



UCR EEOB NEWSLETTER



Spring 2012



Reported happenings from the members of the UCR EEOB program. Thanks to everyone who contributed information this quarter!

Grants/Awards

Ron Bassar -- (former Reznick graduate student) won the 2012 Hynes Award for New Investigators from the Society for Freshwater Science (formerly North American Benthological Society). It is a prestigious young investigator award for aquatic ecology.

Ryan Bedi -- (an undergraduate student working with **Maruicio Torres**) was awarded the CNAS Science Circle Award.

Wil Splinter -- (an undergraduate student working with **Brian Gray** and **Marlene Zuk**) was awarded best undergraduate talk at the Southern California Academy of Science conference at Occidental College.

Mark De Guzman -- won the best poster in Ecology and Evolution at the Southern California Academy of Science conference at Occidental College (link: <http://scas.jsd.claremont.edu/annual/annual.html>). Poster: "The role of sapwood capacitance in hydraulic strategies of desert chaparral shrubs." M.E. De Guzman, S. Virk, and L.S. Santiago.

Casey Richart -- American Arachnological Society, Vincent Roth Memorial Research Fund. Award - \$225.

Tim Higham -- Received a 3-year NSF Grant to work on gecko locomotion (both here in the lab and in Africa).

Nicholas Shirkey - Received a Sigma Xi Grant in Aid of Research.

Matthew O'Neill - Received a Desert Legacy Fund Research Grant.

Priya Balasubramaniam -- Outstanding Teaching Assistant Award from TADP.

Carla Essenberg -- Outstanding Teaching Assistant Award from TADP.

Lijin Zeng -- Outstanding Teaching Assistant Award from TADP.

J.P. Perea-Rodriguez -- Outstanding Teaching Assistant Award from TADP.

Lijin Zeng -- Received a travel grant from the International Society of Behavior Ecology (ISBE) to attend their bi-annual meeting in Sweden this August .

Anne Jacobs - Received a travel grant from the International Society of Behavior Ecology (ISBE) to attend their bi-annual meeting in Sweden this August .

Brian Gray - Received a travel grant from the International Society of Behavior Ecology (ISBE) to attend their bi-annual meeting in Sweden this August. Brian was also awarded the Academic Senate Earle C. Anthony Travel Award.

EEOBGSA - won Outstanding Community Service and Outstanding Commitment to Higher Education Outreach awards from Student Life

Fellowships

Anne Jacobs – Awarded an NSF DDIG.

JP Perea-Rodriguez – Honorable mention on the NSF Graduate Research Fellowship.

Heather Hulton – Honorable mention on the NSF Graduate Research Fellowship; and she received two quarters of support from UCR through the Graduate Research Mentorship Fellowship.

Jeff Olberding – Honorable mention on the NSF Graduate Research Fellowship.

Nicholas Shirkey - Honorable mention for the Ford Foundation pre-doctoral fellowship.

Appointments/Positions/Collaborations

Louis Santiago -- Received tenure and is now an Associate Professor of Botany and Plant Science.

Mark De Guzman -- Received a summer internship with the Smithsonian Tropical Research Institute to work under the supervision of Dr. Stefan Schnitzer on community ecology of Lianas

Breanna Harris – Accepted a 2-year, Visiting Assistant Professor of Biology position at Keck Science Department starting Fall semester of 2012.

Publications

T.R. de Jong, A. Korosi, B.N. Harris, J.P. Perea-Rodriguez, W. Saltzman. Individual variation in paternal responses of virgin California mice (*Peromyscus californicus*): behavioral and physiological correlates. *Physiological and Biochemical Zoology*, In Press (Focused Issue on Intraspecific Variation in Physiology and Behavior).

J.P. Perea-Rodriguez (2012). Monkeys, Malaria, and My Work in Miami. In: Kemmerer L.(ed), Primate People, The university of Utah Press, UT.

E. Conlisk, D. Lawson, A. Syphard, J. Franklin, L. Flint, A. Flint, H. Regan. In press. The roles of dispersal, fecundity, and predation on the population of an oak (*Quercus engelmannii*) under global change. *PLoS One*.

M.E. Wolak (*in press*) **nadiv**: an R package to create relatedness matrices for estimating non-additive genetic variances in animal models. *Methods in Ecology and Evolution*.

J. Arendt & D. Fairbairn (2012). Reproductive allometry does not explain the temperature-size rule in water striders (*Aquarius remigis*) *Evol. Ecol.* 26, 75-757.

