URL: http://www.centerforplantconservation.org/beattie.html

Each year, the grant enables a graduate student in biology, horticulture, or a related field to conduct research on a rare or endangered U.S. plant. Preference is given to students focusing on the endangered flora of the Carolinas or the southeastern United States. Deadline(s): 11/30/2010

The Garden Club of America

The Garden Club of America offers a wide range of excellent scholarships and fellowships. In 2010, 50 students benefited from these diverse offerings. Check out their website at <u>http://www.gcamerica.org</u> for a complete updated list.

M.Sc. position - Raspberry pollination in Algonquin Park: Department of Biology at Trent University We are looking for a M.Sc. student to participate in a project investigating ecological interactions between plants and pollinators. The project will involve an examination of the effects of pollinator diversity and abundance on patterns of fruit production in wild raspberry (*Rubus strigosus*). Previous field experience is required, and a background in plant and/or pollinator ecology is preferred. Basic skills in plant and insect identification are also desired. The student will be supported by a combination of research funding and teaching assistantships. Send applications by email to Marcel Dorken (<u>marceldorken@trentu.ca</u>) or Erica Nol (<u>enol@trentu.ca</u>). In the application, include a letter outlining your suitability for the position, a CV, and contact details for three referees. This position is available in May 2011.

FEATURED FACULTY DR. AARON HOGUE



Courses taught at SU: Human Anatomy and Physiology I (Biol 215), Mammalogy (Biol 305), Comparative Anatomy (Biol 313), Biology of the Vertebrates (Biol 320), Research in Biology (Biol 415 & 416), Readings in Biology (Biol 420)

Research interests: While I have wide-ranging scholarly interests in mammals, conservation, and evolutionary biology, my research primarily focuses on the connection between mammals and their environment. In the past this has included ecomorphological work exploring the adaptation of mammalian jaws and teeth to diet (see Recent Publications). More recently my students and I worked on Delmarva fox squirrel (DFS) conservation. DFS formerly lived throughout the Delmarva peninsula, but were extirpated from all but a few small pockets of land due to habitat loss. After being listed as endangered by the federal government in 1967, the U.S. Fish and Wildlife Service (USFWS) and regional natural resource departments have worked to re-establish populations in additional areas. We worked with Dr. Mike Scott (in the Department of Geography and Geosciences at SU) and the USFWS on a project attempting to identify potential DFS habitat on the lower eastern shore of Maryland. DFS are dependent on older, taller forests with thick canopy cover. We used aerial LiDAR (Light Detection And Ranging) data collected by the state of Maryland to locate and map all tall, mature forests on the lower shore. We then visited select sites to measure key characteristics of forest structure to assess their potential as DFS habitat. Our data indicate aerial LiDAR measures of canopy height and cover (two key characteristics of fox squirrel habitat) are significantly correlated with field measures of these two variables. These findings suggest that this technique can be a useful preliminary tool for locating DFS habitat.

Currently, my students and I are wrapping up two years of field work studying mammalian carnivore (carnivoran) populations across central Delmarva (Dorchester, Wicomico, Worcester, and Somerset counties). At the time of early European colonization of Delmarva, at least 10 species of carnivoran existed on the peninsula. Since that time, three were extirpated from the region (wolves, black bear, and cougar), and three others (bobcats, mink, and long-tailed weasels) have either been extirpated or exist in small isolated populations. Our lab used infrared heat and motion activated cameras, trackboxes (to collect footprints of animals walking through), and mink rafts (to find mink) to search for these and other carnivorans in forests, wetlands, and streams throughout the region. Of the 14 wild mammal species

detected in our study, not a single bobcat, mink, or long-tailed weasel was found. While we cannot say with certainty that these species are now gone from the region, we provide strong evidence that Delmarva may have lost 60% of its carnivoran biodiversity since the arrival of Europeans. Below are examples of some of the species documented by our cameras.



