#### PLEASE DO NOT PRINT THIS.

### BIOLOGY DEPARTMENT LIVING-LEARNING COMMUNITY FALL 2011

The Biology Department welcomed its first **Living-Learning Community (LLC)** program in Fall 2011. Nineteen students that are first year Biology majors chose to be part of this specialized housing program. This gives them the opportunity to reside and take classes with other program participants for their entire freshman year. For more information about the Biology LLC, see page 2.

**Right:** Quasia Stokes braves the ropes





## International Field Study (BIOL 399): Honduras Winter 2012

SCUBA divers in the January 2012 Coral Reef Biology class eagerly await the announcement; "the pool is open" which means it's time to go diving! See page 11 for more information.

### ANNOUNCEMENTS AND AWARDS

The Spring 2012 Biology and Chemistry Seminar Series: http://faculty.salisbury.edu/~kxhunter/biology\_seminars.html

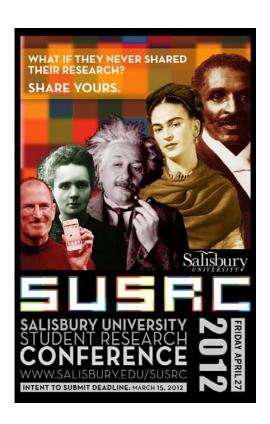
### Relay for Life of Salisbury University: May 4, 2012

The SU Biology Department is participating in Relay for Life of SU on May 4, 2012. In the past two years we have raised over \$4000. If you would like to join our team (SU Biology) or make a donation, please go to the following link: <a href="http://main.acsevents.org/site/TR?pg=entry&fr\_id=41439">http://main.acsevents.org/site/TR?pg=entry&fr\_id=41439</a> and click on "Sign Up".



## SU Student Research Conference Friday, April 27, 2012

The Salisbury University Student Research Conference (SUSRC) committee announces the 11th annual SUSRC on Friday, April 27, 2012. Presentations are organized into themed sessions, ranging from molecular biology to music composition, from education to economics. The conference culminates in a poster reception where the Outstanding Research Mentor Award is presented to a faculty member for excellence in guiding student research. The submission process involves three required steps: (1) the deadline for a student to submit her or his intent to present is March 15, (2) the faculty mentor must approve the student's work, and (3) the deadline to submit final abstracts is Sunday, April 1, 2012, by midnight. The conference is free and the public is invited. For more information visit http://www.salisbury.edu/susrc



### **Biology Department Living-Learning Community (LLC)**

The Biology Department welcomed its first Living- Learning Community (LLC) program in Fall 2011. Nineteen first year Biology majors chose to be part of this specialized housing program, which gave them the chance to reside and take specific classes with other program participants for their entire freshmen year. In Fall 2011 they completed Biology: Concepts and Methods (Dr. Reema Persad-Clem, who is also program advisor) and Introduction to Philosophy (Dr. Itir Gunes) together and during the Spring 2012 semester they are enrolled in the same sections of Zoology (Dr. Reema Persad-Clem) and Environmental Writing (Dr. Gail Samis). Residential Assistant Kate Kundratic (a junior Biology major) has been a great resource for students, providing excellent residential and academic support, including hosting pre-exam study sessions. In addition to shared residential and classroom time, students participated in several non-classroom activities together throughout the semester and with STEM LLC students (advised by Dr. Mike Bardzell). First, they kicked off the semester with an all you can eat ice-cream social in September. This was followed by a trip to the **Beyond the Limits Ropes Course** in November, where student and faculty attendees had fun challenging their comfort zones and problem-solving skills as a team. Students then voted to watch the movie Jurassic Park the week before final exams and pondered the possibilities of ancient DNA over pizza.

This Spring, Biology LLC plans include Swanfall with Tom Horton in February, a trip to the National Zoo in April and a pontoon boat trip to the estuarine ecosystem behind Assateague and Ocean City in May.

