

The Alumnidae

Spring 2012

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Dr. Bryan P. Glass Exhibit

Life Sciences West, home of the Department of Zoology, has a new exhibit in the lobby highlighting the work of Dr. Bryan P. Glass, late Professor Emeritus, and some of the holdings from the OSU Collection of Vertebrates (OSU COV). Undergraduates Alyssia Culbertson and Alesia Sharber learned about Dr. Glass and his work as a biologist at OSU and as Curator of the Collection of Vertebrates when they enrolled in ZOO 3700 Practicum in Natural History Collections taught by current Curator of Vertebrates, Dr. Karen McBee (center). Part of the course requirements included designing an exhibit to feature specimens from OSU COV and work done by Dr.



Glass. Their design was so good that the exhibit was built and installed in a display case in the lobby of the building. We were delighted when Dr. Glass' daughters, Peggy Glass Matlock (left) and Janis Glass Burger (right), were able to visit the exhibit. We encourage everyone to drop by LSW and take a look when you're in the neighborhood.

Greetings from the Department Head

As is typical for this time of year, happenings and events are moving very rapidly with graduation and all of the banquets associated with the end of the academic year. As you will see in this edition the awards and achievements of our undergraduate, and graduate students, as well as our faculty have been exceptional both on and off campus. We want to thank our terrific alumni for their support of awards and scholarships. Indeed that support allowed Zoology to present more scholarships and awards at this year's banquet than has ever been possible in the past. Along that line we have outgrown Murray Hall so our awards celebration next year will be in Click Hall in the Conoco Phillips Alumni Center on the east side of campus. More details will follow in autumn. Finally I hope you will all join me in congratulating Marsha Flasch on a wonderful 24-year career here at OSU. Marsha, who recently retired, has been a key, and especially joyful, part of the Zoology main office. We wish her the best!

Don't miss out on the fun: Come join us for the 2013 Zoology Awards Banquet on 30 March in Click Alumni Hall. More details will be announced in our fall newsletter.

Pictured from this year's banquet are Dr. Matthew Bolek and Ms. Lauren Foley.



Faculty Highlights

Dr. Michi Tobler

Dr. Michael Tobler, Assistant Professor in the Department of Zoology, was recently named the 2012 Sigma Xi Young Investigator for the Oklahoma State University chapter of Sigma Xi. The Young Investigator Award was established by Sigma Xi, the Scientific Research Society, to recognize scientists in the early stages of their careers. Dr. Tobler earned his Ph.D. from the University of Zurich in 2008 and joined OSU in 2010. He has published more than 65 publications over the duration of his career, and his work on the speciation of livebearing fishes in extreme environments has received much media attention (and was highlighted in our fall newsletter). Since joining OSU, he has received more than \$700,000 in grants to support his research. Dr. Tobler is considered an engaging teacher and mentor for undergraduate and graduate students, and an inspiration to his colleagues across campus. Dr. Tobler will present the Sigma Xi Young Investigator lecture during the Spring 2013 semester.

Dr. Stanley Fox

Dr. Stanley Fox, OSU Regents Professor of Zoology, has received the Donald W. Tinkle Research Excellence Award from the Southwestern Association of Naturalists at the 2012 annual meeting (19 - 22 April) at ANUIES, Universidad Autónoma del Estado de México, in Valle de Bravo, Mexico. Dr. Donald W. Tinkle, a prominent herpetologist, ecologist, and evolutionary biologist, was a faculty member at the University of Michigan and a long time member of SWAN. Tinkle was a pioneer in developing life history theory and served as Curator of the University of Michigan Museum of Zoology. To honor Dr. Tinkle's career the Tinkle Research Excellence Award was established by SWAN in 1988. The award is presented to an individual who, in the past 10 years, has made a significant contribution to the knowledge and understanding of the biota of the southwestern United States, Mexico, and Central America through scientific articles and books. The significance of these written works and their quality and quantity are factors in the selection of a recipient of this award. This is the first time the award has been given since 2009. The Zoology Department is also home to previous recipients of the Tinkle Research award:

1994 - Regents Professor Emeritus Dr. Anthony Echelle and his life-long research partner Alice Echelle

2003 - Regents Professor Dr. Ronald A. Van Den Bussche



Fulbright Awardee conducting research in the Department of Zoology

Dr. Irina Feniova from the Russian Academy of Sciences has received a prestigious Fulbright Award to conduct research in the Department of Zoology at OSU. Dr. Feniova is collaborating with Dr. Andy Dzialowski to explore how climate change impacts zooplankton communities and their susceptibility to biological invasions. The collaboration between Drs. Feniova and Dzialowski is a continuation of previous research efforts conducted in Polish lakes that were funded by the Polish Academy of Sciences. Dr. Feniova started work in December and will continue through June.