Citizen Science

In addition to the research outlined above, I am also involved in a five year project monitoring reptiles and amphibians in the state of Maryland. The project, called the Maryland Amphibian and Reptile Atlas (MARA), brings together state and university biologists with numerous volunteers throughout the state to determine the precise distribution of these animals. I am working with Dr. Ron Gutberlet (also in the Department of Biological Sciences) to coordinate volunteers in Wicomico county. The work we are doing now will establish a baseline distribution for these important members of the local vertebrate fauna. Future atlas work can be compared to our findings to detect significant changes or declines in species distribution. For more information about the project, visit our website: http://www.salisbury.edu/lowershoreherpatlas/.

If you are interested in participating, contact me (ashogue@salisbury.edu) or Dr. Gutberlet.

Recent Presentations & Posters

Hogue, A. and A. Yancurra. Mammalian carnivore declines on a mid-Atlantic peninsula. Ecological Society of America 95th Annual Meeting, Pittsburgh, PA – August 6, 2010

Hogue, A. Natural history of bats. Ward Museum of Wildfowl Art, Salisbury, MD - May 9, 2009.

Hogue, A., Z. Hanley and M. Scott. Aerial LiDAR as a tool for locating potential Delmarva fox squirrel habitat. Society for Conservation Biology Annual Meeting, Chattanooga, TN – July 13-18, 2008

Recent Publications

Hogue, A., and S. ZiaShakeri (2010). Molar crests and body mass as dietary indicators in marsupials. *Australian J Zoology* 58:56-68.

Hogue, A. (2008). Mandibular corpus form and its functional significance: Evidence from ecologically convergent marsupials. In: C. J. Vinyard, M. J. Ravosa & C. E. Wall (eds.), *Primate Craniofacial Function and Biology*. New York: Springer. pp. 329-356.

MEETINGS/ PRESENTATIONS/ TRAVEL

An Unforgettable Journey Through Iceland

In the cold North Atlantic Ocean, only a few miles from the Arctic Circle, the small island nation of Iceland is buffeted by brutal Arctic winds. It is a country of old Viking sagas, breathtaking natural wonders, hidden people (elves), and active volcanoes that stop the world in its tracks. Iceland is home to 300,000 inhabitants (Ocean City, MD is flooded with the same number of people every Fourth-of-July weekend). Although it is known throughout the world for its challenging language and troublesome volcanoes, I discovered a different view of the country, one beyond what news channels and history books show. This summer, I had the opportunity to travel around Iceland for 16 days during my summer study abroad program.

From June 4th through the 20th, Dr. Eugene Williams and nine students explored Iceland while completing the SU study abroad class, Biology of Arctic Fishes. The first stop of our journey was the northernmost capital in the world, Reykjavík. This cosmopolitan city blends the country's heritage and history with a very modern infrastructure. Large churches and monuments are nestled next to contemporary homes and hotels.



We used Reykjavik as a springboard for touring the Icelandic countryside because of its proximity to numerous sightseeing spots. The small size of this country allowed us to see the Southwestern region in one long day. Riding in a convoy of Subarus, we followed the one major highway of Iceland over mountains, through vast valleys, and alongside lakes. Unlike its name, Iceland's June landscape was filled with green pastures and fields of gorgeous purple and white Alaskan lupine flowers.



Valley where Hólar University College is located.



Cathedral at Hólar

HENSON SCHOOL OF SCIENCE AND TECHNOLOGY DEPARTMENT OF BIOLOGICAL SCIENCES

September 2010 Newsletter

The first stop was Lake Pingvallavatn. This lake, formed where two tectonic plates collide, has a clearly visible fault line. The water is crystal clear and the views are stunning. Since the nearby volcano, Eyjafjallajökull, had recently erupted, we drove to its base to collect ash. As we drove closer to the volcano, the landscape grew darker. Hazy dust filled the air. Our cars kicked up a choking cloud of ash, adding to the gloom surrounding the volcano. We had no problems collecting ash alongside the roads; the huge piles left there gave me a better appreciation of the power this volcano had unleashed.

