



BIOSPHERE

The Weekly Bulletin of Biology

Biology Colloquium: Friday, 28 September 2012, 2:00 pm in CR 5125

"Hormonal Control of Adult Plasticity in the Brain: Green Anole Lizards and White-crowned Sparrows"

Rachel Cohen, Ph.D.
Department of Psychology, University of Washington

Fish and Lizard Presentations at International Meeting

CSUN ichthyologists and herpetologists alike put on a great show at the 7th World Congress of Herpetology in Vancouver:

- **Dr. Larry Allen** gave a talk entitled, "Bomb radiocarbon dating and estimated longevity of giant sea bass"
- **Jeremiah Bautista** presented a poster, "Reproductive biology of the Barred Sand Bass of southern California."
- **Barbara Sanchez's** talk was, "A comparison of growth and fecundity of Barred Sand Bass from polluted and unpolluted sites in Southern California."
- **Brenton Spies's** presented, "Latitudinal variation in the early life history of the endangered Tidewater Goby."
- **Alissa Luken** spoke about, "Temperature dependent sprint performance of nocturnal and diurnal geckos: does Dollo's law apply to physiological traits?"
- **Jason Warner's** title was, "Getting' high and chillin': cold hardiness of *Liolaemus* lizards living along an elevation gradient."
- **Beck Wehrle's** was, "Why do lizards lounge? The role of social aggregations in

exchanging microbial communities among hatchling *Iguana iguana*."

- **Sigfrido Zimmermann's** was, "Comparative physiology of an invasive reptile: have Mediterranean House Geckos adapted to their local niches?"

Poster at Stem Cell Meeting

Dr. Randy Cohen, Rus Nuryyev, and Toni Uhlendorf presented a poster at the 18th annual International Stem Cell Therapy conference in June: "Human fetal-derived stem cells can decelerate motor deterioration and weight loss in a rat model of cerebellar ataxia."

Long-Term Grant Renewed

The Moorea Coral Reef Long-Term Ecological Research program was renewed for another four years by the National Science Foundation. **Drs. Robert Carpenter and Peter Edmunds** are PIs on this grant, which is shared with colleagues at UC Santa Barbara. The four-year total for the grant is \$3.76 million and will support research opportunities for the PIs and graduate students on the coral reefs surrounding this French Polynesian island.

Prof Receives U.S. Patent

Dr. David Bermudes has been issued a patent by the United States Patent and Trademark Office for a bacterial co-expression system that combines protease-sensitive therapeutic proteins with monomeric and polymeric protease inhibitors. The expression system has the potential to improve the delivery of therapeutic proteins by bacteria and may be useful in the treatment of cancer. Bermudes and his students are conducting related research here at CSUN.

New Publications

Dr. Peter Edmunds, Darren Brown, and **C. Moriarty** have a new paper out: "Interactive effects of ocean acidification and temperature on two scleractinian corals from Moorea, French Polynesia," which appeared in *Global Change Biology*.

Former graduate student **Maggie Johnson** and **Dr. Robert Carpenter** have a paper, "Ocean acidification and warming temperature decrease calcification in the crustose coralline alga *Hydrolithon onkodes* and increase susceptibility to grazing," in *Journal of Experimental Marine Biology and Ecology*. Johnson is now in the Ph.D. program at Scripps Institution of Oceanography.

Recent Trips Involving Coral Reefs

The late spring and summer was a busy time for field research by members of the polyp lab. In April and May, grad students **Darren Brown** and **Beth Lenz** conducted six weeks of field research in Moorea. In June, **Lenz** accompanied **Dr. Peter Edmunds** to Taiwan, where the two worked with an international team from the University of Hawaii to study the effects of

upwelling seawater on coral physiology. This group was joined by post-doc **Dr. Lorenzo Bramanti**, grad students **Sylvia Zamudio** and **Chris Wall**, and undergrad **Aaron Ninokawa** (CSU Fullerton) who travelled to Taiwan to study the effects of climate change on coral larvae.

During July and August, **Dr. Edmunds** led a team to St. John, in the U.S. Virgin Isles, to conduct the 26th year of continuous ecological research on the shallow coral reefs of the region. This trip included grad students **Beth Lenz** and **Alex Yarid**, as well as **Amanda Arnold**. Arnold is now at the University of British Columbia. She went on her first trip to St. John to work with CSUN biologists as a high school student (Viewpoint School) in 2011. For both expeditions she was funded by NSF, through two different programs. The group on the St. John trip was also joined by former CSUN grad student **Lianne Jacobson** (now a Ph.D. student at the University of Florida). Jacobson conducted follow-up research she began for her M.S. degree.

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