#### **INTERNATIONAL STUDIES**



Ann Barse (Director of Coral Reef Biology) and her students BIOL 399/570 – International Studies in Honduras - See page 4 for more information. Photo by Keota Silaphone

#### **ANNOUNCEMENTS**

#### Salisbury University Student Research Conference

The Salisbury University Student Research Conference will be held on Friday, April 24, 2015. 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 we will have the Provosts Welcome, a performance by Squawkappella and the Outstanding Research Mentor Award will be 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 their 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 Wednesday, April 1, 2015, by midnight. The conference is free and the public is invited. For more information visit <u>http://www.salisbury.edu/susrc/</u>



# **Biology 210 – Concepts and Methods**

The instructors for BIOL-210 redesigned the photosynthesis laboratory to use LEDs to stimulate uptake of CO2 from the air. The photograph below shows Caitlin Curry and Hayley Rose using the new apparatus (PAW: Photosynthetically-Appropriate Wavelengths).



# Ward Museum of Wildfowl Art

#### The Tradition & Sport of Falconry - April 3-July 12

Reception: Saturday, May 16, 10 a.m.-3 p.m.

Falconry, the art of hunting with birds of prey, dates back at least 3,000 years. People throughout the world long have revered the sport as a way to successfully hunt game in the wild and to bond with and observe these magnificent birds. In many parts of the world, falconry gained special popularity with nobility. Today they still hold high respect among hunters and birders alike. Look into the fascinating history, modern form and far-reaching influence of falconry.

#### Fifth Annual Art in Nature Photo Festival - August 7-9

Photographers of all levels are invited to submit their photos for the competition in one of three divisions: youth, amateur or professional; and in any of the five categories: birds, plants and animals other than birds, landscape/scenery, macro and black and white photography. Designed to help improve all aspects of their photography, participants have the opportunity to attend a variety of lectures, seminars and workshops led by professional photographers. Photographer marketplace is available in the main lobby.

# **OPPORTUNITIES**

#### Alaska Space Grant Program: Summer Internships

Web Site: http://spacegrant.alaska.edu/student

Program URL: http://spacegrant.alaska.edu/student/summer

Summer research Internships of up to \$5,000 (+travel if required) will be awarded through a competitive process. Deadline: 03/01/2015

## British Society for Cell Biology: Summer Studentships

Web Site: http://www.bscb.org/?url=main

Program URL: http://www.bscb.org/?url=studentships/index

The BSCB Summer Vacation Studentships offer financial support for high caliber undergraduate students, who wish to gain research experience in cell biology during their summer vacation. The aim is to encourage students to consider a post-graduate research career in cell biology after their undergraduate studies. Deadline: 03/31/2015

## Montana Space Grant Consortium Scholarships

Web Site: http://spacegrant.montana.edu

Program URL: http://spacegrant.montana.edu/scholarshipFellowship.html

The Montana Space Grant Consortium offers undergraduate scholarships for the academic year. Awards are made on a competitive basis to students enrolled in fields of study relevant to NASA's mission. These fields include (but are not necessarily limited to): the Biological and Life Sciences, Chemistry, Geological and Planetary Sciences, Physics and Astronomy, Mathematics, Mechanical Engineering, Chemical Engineering, Electrical Engineering, Computer Engineering, Computer Sciences, and Civil Engineering. Deadline: 04/01/2015

# American Association of Candy Technologists: AACT's John Kitt Memorial Scholarship

Web Site: http://www.aactcandy.org

Program URL: http://www.aactcandy.org/aactscholarship.asp

This non-renewing scholarship is awarded to a qualifying college Sophomore, Junior or Senior enrolled in an accredited, four-year college or university within North America, who is majoring in a food science, chemical science, biological science, or related area. Deadline: 04/13/2015

#### University of Georgia: Sea Grant Education Internships

Web Site: http://marex.uga.edu

Program URL: http://marex.uga.edu/sea\_grant\_internship/

The University of Georgia's Marine Education Center and Aquarium offers annual post-baccalaureate internships in marine education. Interns train and work for 50 weeks at the Marine Education Center and Aquarium, near Savannah, Georgia. Four interns will be selected for the period of September 1, 2015 - August 12, 2016. Deadline: 04/04/2015

# Rare Charitable Research Reserve: Scholarship in Graduate Research

Web Site: http://www.raresites.org/

Program URL: http://www.raresites.org/research/scholarship/

The sponsor has partnered with the RBC Blue Water Project to financially assist students in pursuit of higher education as they tackle important water-related issues. The Scholarship will allow students to study in a relatively undisturbed, yet highly accessible site. Deadline: 04/22/2015