Being adventurous college students, no mountain was too tall, or cave too deep for us. Since Iceland seemed to be saving its fences for sheep rather than tourists, every waterfall, cave, lava field, mountain, and boiling mud pit was open for exploration. Was it wise to stand on the edge of roaring waterfalls and explore lava caves filled with icy stalagtites with only the glow of your camera screen to light the way?... Maybe not, but these are just a few of my experiences I will never forget.

Shaun Hutchins creating an ash cloud near the volcano, Eyjafjallajökull (photo by Jason Boos)

Besides traveling the country, we had the opportunity to study Arctic fish, Iceland's natural history, and island biogeography. We also learned about speciation, and in the process, each of us became the next "Darwin." However, unlike Charles Darwin, we used fish instead of finches and cutting edge morphometrics software. At the end of a few hours work, we documented that speciation was occurring in three-spined stickleback fish living in Iceland's lakes. Having the chance to learn about new biological findings directly from the scientists who discovered them was amazing. Listening to their stories and understanding their thought processes brought to life biological topics in ways paper and ink simply cannot accomplish.

Unfortunately, the adventure had to end. We travelled back to Reykjavik for last minute souvenirs and boarded our flight back to New York. I arrived home with a bundle of dirty clothes, hundreds of pictures and lifelong memories.

Article by Sabrina Kunciw (shown right standing in front of the waterfall Seljalandsfoss).



MEETINGS/ PRESENTATIONS/ TRAVEL cont.

2010 Guerrieri Undergraduate Summer Research Program Poster Symposium

Ryan Johnston (Faculty advisor Dr. Dana Price) "Scarabaeoid Beetles (Coleoptera) of Maryland"

Sabrina Kunciw (Faculty advisor Dr. Eugene Williams) "Changes in Gene Expression for Lipid Metabolism in Chinook Salmon during Temperature Change"

Sabrina Kunciw and Dr. Eugene Williams presented at the 2010 American Physiological Society Intersociety Meeting. Global Change and Global Science: Comparative Physiology in a Changing World, Westminster CO, Aug 4-7. Poster Title: "Changes in Gene Expression for Lipid Metabolism in Chinook Salmon during Temperature Change".

Kayla Pennerman received The Kelman Scholarship and spent the summer doing a nineweek internship under Dr. Paola Veronese at North Carolina State University. There she contributed to the characterization of class II transposable elements in *Verticilium dahliae* and *V. albo-atrum* genomes using a variety of bioinformatic tools and other molecular methods. The results of the project were presented by Kayla at NC State's undergraduate summer research symposium. Kayla also presented posters on two other projects at the American Society of Plant Biologists' 2010 annual meeting in Montréal, Canada, and at the 2010 American Phytopathological Society Annual



Meeting in Charlotte, North Carolina. The American Society of Plant Biology sponsored Kayla's travel to Montréal. Kayla's research is supervised by Drs. Geleta, Briand, and Holland, here at Salisbury University and by Dr. Everts, a regional plant pathologist from University of Maryland. Kayla's professional interest is to pursue a career in the field of Plant Pathology.

May 2010, scuba diving in the Bahamas. Dr. Barse (left) finally convinced Dr. Maloof (right) to get certified as a diver.



HENSON SCHOOL OF SCIENCE AND TECHNOLOGY DEPARTMENT OF BIOLOGICAL SCIENCES

September 2010 Newsletter

Dr. Les Erickson attended the 10th International Conference on Grapevine Breeding and Genetics held at Geneva, NY.