R.P. O'Donnell & **C.H. Richart** (2012). Diet of the Columbia Torrent Salamander, *Rhyacotriton kezeri* (Caudata: Rhyacotritonidae): Linkages Between Aquatic and Terrestrial Ecosystems in Forested Headwaters. *Northwestern Naturalist* . 93, 17-22. [DOI: http://dx.doi.org/10.1898/11-23.1](http://dx.doi.org/10.1898/11-23.1)

C.J. Essenberg. Explaining variation in the effect of floral density on pollinator visitation. *American Naturalist*

C.J. Essenberg. Scale-dependent shifts in the species composition of flower visitors with changing floral density. *Oecologia*

Presentations/Conferences/Workshops

Adrienne Mora – Went to Sacramento to represent UCR, and met with staffers and senators to speak with them about the importance of graduate research (and the UCs) in California. <http://ucrtoday.ucr.edu/4171>

Brian Gray – Presented a seminar about evolutionary biology at San Bernardino Valley College titled "Untold Stories of the ER"

"Is Gene Flow the Most Important Evolutionary Force?" **Norm Ellstrand.** The sixtieth annual Faculty Research Lecture, June 8th, University of California, Riverside.

"EFFECTS OF DIETARY PHYTOESTROGENS ON PATERNAL RESPONSIVENESS AND MATURATION IN THE BIPARENTAL CALIFORNIA MOUSE." **A.T. Stamp***, **T. Amador***, **B.N. Harris**, **J.P. Perea-Rodriguez**, **W. Saltzman**. Oral presentation, West Coast Biological Sciences Undergraduate Research Conference, April 2012, Loyola Marymount University. *UCR undergraduate

"INDIVIDUAL SIGNATURES IN VOCALIZATIONS OF CALIFORNIA MOUSE (*PEROMYSCUS CALIFORNICUS*) PUPS." **S. Hossain***, **W. Saltzman**, **S. Rotschafer**, **K.A. Razak**, **K. Kaiser**. Poster presentation, West Coast Biological Sciences Undergraduate Research Conference, April 2012, Loyola Marymount University.

"THE EFFECT OF ACOUSTIC CUES ON AGGRESSION IN MALE PACIFIC FIELD CRICKETS, *TELEOGRYLLUS OCEANICUS*." **Y. Yang***, **B. Gray**, **M. Zuk**. Poster presentation, West Coast Biological Sciences Undergraduate Research Conference, April 2012, Loyola Marymount University. *UCR undergraduate

"VALIDATION OF *XENOPUS LAEVIS* MONOCLONAL ANTIBODIES IN WHITE'S TREEFROG *LITORIA CAERULEA*." **A. Marentes***, **S. Noor**, **E. Wilson**, **W. Saltzman**, **K. Kaiser**. Poster presentation, West Coast Biological Sciences Undergraduate Research Conference, April 2012, Loyola Marymount University. *UCR undergraduate

"ANTI-PARASITE BEHAVIOR IN THE CALIFORNIA FIDDLER CRAB, *UCA CRENULATA*: EFFICACY AND SEX DIFFERENCES." **A.B. Mora** & **M. Zuk**. Oral presentation, May 2012, Southern California Academy of Sciences annual meeting, Eagle Rock, CA.

"IS SPERM COMPETITION RISK MEDIATED BY SOCIAL CUES IN THE PACIFIC FIELD CRICKET *TELEOGRYLLUS OCEANICUS*?" **B. Gray**, **M. Beveridge**, **L.W. Simmons**, **M. Zuk**. Oral presentation, May 2012, Southern California Academy of Sciences annual meeting, Eagle Rock, CA.

"MALE REPRODUCTIVE STATUS DOES NOT ALTER HYPOTHALAMIC-PITUITARY-ADRENAL (HPA) AXIS ACTIVITY OR REACTIVITY IN A MONOGAMOUS, BIPARENTAL RODENT, THE CALIFORNIA MOUSE (*PEROMYSCUS CALIFORNICUS*)." **B.N. Harris** & **W. Saltzman**. Oral presentation, May 2012, Southern California Academy of Sciences annual meeting, Eagle Rock, CA.

"THE RELATIONSHIP BETWEEN CONDITION, MORPH, AND STRIDULATION IN MALE PACIFIC FIELD CRICKETS (*TELEOGRYLLUS OCEANICUS*)." **W.W. Splinter***, **B. Gray**, and **M. Zuk**. Oral presentation, May 2012, Southern California Academy of Sciences annual meeting, Eagle Rock, CA. *UCR undergraduate

"DIFFERENCES IN GROWTH AND BIOMASS ALLOCATION PATTERNS BETWEEN NATIVE AND INTRODUCED POPULATIONS OF THE INVASIVE GRASS *BROMUS RUBENS*." **M.R. O'Neill**, **E.B. Allen**, **L.S. Santiago** and **M.F. Allen**. Oral presentation, May 2012, Southern California Academy of Sciences annual meeting, Eagle Rock, CA.

