

# ANIMAL BEHAVIOR BULLETIN Spring/Fall 2014

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2014 was so busy for CISAB that we did not have time to put out the CISAB Bulletin! Some of the features and events of 2014 are included in this belated edition of the Bulletin. More recent features are included in the Spring 2015 edition of the CISAB Bulletin coming out soon!



### 2014-2015 CISAB & CTRD AWARD **RECIPIENTS**



# Congratulations to the 2014-2015 CISAB Scholarship Recipients:

Alicia Rich-Stout Amy Dapper Jakki Petzold Mikus Abolins-Abols Robert Bowers

# Congratulations to the 2014-2015 CTRD Fellowship Recipients:

Alison Ossip-Klein Leah Wilson Nikki Rendon Sam Slowinski

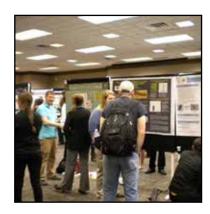


# **3014** Animal Behavior conference



The 2014 Animal Behavior Conference took place last spring from April 24-26, 2014 and broke several CISAB conference records! With 226 participants and 66 presenters from 16 states and 38 universities, the 2014 conference was the biggest and most well-attended in CISAB's history.

As in previous years, a keynote address and poster session began the conference on Thursday evening. IU Biology professor Emilia Martins was this year's Thursday keynote speaker; her talk was titled: "The Long View: Causes and Consequences of Signal Evolution". Thursday's poster session was full of both energy and participants, with a record 44 posters presented by students and faculty of all levels – from undergraduates to tenured professors. Poster topics were diverse and ranged from crayfish foraging to zebra finch nesting.





Friday was filled with a variety of talks from students and faculty. Four sessions were held throughout the day with 25 total talks and plenty of coffee breaks to keep attendees alert and focused! The day of presentations culminated in the conference's keynote address from Dr. Mark Blumberg of the University of Iowa. Dr. Blumberg spoke about his exciting research on the development of the sensorimotor system during sleep. An evening reception at the home of Laura Hurley and G. Troy Smith's house ended the day with good food and great company.

Saturday's symposium "Sex: from codons to condoms, the mechanisms and consequences of sexual behavior" was equally successful and was a brilliant end to the weekend. One-hundred attendees packed into Myers Hall to hear seven presentations related to sexual behavior. The day ended with a keynote address by Dr. Jim Pfaus of Condordia University. His address was about the links between sexual reward and arousal, desire, and preference.





## 2014 KECK CENTER EXCHANGE



Two graduate student members of CISAB traveled to North Carolina State University to give talks at the 15th Annual Student/Postdoc Symposium of the Keck Center for Behavioral Biology on February 21st. Rachel Hanauer (EEB, Ketterson Lab) spoke about the effects of urbanization on avian physiology and parasitism, and Sarah Keesom (EEB, Hurley Lab) spoke about a neural mechanism for integrating social context with auditory processing.

"Upon our arrival Thursday evening, we were treated to dinner by several Keck Center graduate students, with stimulating conversation and delicious, locally-grown cuisine. On Friday, the day of the symposium, we presented our own research, and we were impressed by the wide range of research talks given by the Keck Center members. Study systems included African cichlid fish, rats, moths, mosquitofish, termites, prairie voles, Drosophila, honey bees, wild mice, and cockroaches. The research questions were just as varied, ranging from the genetic mechanisms of food intake to the neural mechanisms of visually-induced behavior to variation in the effects of oxidative stress to the ethics of using recombinant DNA technology. During coffee breaks, lunch, and dinner, we enjoyed engaging in discussions with new colleagues, including the undergraduates (who presented posters), graduate students, post-docs, and faculty members. All in all, it was a day filled to the brim with great science and great scientists! We are appreciative of this opportunity for having allowed us to share our dissertation research with a new, diverse group of behavioral biologists."

-Rachel Hanauer and Sarah Keesom



### CONGRATS TO THE ABC2014 AWARD RECIPIENTS

#### **Undergraduate Awards:**

Caitlyn Finton, Indiana University
Squeaky, Creaky, and Freaky:
Variation in Female Mouse Squeaks during Courtship

Nandita Chittajallu, Indiana University
Factors Mediating Mouse Pup Nipple Attachment

Ben Brier, Indiana University

Nesting and Parental Behavior in Male and Female Zebra Finches is Modulated by Endogenous VPAC Receptor Activation William J. Rowland Mentoring

**Award:** Alejandra Rossi

Hanna Kolodziejski Award: Aubrey Kelly

**CISAB Exemplar Award:** 

Professor Mark S. Blumberg, Dept. of Psychological and Brain Sciences, University of Iowa



# 🜂 Summer 2014 REU Program 🥟



During Summer 2014, IU once again hosted several bright undergraduates from around the country for its REU program. Students were paired with faculty and graduate student mentors to be immersed in a summer of research and professional development activities. Mentors came from the departments of biology and psychological and brain sciences. This year's selection process was particularly competitive, with over 500 applicants competing for 9 positions.