## Biology Living-Learning Community 2011: Field Trip to Assateague Island



Biology LLC students take a lunch break



Left to Right:
Dr. Reema Persad-Clem,
Quasia Stokes, Matt Bernoi,
Laurie Adler, and Briana
James

**Biology LLC Beyond the Limits Ropes Course** 



Mitchell Flores helps team members belay



Navigating the hazards of a jump rope with team members

#### **UPCOMING EVENTS**

## Washington Academy of Sciences "CAPITOL SCIENCE 2012"

Henson School members,

As I hope you all know, the Henson School of Science at Salisbury University represents the only University Student Affiliate of the Washington Academy of Sciences. With this honor comes a lot of perquisites! Among them is an automatic invitation for our students to present their research at the biennial Capitol Science conferences. This year CapSci '12 is being held March 31 and April 1 at "University Row" in DC. We have been given a slot on Sunday, April 1 (yes, April 1) for our students to have a mini-symposium. Students from all disciplines housed in the Henson school are eligible to participate. This conference is one month before our SUSRC and provides our students an excellent opportunity to "tune-up" for our student conference. Students who wish to attend CapSci while not presenting are also welcomed. Nearly every scientific discipline imaginable will be represented including cybernetics, chemistry, biology, physics, food safety, philosophy, medicine and much more. Our students will be able to partake deeply of this festival of science (so to speak).

Our plan is to get a bus (thanks to our Dean!) and make a day of it. The SU Students' time slot is just after the demonstrations of the winning robotics entries of the robotics contest. It should be a lot of fun! All science nerds will be smiling from ear to ear. For more information, go to <a href="https://www.washacadsci.org/capsci12/body.htm">www.washacadsci.org/capsci12/body.htm</a>.

Dr. Eugene Williams

### Maryland Masters Exhibit: January 27-April 8, 2012

Maryland Masters: Edwin Remsberg's Portraits of Maryland Traditions is a collection of images that reveal the unique flavor of Maryland and its distinctive community traditions that have been handed down from generation to generation. Edwin Remsberg, has captured these rituals in this series of portraits of men and women performing their individual practices, including some of the state's oldest living traditions – like foxhunting, Smith Island Cakes, boatbuilding, and Native American beadwork. For more information, visit www.marylandtraditions.org.

### **OPPORTUNITIES**

### Alabama Space Grant Consortium: Undergraduate Scholarships

E-mail: spacegrant@uah.edu

Web Site: http://www.uah.edu/ASGC/ScholarshipsFellowships.php#TeacherScholarship

The Alabama Space Grant Consortium, as a participant in the National Space Grant College and Fellowship Program, invites applicants for NASA Space Grant Undergraduate Scholarships for study in fields related to space at one of its seven member institutions. The value of award is \$1,000 for one academic year. Deadline: 03/01/2012.

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## **Brown and Caldwell: Minority Scholarship Program**

Web Site: <a href="http://brownandcaldwell.com">http://brownandcaldwell.com</a>/MinorApp.pdf
The program consists of three elements designed to increase student's interest in the environmental profession and to support them in defining career goals. Deadline: 03/01/2012

## Alabama Space Grant Consortium: Research Fellowships for Graduate Students

E-mail: spacegrant@uah.edu

Web Site: http://www.uah.edu/ASGC/ScholarshipsFellowships.php#TeacherScholarship

The Alabama Space Grant Consortium (ASGC) invites applicants for NASA Space Grant Graduate Fellowships for study in fields related to space at one of its seven member institutions. The total Space Grant funds awarded per student will not exceed \$37,000 for 12 months. Deadline: 03/01/2012

### National Garden Clubs Inc.: Scholarship Program

E-mail: headquarters@gardenclub.org;

Program URL: <a href="http://www.gardenclub.org/Youth/Scholarships.aspx">http://www.gardenclub.org/Youth/Scholarships.aspx</a>

