



STUDENT NEWSLETTER FOR THE DEPARTMENT OF

# BIOLOGY

UNIVERSITY OF WASHINGTON

Autumn Quarter 2013

Version 17

## Important Dates for Autumn Quarter

Sept 25	First Day of Instruction
Oct 1	LAST DAY to drop a class without a fee thru MyUW
Oct 1	LAST DAY to withdraw at the Reg. office w/o owing tuition
Oct 2	Biology Apparel Day
Apr 5	Deadline at 5:00 pm for apps for Departmental Awards
Oct 1	Info: WRF-HallFellowship 12 pm (noon) PAA A023D
Oct 2	All courses require entry codes to add, beginning
Oct 8	LAST DAY to drop a class without the use of the ANNUAL DROP
Oct 10	Scholarship & Fellowship Fair 10 am to 2 pm MGH Commons
Oct 15	LAST DAY to add a class through MyUW
Oct 16	Freshman Scholarship 101 3:30 - 4:20 pm MGH 171
Oct 20	Deadline for Fall Dept Awards Sunday Oct 20 @11:59 pm
Nov 6	Biology Apparel Day
Nov 6	Biology Networking Night
Nov8-Nov24	Winter Registration Period 1
Nov 11	Veteran's Day: no classes
Nov25--Jan5	Winter Reg Period 2
Nov 27	Mystery Flower contest ends
Nov 28	Thanksgiving Day: no classes
Nov 29	Day After T-Day: no classes
Dec 4	Biology Apparel Day
Dec 6	LAST DAY to Withdraw (from all Autumn Qtr classes)
Dec 6	Last day of instruction
Dec 7-13	Final Examination week
Dec 14-Jan5	Winter Break

## Chair of Dept Dr. H.D. Toby Bradshaw

Welcome back to UW Biology! I hope that you all had an enjoyable and productive summer. With more than 700 bachelor's degrees awarded last year, Biology continues to be (by far!) the most popular major on campus, and is the single largest STEM program in the state of Washington. Our exit surveys of graduating seniors have told us that more course offerings, especially lab courses, and courses in physiology, would be appreciated. The Biology faculty have responded by adding several new courses to the curriculum, including:



Dr. Toby Bradshaw with two of his Harris's hawks

BIOL 402 – Cell Biology Lab  
BIOL 417 – Reproductive Physiology  
BIOL 421 – Ecology and Evolutionary Physiology  
BIOL 448 – Mammalogy  
BIOL 467 – Comparative Animal Physiology  
BIOL 470 – Biogeography

Several of these courses are being taught by our newest faculty members, whose youthful enthusiasm and cutting-edge expertise will make the classes and labs particularly exciting. Please drop by the Biology Advising Office (Hitchcock 318) to plan your academic year.

Your intellectual experience at the UW goes far beyond the classroom. When meeting with Biology's advising team, be sure to ask them about undergraduate research opportunities, Friday Harbor Labs courses and apprenticeships, Exploration Seminars, and study abroad. These unique opportunities for personal and professional growth are wonderful (and memorable!) elements in your education at the world's #1 public research university – the UW.

Best wishes for a successful 2013-14!

*Toby*

## Assoc Chair of Grads Dr. Carl Bergstrom

Welcome to the UW Biology Department! I hope that you had an enjoyable and relaxing summer.

In addition to serving nearly 1700 undergraduates, the biology department is home to more than a hundred graduate students pursuing PhD degrees in the biological sciences. Our graduate students join us from premier institutions all over the world, and are valuable contributors to our department. In addition to serving as Teaching Assistants, they assist with faculty research in addition to conducting original research for their dissertations.

Our graduate students study everything from the evolutionary history of extinct species, to the dynamics of changing ecosystems around the world, to molecular biology of neural function in fruitflies. The diversity of interests in our department inspires creative and collaborative research, and distinguishes our students work. Our graduate students go on to do great things, including working as faculty at institutions around the world, serving in a range of government positions, or even staying close to home by working at the Gates Foundation.

I would strongly encourage our undergraduates to seek out opportunities to interact with the graduate students department. Our graduate students not only serve as curriculum guides in your discussion sections - they can help you gain insight into the intriguing world of research, and perhaps even play the role of mentor as you find a path to research for yourself!