#### INTERNATIONAL STUDIES - (BIOL 399/570) Coral Reef Biology in Honduras Winter 2015

Students mastered identifications of numerous fishes, corals and other invertebrates, and familiarized themselves with topics in coral reef research from readings of the primary literature. We then traveled to Roatan Island, Honduras from Jan 17-24 where we stay in small wooden bungalows right at the water's edge. All students were SCUBA-certified, and we went diving 12 times on fringing and barrier type reefs, including a night dive, and one wreck dive. Memorable species we saw include big groupers, parrotfishes, corals, sponges, green and hawksbill sea turtles, and 6-foot green moray eels! Between dives, students attended lectures and labs to learn more about coral and fish identification, reef monitoring research, sea turtle conservation, cetacean biology, and more. If you are interested in taking this class in January 2016, contact Dr. Ann Barse, by email or stop by her office! (ambarse@salisbury.edu; HS 233). Photo credits: Ann Barse (non-underwater photos) and Keota Silaphone (underwater photos).







Chillin' under the sea with a dog tooth snapper Photo by Keota Silaphone

# HENSON SCHOOL OF SCIENCE AND TECHNOLOGY DEPARTMENT OF BIOLOGICAL SCIENCES

# February 2015 Newsletter



One of the dive sites off Roatan Island



Checking out Back Reef invertebrates before releasing them back to the sea



**Back Row, Left to Right:** Lillianne "Bae" Walters, Kelsey Mitchell, Sierra Crist, Reva Scheibner, April DeMell, Jennifer Hutton (AKR Education Coordinator), Arden Byrne, and Dr. Ann Barse (Program Director)

**Front Row, Left to Right:** Clinton (our waiter for the week), Michael Robben, Cierra-Jeanne Maszkiewicz, Joanna Trojanowski, Melanie Weaver, Emily Caffrey and Jonathan Forte

## **INTERNATIONAL STUDIES – Biodiversity in Costa Rica Winter 2015**

Twelve Salisbury University students participated in the Winter Term 2015 course in Costa Rica with Adjunct Instructor Mary Gunther. The students studied tropical biodiversity and examined how Costa Rica has developed its ecotourism industry. There were sea turtles, amazing birds, two and three toed sloths and activities from hiking to zip-lining. In January 2016 the program will be offered again: there will be the option to take one of two different classes – a lab credit or a general ed. credit course. For more information contact Ms. Gunther or Dr. Liebgold in the Biology Dept.





# **PUBLICATIONS (Undergraduates\*)**

Emmert, E. A. B., Z. M. Haupt\*, K. M. Pflaum\*, J. L. Lasbury\*, J. P. McGrath\*, A. E. Collins\*, and C. H. Briand. 2015. *Bdellovibrio bacteriovorus* protects *Caenorhabditis elegans* from bacterial pathogens. Fine Focus 1:51-61.

**Quillin, K.** 2014. Helping students to overcome STUMPS: Scientific Terms Undermined by Meanings Peripheral to Science.

Course Source: <u>http://coursesource.org/courses/helping-students-to-overcome-stumps-scientific-terms-undermined-by-meanings-peripheral-to#tabs-0-content=1</u>

**Abstract:** Many terms and phrases that are ubiquitous in everyday use have very different meanings in science. As a result, biology students often hold prior conceptions that are difficult to change. In this essay, I refer to such problematic terms as STUMPS: Scientific Terms Undermined by Meanings Peripheral to Science. STUMPS are so commonplace that even scientists, science journalists, and instructors sometimes use them incorrectly in science discourse, further hindering student learning. The goals of this essay are: (1) to build awareness among instructors about their own use of STUMPS, and (2) to prompt instructors to help students build a metacognitive awareness of STUMPS so that students can overcome barriers to learning in science. As examples, the "humans and animals" STUMPS is discussed in detail, followed by the common evolution-related STUMPS "selection," "adaptation," and "fitness," and the common process-of-science STUMPS "theory," "hypothesis," "prediction," and "experiment." The problem of STUMPS should be addressed transparently and often in the classroom, with plenty of opportunities for students to practice correct use of terms to ensure successful learning in science.

#### **ALUMNI NEWS**

Check Out Krystal Donaldson (SU Alumni 14). Krystal is currently a dental student at the University of Maryland School of Dentistry Class of 2018. She was recently awarded the Student National Dental Association Freeman-King Scholarship, an annual award that honors a first-year dental student who exhibits leadership.

http://www.dental.umaryland.edu/about/news/february-2015/student-profile-krystal-donaldson-dds-18.html



If you have announcements to add or general comments regarding the Newsletter, please email dlprice@salisbury.edu. Editor: Dr. Dana L. Price; Coeditor: Dr. Judith Stribling