Left: Wild grapevine from SU campus Right: Waterfall near Cornell



In June, Dr. Patti Erickson and Dr. Kim Hunter attended a 2-day bioinformatics workshop at Howard University led by Cold Spring Harbor Laboratory's DNA Learning Center (DNALC). They learned new tools, such as those found at iPlant Collaborative's DNA Subway (http://dnasubway.iplantcollaborative.org/), for analyzing and annotating plant genomic DNA sequences.

Dr. Patti Erickson also attended a separate 2-day DNALC workshop to learn about new advances in RNA interference (RNAi) techniques in the soil nematode, *C. elegans*.

Dr. Aaron Hogue and Andrew Yancurra presented at the Ecological Society of America 95th Annual Meeting, Pittsburgh, PA, August 6. Poster Title: Mammalian carnivore declines on a mid-Atlantic peninsula.

Dr. Ryan Taylor gave an invited talk as part of a symposium "Signaling in Multiple Modalities" at the Animal Behavior Society meeting at the College of William and Mary in July.

Dr. Lawler gave a talk on Bird Anatomy to the Ward Museum's Carving Club on Aug. 24.

Dr. Lawler traveled to southern New England in early summer, visiting Mystic Seaport, New Bedford, Cape Cod, the Adams's homes in Quincy and Mark Twain's home in Hartford as well as other spots in Connecticut, Rhode Island and Massachusetts. See Photos below.

Left: View of Walden Pond in Concord; Right: Humpback whale seen on a trip out of Cape Cod.





Dr. Stephen Gehnrich (Biology Department Chair) and Dr. Ron Gutberlet participated in this year's Acadia Adventure Program which takes new students to one of the most beautiful national parks in America. During the adventure, students go sea kayaking, cliff climbing, camping, whale watching, have a true Maine lobster dinner, swim in the ocean, work on a service project for the National Park Service, visit Bar Harbor, see the first sunrise in America on top of Cadillac Mountain and have a multitude of other adventures. All activities are a way for students to bond and have a common experience with other incoming students, peer leaders, SU faculty and staff members.





NATURAL HISTORY STUDY IN PERU: MAY-JUNE 2010

Dr. Ron Gutberlet of SU and Dr. Michael Harvey of Broward College did some exploring in southern Peru during late May and early June.

Exploring the cloud forest at Cielo Punku.



A leaf mantis from lower montane forest along Kepashiato-Kimbiri road.



Sunbittern along the Kepashiato-Kimbiri road.



Blue-gray Tanagers.



Yellowrumped Cacique in a nest tree.



A small frog of the genus *Phrynopus* from the high Andes.



Ameiva species (possibly undescribed) from the high Andes near Ayacucho.



Enyalioides lizard from lower montane forest along Kepashiato-Kimbiri road.



PUBLICATIONS/ARTICLES/ABSTRACTS

(*Undergraduate Student, **Masters Student, ***Emeritus Professor)

*Martin, C. M., *Guy, L. and R. C. Taylor. "Male position relative to foam nests influences female mate choice in the túngara frog, *Physalaemus pustulosus*." Journal of Herpetology. In Press. [This project was developed by our current bio student Tina Martin and former student Lisa Guy. While working in the field in Panama, Tina and Lisa noticed a pattern where male túngara frogs often position themselves next to a foam nest when producing courtship calls. They developed an experiment to test the hypothesis that this male position adjacent to a foam nest increases the probability of mate attraction.]

Taylor, R. *Scientific Knowledge and Evolutionary Biology* in "Genesis, Evolution and the Search for a Reasoned Faith"

ALUMNI

Conner Cox, who is currently in the physical therapy PhD program at UMES, received the Eastern Shore Big Brother of the Year award.

Jessica Vernon graduated from med school at The University of Texas at San Antonio and will start a residency in ObGyn at Sinai Hospital in Baltimore.

Thank you to Dr. Ron Gutberlet for his help editing this material. His work is much appreciated.

If you have announcements to add or general comments regarding the Newsletter, please contact Dr. Dana Price: <u>dlprice@salisbury.edu</u> Your opinion matters!