The sponsor offers financial aid to students majoring in fields of study related to horticulture and the environment. Thirty-five advanced annual scholarships are available for the academic year of 2012-2013, each in the amount of \$3,500. Deadline: 03/01/2012

### Iowa State University: Research Experience in Molecular Biotechnology and Genomics

E-mail: lmwild@iastate.edu; Program URL: <a href="http://www.reu.iastate.edu/application\_full.html">http://www.reu.iastate.edu/application\_full.html</a>
The sponsor invites applications for the Research Experience in Molecular Biotechnology and Genomics programs from outstanding students who have finished their freshmen, sophomore or junior years and who have interest in research careers will join a selected group of active faculty conducting lab research on molecular biology, biotechnology of animals, microbes and plants. Deadline: 03/01/2012

### **Worcester Polytechnic Institute:**

### **Industrial Mathematics and Statistics Research Experiences for Undergraduates (REU)**

E-mail: rpodell@wpi.edu; Program URL: <a href="http://www.wpi.edu/academics/Depts/Math/CIMS/">http://www.wpi.edu/academics/Depts/Math/CIMS/</a>
This eight-week program offers undergraduate students the opportunity to work on mathematical and statistical problems in close collaboration with faculty and industrial sponsors. Deadline: 03/02/2012

### Oak Ridge Institute for Science and Education:

## Summer Student Research Program at the National Center for Toxicological Research

E-mail: sherry.foster@orau.gov

Program URL: http://see.orau.org/ProgramDescription.aspx?Program=10137

The sponsor provides graduate and undergraduate students opportunities to participate in research on biological effects of potentially toxic chemicals and solutions to toxicology problems that have a major impact on human health and the environment. Deadline: 03/02/2012

### Wadsworth Center: Summer Undergraduate Research Program

E-mail: reu@wadworth.org; Program URL: http://www.wadsworth.org/reu

Students are selected from colleges across the country to work for 10 weeks on independent research projects in the laboratories of Wadsworth scientists. Deadline: 03/05/2012

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### University of Wisconsin-Milwaukee: Summer Internships in Aquatic Sciences

E-mail: cglsreu@uwm.edu;

Program URL: <a href="http://home.freshwater.uwm.edu/reu/files/2011/11/REUfly12.pdf">http://home.freshwater.uwm.edu/reu/files/2011/11/REUfly12.pdf</a>

This research experience program will provide undergraduate students with laboratory and field training in aquatic science with extensive shipboard field research opportunities. The goal of this activity is to develop, through hands-on experience, future scholars to pursue Interdisciplinary research toward an understanding of the aquatic environment. Deadline: 03/05/2012

### **BioSocial Society: Small Research Grants**

E-mail: secretary@biosocsoc.org; Web Site: <a href="http://www.biosocsoc.org/">http://www.biosocsoc.org/</a>

The sponsor awards small grants to postgraduate student members of the society to help with costs associated with fieldwork or data collection on biosocial topics. Deadline: 03/19/2012

## **Morton Arboretum: Internship Programs**

Web Site: http://www.mortonarb.org/internships.html

Program URL: http://www.mortonarb.org/general-information.html

The Morton Arboretum, located in Lisle, Illinois, a suburb of Chicago, is offering three-month internships in Public Horticulture from approximately May 21, 2012 to August 17, 2012.

Applications for the 2012 internships will be accepted until the positions have been filled.

## Fordham University: Calder Summer Undergraduate Research (CSUR) NSF-REU Program

E-mail: REUatCalder@fordham.edu; Web Site: <a href="http://www.fordham.edu">http://www.fordham.edu</a>; Program URL: <a href="http://www.fordham.edu/academics/office">http://www.fordham.edu/academics/office</a> of research/research centers in/the louis calder cen/research opportuniti/index.asp

The sponsor and the Louis Calder Center Biological Station are offering paid research opportunities for undergraduate students to gain research experience in a variety of biological fields. Deadline: 03/30/2012