Best wishes for a happy and enlightening year. *Carl*

*Bridget Bradshaw Senior Biology (General)*

In the evenings here you can lie on your back and watch as the deafening clouds of Rainbow lorikeets whip neatly into the date palms lining the river. The locals grumble about them—every dawn and dusk the sound of a million screeching brakes as they amass—but their ruckus has yet to outweigh their charm for me. There was a pair yesterday outside of my house, perched on some leguminous plant. I found their delicate and methodical stripping of one tiny leaflet at a time extremely endearing, squeaking quietly to each other. But back to the river! If you look down past the lorikeets in the palms and eucalypts you can see giant fruit bats the size of seagulls winging noiselessly up and down the river, occasionally crashing ungracefully into the black bean trees to roost. The lady that works at the post office was telling me that she's doesn't like the bats because they carry disease, which sounds silly to me seeing as humans are just walking disease bags anyway. But in my experience it's best to not anger people responsible for your mail. After heavy rains the river is brown and full of debris, but I hear it houses a healthy population of maturing Bull sharks. My professor for Animal Ecophysiology showed us pictures of all the little bull sharks he's caught from his tinnie, coincidentally located right next to a dock I row off of in the mornings. I spend gratuitous amounts of time staring hopefully into the opaque water, but have yet to see one.

I've been in Brisbane for 7 months now and am already feeling sad about my departure in December; so many things left to do with not nearly enough time. A lifetime would hardly cut it!



University is keeping me busy this semester, but my Marine Invertebrates class is well worth the time it takes. We head out in a few weeks for Heron Island to the University of Queensland marine research station where some of the top ocean acidification and coral reef studies are being conducted. It's becoming increasingly hard to focus on my more mundane studies because I'm so excited to be on Heron for a week of intense natural history immersion, which in my opinion is the best way to spend one's time.

My friend and I went diving down in New South Wales last weekend and spent the whole time reveling in the glorious assemblage of nudibranchs, ascidians, and parrotfish while everyone else was focused on nurse sharks.

On the complete opposite end of the water-land continuum, I spent a week of the winter in Idalia National Park located in Western-central Queensland taking a field course called 'Ecology of the Outback.' We camped out in the semi-arid landscape and counted macropods and chenopods and generally ran around like scruffy desert hooligans. I've never been somewhere so silent at night—no sound of insects or wind or water, but the stars were unbelievable.



Pebble dragon (*Tympanocryptis cephalus*). Idalia National Park, QLD.

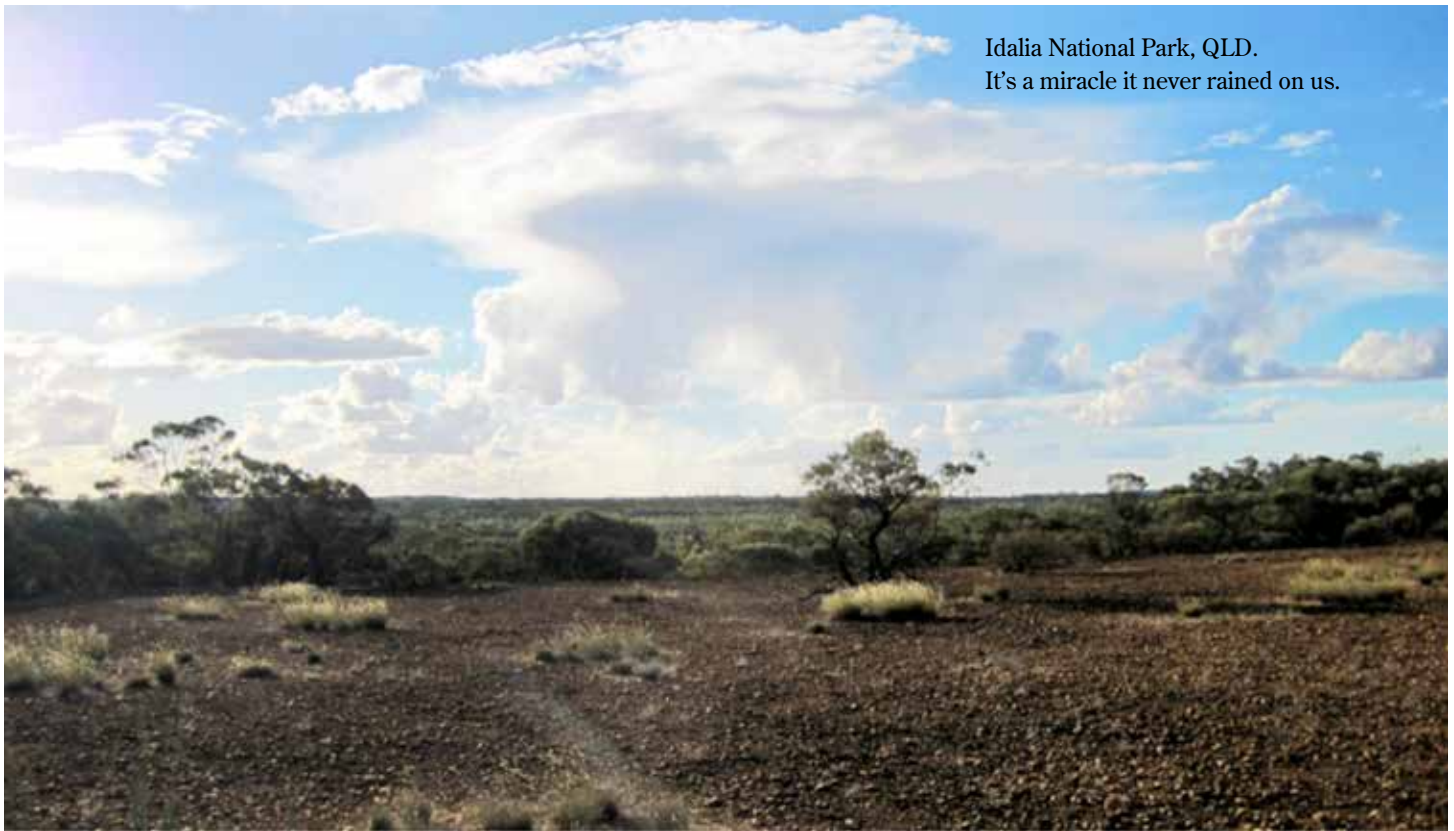
Now you may think to yourself, 'Self, studying abroad sounds like an action packed adventure of a lifetime in which I will spend every second rolling around in nature!' DISCLAIMER: The vast majority of my time here is spent just as my time in Seattle: holed up in the library, half-awake, struggling to keep from drowning in work. But studying abroad isn't really about going somewhere to sit on a bus full of tourists with 'Adventure [COUNTRY NAME HERE]' printed on the side of it, being shipped from one sight to the next, taking a picture, and moving on. People here—and in Seattle—ask me why I chose Australia and more specifically Brisbane. I say, for the birds and insects and weather, but most seem taken aback by my lack of better justification for the choice.