"EFFECTS OF DIETARY PHYTOESTROGENS ON PATERNAL RESPONSIVENESS AND MATURATION IN THE BIPARENTAL CALIFORNIA MOUSE." **A.T. Stamp***, **T. Amador***, **B.N. Harris**, **J.P. Perea-Rodriguez**, and **W. Saltzman**. Oral presentation, May 2012, Southern California Academy of Sciences annual meeting, Eagle Rock, CA. *UCR undergraduate

"The role of sapwood capacitance in hydraulic strategies of desert chaparral shrubs." **M.E. De Guzman**, **S. Virk**, **L.S. Santiago**. Poster presentation, May 2012, Southern California Academy of Sciences annual meeting, Eagle Rock, CA.

"EFFECT OF CHRONIC VARIABLE STRESS ON PATERNAL BEHAVIOR IN CALIFORNIA MOUSE FATHERS." **B.N. Harris**, **T.R. de Jong**, **V. Yang***, **W. Saltzman**. Poster presentation, June 2012, Society for Behavioral Neuroendocrinology annual meeting, Madison, WI. *UCR undergraduate

"CHALLENGES IN STUDYING THE NEUROENDOCRINOLOGY OF MATERNAL BEHAVIOR IN PRIMATES." **W. Saltzman**. Oral presentation, June 2012, Society for Behavioral Neuroendocrinology annual meeting, Madison, WI.

"EFFECTS OF DIETARY PHYTOESTROGENS ON PATERNAL RESPONSIVENESS AND MATURATION IN THE BIPARENTAL CALIFORNIA MOUSE." **A.T. Stamp***, **T. Amador***, **B.N. Harris**, **J.P. Perea-Rodriguez**, **T.R. de Jong**, **W. Saltzman**. Poster presentation, June 2012, Society for Behavioral Neuroendocrinology annual meeting, Madison, WI. *UCR undergraduate

"BEHAVIORAL EFFECTS OF PLACENTOPHAGIA IN MALE CALIFORNIA MICE." **J.P. Perea-Rodriguez**, **T.R. de Jong**, **W. Saltzman**. Poster presentation, June 2012, Society for Behavioral Neuroendocrinology annual meeting, Madison, WI.

Anne Jacobs – Gave a talk at the annual Animal Behavior Society meeting in Albuquerque, New Mexico

Adrienne Mora – Gave a talk at the annual Animal Behavior Society meeting in Albuquerque, New Mexico

Brian Gray – Gave a talk at the annual Animal Behavior Society meeting in Albuquerque, New Mexico

Matthew Wolak – presenting a poster at the Fourth International Conference of Quantitative Genetics in Edinburgh, Scotland.

Adrienne Mora – will be presenting at the Parasitology conference this summer.

Heather Hulton -- poster at ESA's Emerging Issues conference in West Virginia on "Predicting Small Rodent Colonization Patterns in a Fragmented Landscape to Post-Fire Lands in Joshua Tree National Park"

Ashkaan Fahimipour & Heather Hulton -- Had abstracts accepted for the ESA meeting in Portland this August. Ashkaan's talk is titled 'Space, time, and the ontogeny of food web structure.'

Personnel

We said goodbye to **Libby Swanger** as she has moved to Marlene's new lab in Minnesota.

Emily Muns -- Defended her M.S. Thesis. The title of her thesis is "The effect of food restriction on sperm number in the water strider *Aquarius remigis*" and she is advised by Dr. Daphne Fairbairn.

Mauricio Torres-Mejia – Defended his Ph.D. Dissertation. The title of his dissertation is "Ecomorphology of Body Shape and Life History in females of the genus *Gambusia* (Poeciliidae) and in the guppy (*Poecilia reticulata*, Poeciliidae)" and he is advised by Dr. David Reznick.

Carla Essenberg – Defended her Ph.D. Dissertation. The title of her dissertation is "Understanding the Effects of Floral Density on Flower Visitation Rates and Species Composition of Flower Visitors" and she is advised by Dr. John Rotenberry.

Elizabeth (Liz) Dlugosz -- Defended her Ph.D. Dissertation. The title of her dissertation is "Effects of stressors on voluntary running" and she is advised by Dr. Mark Chappell.

Lijin Zeng – Is expecting her first child.

Quresh Latif -- (former Rotenberry graduate student) and his wife are also expecting their first child.