### **Gen Foundation: Grants Program**

E-mail: info@genfoundation.org.uk; Web Site: <a href="http://www.genfoundation.org.uk/index.html">http://www.genfoundation.org.uk/index.html</a>

Program URL: <a href="http://www.genfoundation.org.uk/apply.html">http://www.genfoundation.org.uk/apply.html</a>

SYNOPSIS: The Gen Foundation is a charitable trust, which principally provides grants to students/researchers in biological, chemical, botanical, and food sciences. Exceptional candidates in language, music, and art may also be considered. Deadline: 03/31/2012

### Montana Space Grant Consortium: Fellowship Program

E-mail: msgc@montana.edu; Web Site: <a href="http://spacegrant.montana.edu/scholarshipFellowship.html">http://spacegrant.montana.edu/scholarshipFellowship.html</a>
Program URL: <a href="http://spacegrant.montana.edu/documents/FelApp12.pdf">http://spacegrant.montana.edu/documents/FelApp12.pdf</a>

The Montana Space Grant Consortium invites applications for graduate fellowships (\$15,000 plus in-state tuition and fees) for the academic year 2012-2013. Awards will be made on a competitive basis to students enrolled in fields of study relevant to NASA's mission. Deadline: 04/02/2012

### Montana Space Grant Consortium: Undergraduate Scholarships

E-mail: msgc@montana.edu; Web Site: <a href="http://spacegrant.montana.edu/scholarshipFellowship.html">http://spacegrant.montana.edu/scholarshipFellowship.html</a>
Program URL: <a href="http://spacegrant.montana.edu/documents/SchApp12.pdf">http://spacegrant.montana.edu/documents/SchApp12.pdf</a>

The Montana Space Grant Consortium invites applications for undergraduate scholarships (\$1,500) for the academic year 2012-2013. Awards will be made on a competitive basis to students enrolled in fields of study relevant to NASA's mission. Deadline: 04/02/2012

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### **Vermont Space Grant Consortium: VSGC Undergraduate Scholarship Program**

E-mail: zeno@cems.uvm.edu; Web Site: <a href="http://www.vtspacegrant.org/scholarship.php">http://www.vtspacegrant.org/scholarship.php</a>

Program URL: <a href="http://www.vtspacegrant.org/scholarship\_factsheet.php">http://www.vtspacegrant.org/scholarship\_factsheet.php</a>

The Vermont Space Grant Consortium is pleased to announce a competition for up to ten undergraduate scholarships available for the 2012-2013 academic year. These Vermont Space Grant Scholarships, each worth \$2,500, will be awarded on the basis of academic standing, letters of recommendation, and an essay detailing career goals. Deadline: 04/13/2012

### South Dakota Ornithologists' Union: Mary E. Baylor Memorial Scholarship

E-mail: osprey@midco.net; Program URL: <a href="http://sdou.org/">http://sdou.org/</a>

The sponsor presents the Mary E. Baylor Memorial Scholarship to an undergraduate student who is in his/her junior or senior year at a South Dakota college or university, pursuing a major in biology with particular interest, in order of priority, in ornithology, ecology, wildlife management, biological education, medical practice, or medical research. Deadline: 04/15/2012

### New York University: Summer Undergraduate Research Program

E-mail: surpinfo@cns.nyu.edu; Program URL: <a href="http://www.cns.nyu.edu/undergrad/surp/">http://www.cns.nyu.edu/undergrad/surp/</a>

The Center for Neural Science hosts a summer research experience program for undergraduates with an interest in neuroscience. Students apply for positions in a ten-week summer program during which they actively participate in research projects in the laboratories of New York University science faculty. The program runs from May 29 to August 3, 2012. Deadline: 04/15/2012

### **National Water Research Institute:**

## Fellowship Program - NWRI-Southern California Salinity Coalition Fellowship

E-mail: fellow@nwri-usa.org; Web Site: <a href="http://www.nwri-usa.org/fellowship.htm">http://www.nwri-usa.org/fellowship.htm</a>