Graduate and Undergraduate Student Accomplishments

Zoology Ph.D. student receives NSF fellowship

OSU Department of Zoology graduate student, Marissa Rice, has been awarded an esteemed National Science Foundation (NSF) Graduate Research Fellowship (approximately \$126,000 over three years). This program recognizes and supports outstanding graduate students (M.S. and Ph.D.) in the NSF-supported disciplines of science, technology, engineering, and mathematics. Ms. Rice will be investigating the influence of the neuro-hormone oxytocin on social and spatial memory and how it shapes reproductive tactics. Two additional Zoology graduate students, Ms. Courtney Passow (Ph.D. student) and Mr. George Prounis (Ph.D. student), and one incoming graduate student, Ms. Lynne Beaty (Ph.D.), have been awarded honorable mention. For 2012, 12,669 applications were submitted to the program and only 2,000 fellowships and 1,835 honorable mentions were awarded.



Marissa Rice and George Prounis are both advised by Dr. Alex Ophir (highlighted in our fall newsletter). Mr. Prounis will investigate how the formation of new neurons in adulthood influences monogamy. Courtney Passow, advised by Dr. Michi Tobler, will be studying the genomic basis of adaptation and speciation in fish inhabiting toxic sulfide springs. Lynne Beaty, who will join the department this fall, will be advised by Dr. Barney Luttbeg and will investigate how prey state and the information about predation risk available to them affect prey and predator spatial distributions and population dynamics.

Justin Lack receives Stephen J. O'Brien Award and the 30th Annual Phoenix Award

Justin Lack received the 2012 Stephen J. O'Brien Award from the American Genetics Association (AGA) for the Best Paper Authored by a student published in the *Journal of Heredity* during 2011. Justin received this award for the following paper: Lack, J. B., R. D. Nicholls, G. M. Wilson, and R. A. Van Den Bussche. 2011. *Genetic signature of reproductive manipulation in the phylogeography of the bat fly, Trichobius major*. *Journal of Heredity* 102:705 – 718. As indicated in the award notification letter, “A committee of the AGA Council evaluated whether candidate articles were substantial, novel and synthetic in their approaches.” The committee’s comments on the merits of Justin’s paper included: “Sophisticated analyses applied to an interesting problem. The distinguishing feature is that the authors examined a supplementary hypothesis positing infection driving a mtDNA selective sweep. An excellent study of parasite & host ecology, genomics and population biology on multiple levels. Three levels of species genetics tie into a concise example of evolution and adaptation. Well done and well written.”

Justin was also honored at the 30th Annual Phoenix Award Reception held on campus 19 April 2012 where he received the Phoenix Award for the Outstanding Doctoral Student at OSU. The award is sponsored by The Graduate and Professional Student Government Association, the Graduate College, Vice President for Research and Technology Transfer, and the Provost and Senior Vice President. The Phoenix Award recognizes exemplary achievement in leadership, scholarship, professional involvement, and university and community service.

Justin was a Ph.D. student under the guidance of Dr. Ronald A. Van Den Bussche and graduated on 4 May. He has accepted a Post-doc position at the University of Wisconsin-Madison.

University of Oklahoma Biological Station Graduate Summer Research Fellowship awarded to OSU student

Jared Goos, a first year doctoral student in the Dr. Puni Jeyasingh lab has been awarded the University of Oklahoma Biological Station (UOBS) Graduate Summer Research Fellowship. It is one of two \$2,500 fellowships in support of graduate research. UOBS offers free housing, and access to facilities and equipment. Jared is the first non-OU recipient ([GO POKES](#)) of this award. Jared's research interests focus on phenotypic evolution. His summer research will attempt to mechanistically integrate ecosystem parameters, phenotypic expression, and fitness consequences using *Hyalella* amphipods.

Three students receive awards at annual SWAN meeting

Three zoology graduate students received awards at the annual meeting of the Southwestern Association of Naturalists. The meeting was held by the Universidad Autónoma del Estado de México on 19-22 April 2012 at Valle de Bravo, México. Danielle Alba has received the Howard McCarley Student Research Award for 2012. The award is granted to support students in higher education researching biota of the southwestern United States, Mexico and Central America and is given in memory of the late Howard McCarley. Danielle will be using the award towards her research of small livebearing fish (*Poecilia mexicana*) and Eco-Evo loops in sulfidic spring and cave habitats of southern Mexico. Danielle is a Ph.D. student under the guidance of Dr. Michael Tobler. Enrique Santoyo-Brito and Matt Anderson both received a Bruce Stewart Student Travel Award to help defray travel and meeting expenses for students attending the annual meeting. Enrique presented both a talk and a poster that were co-authored by Matt Anderson and Dr. Stanley Fox at the meeting. The talk was entitled: "Sex ratio and morphological development according to incubation temperature in the collared lizard, *Crotaphytus collaris*". The poster was entitled: "An artificial nest chamber for captive *Crotaphytus collaris* that increases clutch success and promotes natural behavior". Enrique and Matt are Ph.D. students under the guidance of Dr. Stanley Fox.