Outreach

Rebecca Swab, Sasha Prokuda, and Carla Essenberg – Worked with the students of Bryant School in Riverside as part of the school's after-school E3 program.

Matt Wolak, Sarah French, Libby Swanger, Keenan Morrison, and Brian Gray gave presentations to 105 4th graders at Kingsley Elementary School on ecology, evolution, and careers in science.

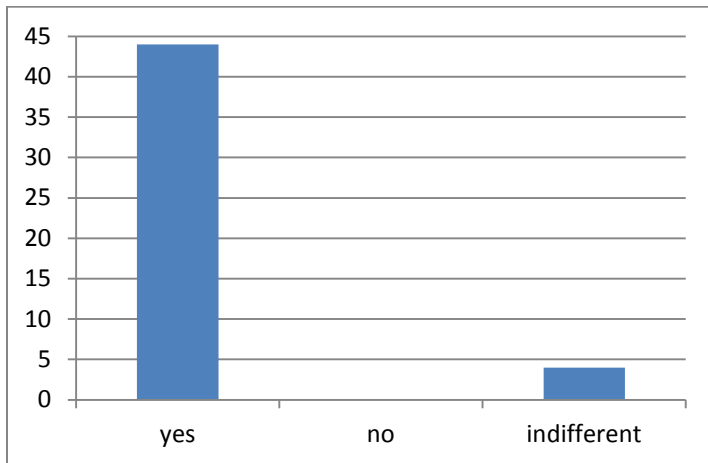
Brachi Schindler and Taylor Hundman gave an outreach presentation on ecology and evolution to 95 4th graders at Del Norte Elementary School

Total outreach hours for the 2011-2012 school year = **638!** (see breakdown on attached page)

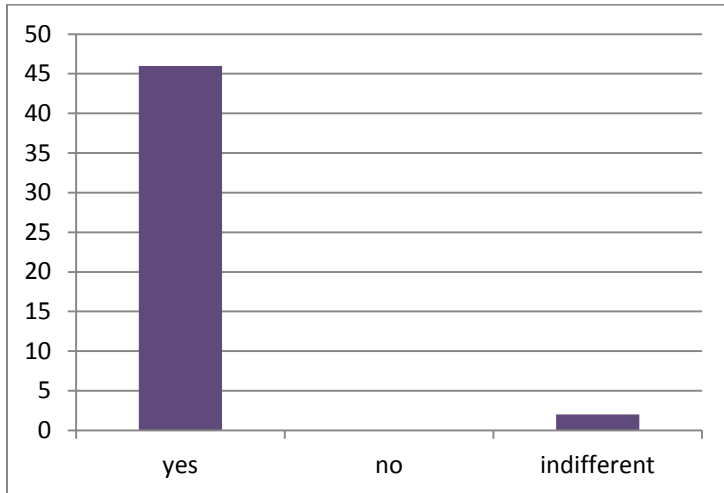
Other

Thank you to everyone who filled out the EEOB News Survey, we had 48 responders. The results are below. The EEOBGSA discussed the News at our last meeting and we plan to continue the News next school year. The plan is to also get the News on the new EEOB website.

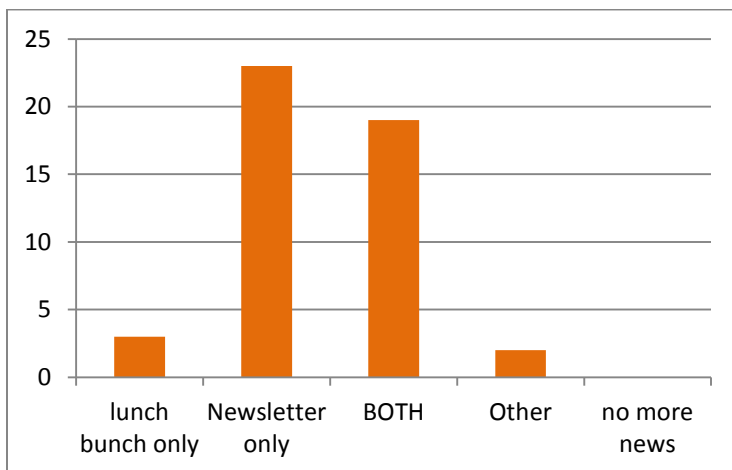
1. Do you like the concept of EEOB News?



2. Would you like to have EEOB News in the Spring?



3. Which best describes how you would like the News to be disseminated?



Spring quarter lunch bunch was organized by Priya B., the quarterly schedule is below.