Program URL: <a href="http://www.nwri-usa.org/documents/FellowshipApplicationProcedures2012-2013.pdf">http://www.nwri-usa.org/documents/FellowshipApplicationProcedures2012-2013.pdf</a> Under the Fellowship program, NWRI awards Fellowships to graduate students in the U.S. in the areas of water resources and treatment. Students must be currently enrolled full-time in a graduate program at a U.S. university to receive the NWRI Fellowship. The sponsor will award fellowships to fulltime students in their first, second, third, or fourth years of study. Deadline: 04/25/2012

## National Water Research Institute Fellowship Program - NWRI-American Membrane Technology Association (AMTA) Fellowships for Membrane Technology

E-mail: <a href="mailto:fellow@nwri-usa.org">fellow@nwri-usa.org</a>; Web Site: <a href="http://www.nwri-usa.org/fellowship.htm">http://www.nwri-usa.org/fellowship.htm</a>

Program URL: <a href="http://www.nwri-usa.org/documents/FellowshipApplicationProcedures2012-2013.pdf">http://www.nwri-usa.org/documents/FellowshipApplicationProcedures2012-2013.pdf</a> Under the Fellowship program, NWRI awards Fellowships to graduate students in the U.S. in the areas of water resources and treatment. Students must be currently enrolled full-time in a graduate program at a U.S. university to receive the NWRI Fellowship. The sponsor will award fellowships to fulltime students in their first, second, third, or fourth years of study. Deadline: 04/25/2012

#### PUBLICATIONS/ PRESENTATIONS

**Dr. Patti Erickson** attended the hands-on BioTrac 39: Epigenetics workshop (<a href="http://www.biotrac.com/pages/Tracs/Trac39.html">http://www.biotrac.com/pages/Tracs/Trac39.html</a>) offered by the Foundation for the Advancement of Science (FAES) at the National Institutes of Health (NIH) in Bethesda during the first week of December. Dr. Erickson learned laboratory techniques for identifying genes with altered chromatin structure using chromatin immunoprecipitations (ChIP), methylation-specific, quantitative polymerase chain reaction (PCR) analysis, and methylation-specific quantitative PCR DNA array analysis. She hopes to include one of these techniques in Contemporary Genetics (Biol 440), when she teaches it again next fall.

James J. Roberts, **Paul A Grecay**, Stuart A. Ludsin, Steve A Pothoven, Henry A. Vanderploeg, and Thomas O. Hook. **In Press**. Evidence of hypoxic foraging forays by yellow perch (*Perca flavescens*) and potential consequences for prey consumption. Freshwater Biology.

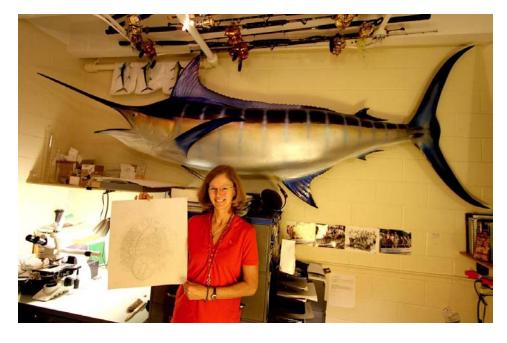
**Dr. Ellen Lawler** published "The Original Maryland Yellowthroat: A Case of Mistaken Identity" in The Maryland Yellowthroat (newsletter of the Maryland Ornithological Society), Vol. 31, No. 4, Sept./Oct. 2011.

**Dr. Ellen Lawler** gave a talk, "Henry Callister: Colonial Merchant and Amateur Naturalist" at Adkins Arboretum on Feb. 10, 2012 and will present a poster, "The Swallow Dissertation of Henry Callister" at the annual conference of the Maryland Ornithological Society on Feb. 25.