Incoming graduate student awarded fellowship by Department of Defense

Ms. Lynne Beaty, who will be a new graduate student in the Department of Zoology starting Fall 2012 and advised by Dr. Barney Luttbeg, has been selected to receive a 2012 National Defense Science and Engineering Graduate (NDSEG) Fellowship. The NDSEG Fellowship is sponsored and funded by the Department of Defense (DOD) as a means of increasing the number of U.S. citizens and nationals trained in science and engineering. Of the over 3,000 applications received, only approximately 200 applications were selected for the fellowship that will provide 3 years of financial support (approximately \$30,000/yr). Ms. Beaty will be investigating the game and spatial dynamics of frog tadpoles and their aquatic predators.

Undergraduate researcher awarded prestigious scholarship

Rosa Yorks, a Zoology major and researcher in the lab of Dr. Puni Jeyasingh has been awarded the prestigious Barry M. Goldwater Scholarship. Its goal is to provide a continuing source of highly qualified scientists, mathematicians, and engineers by awarding scholarships to college students who intend to pursue careers in these fields. The scholarship is awarded to about 300 college sophomores and juniors nationwide. A maximum of \$7,500 per academic year is granted. Rosa's research project surrounds the effect of temperature on the physiology of various *Daphnia* genotypes inhabiting Sooner Lake, and the microevolutionary dynamics of this population to increasing temperature. This work has been supported by the Niblack (2010) and Wentz (2011) Scholarships.

Ms. Yorks, who was recently named the department's Outstanding Senior in Zoology, will graduate with two separate degrees (Zoology and Microbiology & Molecular Genetics), and a minor in Biochemistry in 2013.

*Student and Faculty Award Winners
2012 Annual Zoology Awards*

Undergraduate Students

Outstanding Zoology Sophomore: Lauren Foley
Outstanding Zoology Junior: Megan A. Reidy
Outstanding Zoology Senior: Rosalina M. Yorks
Outstanding Physiology Senior: Megan E. Prouty
Edwin Chappabitty, Jr. MD Scholarship: Ashley L. Lonetree
Dr. G. Michael Steelman Scholarship: Pierre A. Ruhlmann



Left to right: Dr. Edwin Chappabitty, Jr., Ashley L. Lonetree, and Dr. Matthew Bolek. Ashley received the Edwin Chappabitty Jr. M.D. Scholarship.

Graduate Students

Outstanding Zoology Masters Student: David D. Zheng
Outstanding Zoology Doctoral Student: Matthew L. Anderson
Outstanding Wilhm Teaching Assistantship - Masters: David S. Haines
Outstanding Wilhm Teaching Assistantship - Doctoral: Danyelle N. Lee
S. L. "Bud" Burks Memorial Graduate Research Award: Courtney N. Passow
Waters Grant-in-Aid of Research: Elisha K. Mueller
Bob and Julia Bollinger Field Research Grant: Medhavi Ambardar
Departmental Travel Grant: Priyanka Roy Chowdhury
Zoology Graduate Student Society Outstanding Masters Student: Jeremy Wilkinson
Zoology Graduate Student Society Outstanding Doctoral Student: Reid Morehouse
Zoology Graduate Student Society Best Lunchtime Seminar Presentation:
Fall - Anna Moyer
Spring - Medhavi Ambardar

Faculty

Zoology Graduate Student Society Outstanding Graduate Mentor: Dr. Stanley F. Fox



Left to right: Dr. Matt Lovern, Courtney Passow, and Dr. Linda Burks. Courtney received the S. L. "Bud" Burks Memorial Graduate Research Award.

Left to right: Luann Waters, Elisha Mueller, and Dr. Matt Lovern. Elisha received the Waters Grant-in-Aid of Research.



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Keep in Touch and Help Us Grow Stronger

We hope you enjoy *The Alumnidae*, and we hope to hear from you about future issues. To be sure that you continue to receive the newsletter, please update address and email information with the OSU Alumni Association at:

<http://www.orangeconnection.org>

If you have comments, questions, or contributions for *The Alumnidae* send them directly to meredith.hamilton@okstate.edu

YES! I want to support the ZOOLOGY DEPARTMENT at Oklahoma State University!

1. DESIGNATION

- Zoology Excellence Fund (223750)
- Wilhm Teaching Assistantship Award (228230)
- Scholarship for Zoology Students (224550)
- Burks Student Award (223590)
- Dr. G. Michael Steelman Scholarship (229830)
- Bryan P. Glass Scholarships (223750)
- Chappabitty Scholarship (228855)
- Collection of Vertebrates
- Other _____

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