Week	Date	Speaker	Title
1	Apr-6	TBA	EEOB GSA Meeting
2	Apr-13	Dr. Bradford Hawkins , UC Irvine	Global patterns of biodiversity: linking ecology and evolution through climate
3	Apr-20	Dr. Sang-Hee Lee , Professor of Anthropology	Modern Human Origins
4	Apr-27	Dr. Pawel Koteja , TBA	Natural selection on metabolic traits in a small rodent, the bank vole
5	May 4	Dr. Bradley White , Assistant Professor of Entomology	Ecological Genomics of the African Malaria Mosquito
6	May 11	Dr. Laura Mydlarz , University of Texas, Arlington	Service learning pedagogy: Combining undergraduate teaching and NSF broader impacts
7	May 18	Drs. Ken Halama , (UC Natural Reserves) Jan Beyers (USFS Fire Lab) and Arlee Montalvo , (Riverside Corona Resource Conservation District)	Pursuing non-academic jobs
8	May 25	Sarah Pemberton , Office of Student Affairs and Officer Greg Lynch , UCR Police Dept.	Dealing with Distressed Students - CANCELLED
9	Jun-1	Dr. Samrat Mondol , Postdoc, Center for Conservation Biology, University of Washington	TBA
10	Jun-8	Dr. Leslie Martin (La Sierra University), Tatiana Vasquez (San Bernardino Valley College) and Dr. Cindy Shannon , (Mt. San Antonio College)	Teaching in Community Colleges

EEOBGSA Outreach Summary

Category	# hours	# community member and/or students served	# EEOBGSA members involved	Comments/Details	2011 hours or students	Increase in raw hours or # of students (see research)	% increase from 2011 to 2012
Science Fair Judging	92.32	6 fairs	22	Granite Hill Elementary (Jurupa Unified School District); Bryant School of Arts and Innovation (Riverside Unified School District - RUSD); St. Catherine's of Alexandria (RUSD - Private School); RUSD District Fair; Perris Elementary School District Fair (Perris Elementary School District); Inland Science and Engineering Fair (Riverside, Inyo, Mono and San Bernardino Counties).	66.75	25.57	38.31
Science Fair Mentoring	174.45	45	15	EEOBGSA members mentored local students with their science fair projects -- some with the NASACLIM program, others on their own. We also raised money and sponsored prizes for the winning projects (as chosen by EEOBGSA judges -- see above). We also attend the RUSD Science Fair Expo to provide assistance to students, parents and teachers.	18	156.45	869.17
Additional Research and Professional Development Mentoring	235.5	56	25	Undergraduate professional development, preparation of research proposals, grants, presentations, and manuscript drafts	150	85.5	57
Research				See Breakdown Below			
UCR students	N/A	104	25	Number of UCR undergraduate students who worked with an EEOBGSA member on research, either in the lab or in the field	80	24	30.00
UCR students w/ independent projects	N/A	41	25	Number of UCR undergraduate students who have their own independent projects and are under the guidance of an EEOBGSA member. Research projects can be stand-alone or a portion of the EEOBGSA members' research	31	10	32.26
UCR students w/ grants or who will be co-authors	N/A	36	25	Number of UCR undergraduates that are doing research with an EEOBGSA member who have their own funding (e.g., UCR Chancellor's Research Fellowship or Undergraduate Research Grant) and/or will be a co-author on the published research. Some of these students have also presented their results at conferences, both local and international	21	15	71.43
Community members	N/A	16	25	Non-UCR People who assisted EEOBGSA members with their research	not available	not available	not available
Journal Donation	NA	1105*	All	Donations of scientific journal articles to the following: West Valley High School, RUSD STEM Academy, Centennial High School, Ramona High School, UCR Upward Bound Program. *refers to number of journals donated	335*	770*	229.85
School Presentations	44.5	434	11	Various outreach and science presentations at various local schools and venues	8.5	36	80.90
Teacher Training & Assistance	6.75	103	2	West Valley High School; Ontario-Montclair School District Teacher Program; dermestid beetle and house cricket donations (from the colonies that we rear for outreach purposes)	0	6.75	
Departmental Service	N/A	N/A	43	GradFest -- Annual recruitment weekend for potential new EEOB graduate students; planned and coordinated by EEOBGSA members and faculty. EEOB 265 "Lunch Bunch" -- Seminar series run by EEOBGSA members. Coffee half hour.			
University Service	38.5	875	9	UCR Discovery Days; STEM transfer center presentation; Chaffey EOPS presentation; UCR Climate Day	19	19.5	102.63
Other	46.5	364	10	Various "other" events, for example: community college guest lectures, volunteering at local wildlife areas, and volunteering to judge academic competitions for a local high school	not available	not available	not available

TOTAL HOURS 638.5

240 398.52 166.05