Biology Master's students **Kyle Ward** and **Amy Reese** are going to present posters describing their research at the 2012 annual meeting of the American Society of Biochemistry and Molecular Biology in San Diego, CA in April. **Steve Rigoulot**, an undergraduate biology major, was awarded a competitive travel grant from the ASBMB to attend and present his research at the same meeting.

#### **TRAVEL**

**Dr. Ann Barse** visited Dr. Ash Bullard's lab at Auburn University (fall 2011) to work on a species redescription of the monogenean *Capsala laevis* collected from a roundscale spearfish. Dr. Barse is on Sabbatical during the 2011-2012 academic year.



**Dr. Dana Price** attended a Scarab Workshop in Chanchamayo, Peru during January 2012. The workshop provided Dr. Price with an opportunity to learn identification tools, biology and ecology of Scarabs, and new field research techniques for the sampling of Scarabs. This workshop allowed Dr. Price to meet Scarab workers from all over the world. This type of workshop is implemented to promote collaborations, and implement new projects on the diversity of Scarabs in South America. Pictures from her trip are shown below. For more information about Scarabs or to see more pictures from her trip go to Dr. Price's homepage: <a href="http://faculty.salisbury.edu/~dlprice/">http://faculty.salisbury.edu/~dlprice/</a>.



Blacklighting



Museo De Historio Natural



Field Lab



Fundo Genova Field Site

### International Field Study (BIOL 399): Coral Reef Biology

The 12th Coral Reef Biology class worked very hard digesting 13 peer-reviewed articles about coral reef ecosystems the week prior to travel. January 7th, we arrived on Roatan Island in the Bay Islands of Honduras and headed to the Roatan Institute for Marine Science to experience what we read about by literally diving into the ecosystem. In addition to daily lectures about tropical reef organisms, we experienced a night dive in the inky waters with zooplankton swarming around our dive lights and flashes of bioluminescent organisms around our waving arms. We snorkeled around mangrove roots with juvenile barracudas and explored the back reef where we collected and observed [and later released] a diverse collection of invertebrates that inhabit these protected waters. We saw pilot whales, hawksbill and green sea turtles, fish cleaning stations, corals both healthy and devastated by disease and sedimentation, and invasive lionfish. We swam with captive bottlenose dolphins, we listened to the noises of the reef that are the attractant cues for juvenile fishes and coral larvae to settle on the reef. Much was learned and a good time was had by all! SCUBA certification is a new prerequisite for future classes. If you are interested in learning more about this winter class, email Dr. Ann Barse.





Study time



Examining specimens gathered during a dive

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### **ALUMNI**

**Jocelyn Andersen**, 2005 Dual Degree graduate, married her college sweetheart in September. She works as an Environmental Educator with the Chesapeake Bay Foundation, and she recently left her position at the Karen Noonan Center (surrounded by the Blackwater National Wildlife Refuge) for a position as manager of the CBF Baltimore Harbor Program. Jocelyn writes, "I am enjoying the opportunity to share the beauty and challenges of the Patapsco River and the Bay with inner city youth, college students, and teachers. I use a YSI Sonde water quality instrument and graphing program on a regular basis with my AP environmental science students. I recently became one of the first Certified Environmental Educators in Maryland through the Maryland Association of Environmental Outdoor Educators (MAEOE) certification process."

**Emily Seldomridge**, 2007 Dual Degree graduate, is planning to defend her PhD in the Geography Department at UM College Park in April. She will have completed a MS and PhD in 5 years, with a number of publications, including 3 first-author pubs. from the PhD work with a 4<sup>th</sup> on the way. She just accepted the position of Lake Superior National Estuarine Research Reserve Monitoring Coordinator in Wisconsin, and she is also a finalist for a Fulbright fellowship.

If you have announcements to add or general comments regarding the Newsletter, please email <a href="mailto:dlprice@salisbury.edu">dlprice@salisbury.edu</a>. Your opinion matters!

Editor: Dr. Dana Price

Coeditor: Dr. Ronald Gutberlet