#### **Research Topics & Experiences**



#### The Impacts of Food Restriction on Reproductive Development in a Seasonally-Reproducing Mammal, the Siberian Hamster (*Phodopus sungorus*)

Student: Carlisha Hall, University of North Carolina at Pembroke

Mentors: Allison Bailey and Greg Demas

#### The Effects of Thermal Physiology on the Location of Individuals within a Group

Student: Jason Cahela, University of Hawaii at Manoa

Mentors: Delia Shelton and Jeff Alberts

#### Risk-taking, Environmental Psychology, and Disease Risk in South Africa

Student: Marley Alford, Bard College

Mentors: Eric Shattuck, Colleen Friedly, and Michael Muehlenbein

#### Squeaky Growls: A Male Mouse's Neural Response to Differing Structures Occurring in Female **Mouse Squeaks**

Student: Miranda Millar, New Mexico Institute of Mining and Technology

Mentor: Laura Hurley

(REU 2014, continued.)

Nilda Yarelis Rivera-Reyes, a senior psychology major from the University of Puerto Rico, Cayey, wrote about her time at CISAB during Summer 2014:

"My experience being part of the REU program in animal behavior was great! This program taught me a lot of things: from ethics in research to how to make an effective oral presentation. I also learned that the goal of animal behavior research is not just to understand humans, but also to understand the behavior of other animals. I gained more independence during the program, because I got to work on my own on an engaging research project. This helped me decide that I definitely want to continue studying and researching about animal behavior, but from a clinical perspective. I learned a lot about life as a research scientist and as a graduate student. For me, the most memorable moment was the Symposium; it was exciting to explain my research project to others and learn about other REU projects."

#### **Olfactory Working Memory in Rats**

Student: Nilda Yarelis Rivera-Reyes, University of Puerto Rico at Cayey Mentors: Alexandra Smith, Amanda Doyle and Jonathon Crystal

# Electric Communication Signals and Expression of the Neuromodulator Substance P in a Weakly Electric Fish

Student: Stephanie Polukort, New England University

Mentor: Troy Smith

#### Modulation of Mouse Maternal Behavior by Pup Phenotype and Familiarity

Student: Taran DePaola, Northern Arizona University

Mentors: Cathleen Rodda and Jeff Alberts

#### The Role of Corticosterone in Migration of the Dark-Eyed Junco, Junco hyemalis

Student: Zephyr Wenrich, Indiana University Mentors: Adam Fudickar and Ellen Ketterson

#### **Cadmium Alters the Social Dynamics of Zebrafish**

Student: Zoe M. Austin, Oklahoma State University

Mentors: Anuj Khemka, Meital Shachaf, Delia Shelton and Emília Martins

"I had an extraordinary REU experience during the summer of 2014 in Bloomington, Indiana. I learned how to think like an animal behaviorist, which is a skill I never imagined I would learn so soon in my academic career. I also learned a great deal about how to properly and professionally conduct research. The lab I was a part of drastically increased my writing skills and showed me that I am capable of working hard to reach a goal. After this experience I am only more apt to apply to a graduate program and earn a Ph.D. The program as a whole was very warm and welcoming, with many mentors helping us along the way. I learned so many valuable things this summer, and I will take those lessons with me throughout the rest of my academic career. I loved my experience and I would highly recommend other motivated students to apply to the CISAB REU program. I will always remember my time in Indiana and I still can't stop telling people about my summer experience. Thank you CISAB!"

~ Taran DePaola; Senior Psychology Major at Northern Arizona University



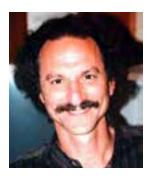
INTERESTED IN APPLYING TO THE CISAB REU PROGRAM?

APPLY ONLINE AT: HTTP://WWW.INDIANA.EDU/~ANIMAL/REU/



### FACULTY AWARDS





**Dr. Jeffrey Alberts** was elected as a Fellow of the Society during the Animal Behavior Society's 2014 Annual Conference. Dr. Alberts is a professor in the department of psychology at Indiana University. His work on prenatal development and weaning is central to the field of developmental psychobiology and his many years of supervising the development of the animal laboratory on the space station and ground breaking experiments with animals in orbit, conducted both in the USA and USSR, will, in time, be historical landmarks.

(Other CISAB members who are also Fellows of the Society are: Emilia Martins, Ellen Ketterson, and Meredith West)



**Dr. Ellen Ketterson** was elected to the American Academy of Arts and Sciences, one of the major academies that recognizes excellence in sciences, as well as the arts. Ellen has contributed at many different levels across this spectrum, from years of important research on bird behavior and environmental endocrinology to the release of the film Ordinary Extraordinary Junco - this honor is incredibly well deserved.

Dr. Ellen Ketterson also received the Cooper Ornithological Society's Loye and Alden Miller Award for Lifetime Achievement at the society's annual meeting in September. The award has special significance since Alden Miller was an important figure in early junco science, as revealed in Chapter 3 of Ordinary Extraordinary Junco, which also documents the Ketterson lab's junco research.

**Dr. Peter Todd** was named a Provost Professor at Indiana University.





**Dr. Michael Wade** was named Interim Vice Provost for Research. The mission of the Office of the Vice Provost for Research is to serve the faculty at Indiana University Bloomington and regional campuses by facilitating ongoing research and creative activity, incubating new initiatives, and maximizing the potential of faculty to accomplish path-breaking work. The OVPR provides funds and infrastructure to enhance opportunities for federal, state, and private support.

**Dr. Randy Beer**, was named Provost Professor at Indiana University.



**Center for the Integrative Study of Animal Behavior** 

Indiana University 409 N Park Ave Bloomington, IN 47405 812-855-9663 cisab@indiana.edu