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WELCOME TO THE BIOLOGY DEPARTMENT

Having entered through a glass door that displays the familiar word "BIOLOGY," you are greeted by cool air and red cement floors... Yes, returning students, summer is over and welcome home!

Freshmen and transfer students, a warm welcome to our department! It is no secret that the sciences are quite a challenge in the grand scheme of academia. With that challenge that Florida Southern will offer will come an endearing fellowship amongst you and your fellow classmates and professors over the course of your hard work here over the next few years. Our department is dedicated to helping you towards achieving your goals. The courses you will take here will open doors of opportunities as well as your minds to the incredible worlds of biology, chemistry, physics, and mathematics.

NEW FACE IN BIOLOGY—DR. JOSEPH MACEDONIA

Biota would like to extend a warm welcome to our new ecologist, Dr. **Joseph Macedonia!** Originally from Pennsylvania, Dr. Macedonia comes to our department from Arizona State University. He received a B.S. in Zoology from Colorado State University and a Ph.D from Duke in Biological Anthropology. He has held postdoctoral research and teaching positions in California, Michigan, Indiana, Tennessee, and Arizona. He has conducted research in Hawaii on habitat light and coloration in Hawaiian damselflies and also has conducted



CHANGES AND NEW DIRECTIONS

Dr. Gauthier has replaced Dr. Tripp as the **Chairperson of the Natural Science Division**. Dr. Baum continues to head biology though we have become the Biology Program and his new title is **Biology Program Coordinator**.

President Kerr also named Dr. Baum to be FSC's first **Premedical Studies Coordinator**. If you are a premedical student, and that includes all programs leading to a doctorate in medicine such as medicine, dentistry, veterinary medicine, podiatry, optometry, etc., you should touch bases with him to insure you are on track. This is particularly important if you are being advised by someone outside the Biology Program.

research outside the country in Madagascar and the Caribbean. Dr. Macedonia plans on putting together a May Options course for 2008 on lizard behavior and ecology in Jamaica. He begins at FSC teaching Animal Behavior, Comparative Anatomy as well as Biological Science for non-majors. He will be working with Dr. Kjellmark on Tri-Beta to give him and our students a chance to know each other outside the classroom. Feel free to stop in his office in Polk Science 138 and welcome him to FSC!

Special Interest Articles:

- Welcome Back!
- New Faces in Polk Science
- Tropical Ecology Coverage

Individual Highlights:

Tropical Ecology	2
Lecture Series	4
Welcome Back Dr. G!	4
Get Involved	3
Advising	3

It Doesn't Get Any Better Than This 10 Students Accompany Dr. Kjellmark to Study Tropical Ecology on Andros Island, Bahamas for May Option

To a student of science, the only thing better than a trip to the Bahamas would be to throw a science course into the itinerary. That's exactly what ten students had the opportunity to embark on this past May when Dr. Kjellmark took a group of students to Andros Island, in the Bahamas for a course in Tropical Ecology.

The course, which spanned two weeks, began its first week with a series of on-campus lectures that included lessons on the limestone topography of the islands, the plant and vegetation on the islands, as well as work that Dr. Kjellmark did on Andros while working on his Ph. D. After the course's first of three tests on the first Friday, students piled in the school van for a love-bug splattered ride to Ft. Lauderdale to catch the plane to Andros. Early Saturday morning, with bags weighed in at under the allowed forty pounds, scuba gear checked, and passports in hand, they boarded the seventeen passenger plane for Andros. As Eina Dorado had warned everyone the night prior, the plane ride *was* loud, but aside from some unique turbulence, the forty-five minute ride to the island ended safely. Upon descending, picturesque Sawgrass flatlands and Bahamian pine trees came into view as well as smoke from forest fires, which are typical to Andros during this dry season. Emily Thomas had to remind everyone to save their film for the rest of the trip as some students began taking aerial shots of the views out the windows.

After the taxi ride to Forfar field station, Dr. Kjellmark led several lectures in the field. Beginning at the field station with a beach community, plants such as Sea Grape (*Cocoloba uvifera*), Wild Dilly (which Cuban Emerald humming birds frequented each morning) and Australian Pine (*Cashurina equisetifolia*) (which is actually not a pine, but a non-native dicot resembling a pine) were introduced. The group then ventured into a coastal coppice, where they were first introduced to the later to become infamous Poisonwood (*Metopium toxifera*). The day closed with snorkeling on the beach, dinner at the Lodge, an orientation from the staff of Forfar, and finally, students turned in for their first night on Andros.

The week then took off from here with adventures in all kinds of brush with Dr. Kjellmark, who's quote from the trip soon became, "I think there's a trail here..." A visit to Henry Morgan's cave did not yield any treasure, but did yield some awe-inspiring photographs of the nearby Morgan's bluff. A trip to Attala coppice and its surrounding pine woods began the work with point quarters surveys, the primary method the students used to study the plant life on Andros. Here in Attala Coppice, students came face to face with several Attala butterflies; gorgeous black butterflies with a brilliant orange coloring on the upper portions of each wing.

The marine creatures they encountered included Nassau Grouper, Squirrel fish, Blue Tangs (like Dory from *Finding Nemo*), a sting ray, a nurse shark, and countless other tropical fish. The students were assured in a tropical fish lecture given by Ken at Forfar, that the Nurse sharks were rather placid, unless one tried to hug them.

Other aquatic adventures included trips to several blue holes. A blue hole, (as students learned in the lectures the previous week) is a large limestone sink hole that has filled with water. Among those visited were Uncle Charlie's Blue hole, Church's Blue hole, and Rainbow Blue hole, each a refreshing way to end a hot day in the field. Megan McDonald mentioned Church's blue hole as one of her favorite parts of the trip, attributing this to the exciting twenty-foot jump off the swim platform.

Among the terrestrial organisms encountered on the trip, mosquitoes showed up as an unwelcome nuisance when the wind left for the rest of the week. Barrett Beck reminded everyone that it was the females that did the biting, earning the "mo-SHE-toes" (as opposed to mosquitoes) a new title each time one was slapped to death. Doctor flies, much like the familiar green head flies also were an unpleasant encounter; they earn their name from their habit of stroking the skin, and then painfully drawing blood. Becky Whitehead was saved from some bites when a Bahama Pee-Wee swooped down next to her at Church's Blue hole to claim several flies for a meal.

Evenings were spent either studying, basket-weaving in the lodge, or playing hilarious games of Catch Phrase (a hint if you ever play this game with Dr. Kjellmark, remember that radishes are in the mustard family...). The final evening on the island wrapped up with two tests; one lecture, one a lab practical, and the turning in of field journals to end the course.

Students returned to Florida the following Saturday, May 12th, where a much desired stop at a McDonald's was made upon reaching Ft. Lauderdale. Although tired and weary of poisonwood rashes and "mo-SHE-toe" bites, the phrase, "I'd go back in a heartbeat" was already being exchanged in conversations on the bus ride back to campus.

...For more information on
Dr. Kjellmark's Tropical
Ecology class and when it's
offered, stop by his office in
Polk Science

"...the nurse sharks were rather placid, unless one tried to hug them..."

ADVISING FOR FIRST YEAR STUDENTS: TAKE NOTE

Because the college has selected special mentors for first-year students, some of you may not have biology faculty as advisors, though you should have someone who is in the sciences. Please, Please, Please, do not hesitate to let any of the Biology faculty know if you have any questions about which courses to take next term. They want you to stay on track.

If you are not taking College Chemistry, CHE 111-112, your first year, you should know that the Chemistry Program offers a superb two-hour course called **Prep for Chem, CHE 100**, in the spring semester. This is an excellent way to prepare you for College Chemistry, which you would then take in your sophomore year. Students who have done well in CHE 100 have gone on to graduate and medical schools so do not think of it as a remedial course, but as one that can really pave the way for success in college chemistry.

FSC HONORS/USF MEDICAL SCHOOL PROGRAM- CONGRATULATIONS

Three first-year students were admitted to the FSC Honors/USF Medical School Program. These students met all entry requirements which include a minimum 1300 SAT or 29 ACT, High School GPA of 3.7 unweighted, top 10% of high school graduating class and admission to the FSC Honors Program. These students have priority admission to USF medical school when they successfully complete the program. Please congratulate **Jennifer Bruno, Michael Saco, and Michael Politis**. Upperclassman, **Tara Saco** is also in the program.

This is the first year we have worked with admissions to recruit students into the program. The Program is prominently displayed on the first page of the FSC website's Home Page. If you know a high school senior who is interested in medical school, qualifies for this program, and would be interested in attending FSC, please contact the college's Premedical Studies Coordinator, Dr. Baum.

Tri-Beta Encourages Student Involvement

Tri-Beta is a society for students in the biological sciences that is affiliated with the American Association for the Advancement of Science. It is a recognized organization across college campuses nationwide.

Florida Southern's chapter, Beta Eta, seeks to encourage student involvement through community service efforts, on campus events, and off campus field trips.

TriBeta offers students two ways to get involved. Those with twelve credit hours in biology and a 3.0 GPA in biology are eligible to apply for regular membership in Beta Beta Beta. Furthermore, students, especially those who have not acquired the minimum hours in biology, are encouraged to apply for associate membership. The

requirement for this option is to simply have an interest in biology.

The officer's of TriBeta have a lot in store for the fall semester and ultimately, this academic year. In the past TriBeta has hosted professional school informational sessions, trips to zoos and wildlife refuges, and lake clean-up efforts at Southern Landing.

Interested and want to get involved? TriBeta's first meeting will be August 29, 2007 at 10:10 alongside other science student organizations in PS155. You can also contact the President of TriBeta, Jessica Campbell, at 863-513-8728, or at jcampbell87@gmail.com.

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If it's biology, it's here!

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We're on the Web!

See us at:
<http://www.flsouthern.edu/academics/biology/Biota.htm>

Bummed out about classes on Labor Day?



That's okay! Come out and join the department for a Labor Day Picnic for all science and math students. Please plan to attend the Natural Science Division Labor Day picnic on the east side of Polk Science Building, Monday, September 3rd from 4:30 to 6:30 pm. We want all science and math students to attend so please put this on your calendar. Please tell Ms. Bentley, the Division Secretary, (her e-mail is lbentley@flsouthern.edu) that you are coming; we need to know how many are

attending. This is a great way to start the academic year and meet your professors. Dr. Gauthier promises some veggie burgers for those who do not eat meat, but there will be plenty of "Bossie" hot dogs and burgers for the carnivores among you!

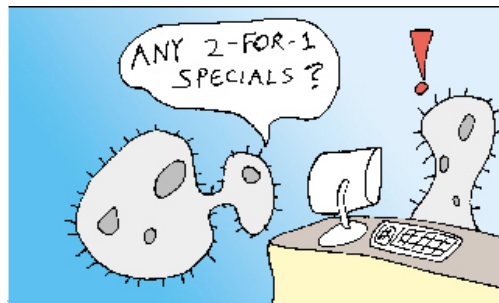
Upcoming Lectures & Presentations

September

- 9/25- "Working in the Tropics on Food Problems"
By Dr. Peter Reilly
Iowa State University
- 9/27 - "MD's Need Not Apply: What Else You can do with A Degree in Biology"
By Dr. Morvillo

About Biota...

Biota is a publication for and about the biology department of Florida Southern College. It serves as a direct means to unite students, faculty, and staff. Students can refer to Biota and gain insight into the department—what faculty projects are ongoing, what student researchers are exploring, and what new courses are up-and-coming. Students, faculty, and staff are encouraged to contribute to the publication. Furthermore, if you feel there is something that is not included and should be, feel free to let Biota know. Submissions and ideas can be sent to cbuckingham@flsouthern.edu



Comic Courtesy of International Health, Racquet and Sports Club Association, by Stan Tran.
Not to be reprinted out of Biota

WELCOME BACK DR. GAUTHIER!

Dr. Gauthier or "Dr. G" as she is known by her students returns to Florida Southern this year from a refreshing sabbatical that spanned the 2006-2007 school year. In the first part of her sabbatical, she spent time at the University of Illinois at Urbana-Champaign (UIUC), one of the top chemistry schools in the country, (with 5,000 students in General Chemistry alone!) as a visiting professor. Through a National Science Foundation (NSF) Initiative she worked with colleagues exploring ways to increase the number of students studying for science and technology careers. Dr. G worked with a special program for minority students at the University (about one hundred in a class, split into small groups), as well as spent time developing curriculum for high school teachers. The curriculum has a thematic approach; all the science surrounding a thematic unit is taught by a specialist from the specific theme (microbiologists, chemists, etc.). So, in the example of a space shuttle, fuel cells, energy, recycling and other scientific topics related to the theme of space shuttles are used to educate students. While Dr. Gauthier was with the University of Illinois, she had the opportunity to attend Fine Arts performances such as "The Human Genome" as well as an exhibition/concert of the Stradivarius violins from the Smithsonian's National Museum of

American History. In addition to her work and research at the University, Dr. G was also able to mentor graduate students and give a lecture at the UIUC lecture series on "Careers in Academia. Giving talks and lectures in locations such as Argentina, Peru, Chile, Uruguay, and the University of Colorado, she became well known at the air port near the University and clocked in over 39,000 miles in just one month!

After returning home in December, Dr. Gauthier did research in a lab at USF expanding her knowledge in crystallography, and developing new methods in the isolation of chemicals in Green Tea. She also had the chance to attend an enlightening conference with her daughter, entitled "Science in Society: Closing the Gap." Taking place in Boston, well known attendees and speakers included Al Gore, the producer of *Law and Order*, BBC, The American Association for Advancement of Science, and the director of *Nova*.

--On behalf of the department,
Biota would like to wish Dr. Gauthier a warm welcome back to Florida Southern College and to her new position as Division Chair of Science and Mathematics!

THE FLORIDA CENTER FOR SCIENCE AND RELIGION

...is pleased to announce its 2007 Annual Lecture Series:

September 11, 18, and
October 2

College Heights United
Methodist Church
942 South Blvd, Lakeland
7:00-8:30 PM

Further details to come!

FSC Welcomes Dr. James Worden to the Chemistry Department

Biota would like to welcome Dr. Worden to his first teaching position at Florida Southern College! Dr. Worden comes to FSC from the University of Central Florida where he researched polymers for solar energy purposes. He graduated from the University of Wisconsin with a degree in Polymer Chemistry and attended graduate school at North Dakota State University. Dr. Worden has worked with coatings and polymeric materials (in paint chemistry) and conducted research in the synthesis and surface modification of gold and metal particles. We understand that he is a fan of the Green Bay Packers and enjoys golfing in his spare time. This semester he will be teaching General Chemistry, a lab section for CHE 111, Preparatory Chemistry, and Physical Science.