But the joy of travel, at least for me, is when you find yourself suddenly at home in a place thousands of miles away from everything you know; one day you can hop on a bus or bike and head in a direction without pre-meditation or the worry of never finding your way back. The joy of travel is walking into the forest and sitting down next to an acacia, listening to the kookaburras, and feeling familiarity with those smells and sounds. Lastly, I highly recommend when you study abroad to try going by yourself. Like walking in the dark, it is impossible without confidence in your adaptability and trust in your instincts.

**Be a generalist. Learn to be happy anywhere and the world will be your proverbial oyster.**







Idalia National Park, QLD.  
It's a miracle it never rained on us.



Goanna (Fam. Varanidae), D'Aguilar National Park, Brisbane, QLD.



Plumbago blue  
(*Leptotes plinius*).  
Caught in backyard, Brisbane.



Red-winged parrots (*Aprosmictus erythropterus*).  
Female (L) and male (R), Idalia National Park, QLD.



Some kind of katydid...(Caedicia, probably). D'Aguilar National Park, Brisbane, QLD.



## New Course: Mammalogy

Biology 448 with Sharlene Santana



Dr. Sharlene Santana  
Assistant Professor, Department of Biology  
Curator for Mammals, Burke Museum of Natural  
History and Culture

Growing up in the tropics of Venezuela, I found it impossible not to develop a keen interest in biodiversity. This led me to pursue a career as an evolutionary biologist, and to focus my research on understanding why there are such big differences in diversity across groups of mammals. As an integrative biologist, my research approaches this topic by examining three fundamental aspects of the ecology and evolution of biological systems: (1) lineage diversification, (2) phenotypic diversification, and (3) the roles of anatomical and behavioral evolution on organismal performance. The long-term goal of my research is to understand how behavior, anatomy and function evolve to create ecological opportunities and result in bursts of diversification in mammals.

Thus far, my work has contributed to the understanding of major radiations within bats and primates. I have used innovative approaches to investigate evolutionary hypotheses in these systems, which have involved combining techniques from multiple disciplines, including ecology, evolutionary biology, engineering, geography and computer science. Ongoing work will expand this framework over other mammal groups, and will also zoom in the mechanisms that allow many mammal species to coexist in tropical ecosystems.

This Autumn, I am excited about teaching a new class, BIOL 448, Mammalogy. In this class, we will learn about the evolutionary patterns, ecology, behavior, physiology, and taxonomy of mammals. We will rely on a comparative, systems approach to understand the major trends and mechanisms maintaining the diversity in form and function in mammals. The prerequisites for this class are either BIOL 350, BIOL 354, or BIOL 356.



## Scholarship & Fellowship Fair

October 10th - Save this date!

The Office of Merit Scholarships, Fellowships & Awards will be hosting the 2013 Undergraduate Scholarship & Fellowship Fair on Oct. 10, 10am-2pm in the Mary Gates Hall Commons.

The 2013 Undergraduate Scholarship & Fellowship Fair is an opportunity for UW undergraduates and alumni to learn about and explore the variety of scholarships, fellowships, and other funded programs to consider for undergrad, graduate, and postgraduate years.

Program representatives from UW, local and national organizations, agencies, departments, etc. will be tabling throughout the day, as well as offering specific workshops & information sessions.

Please visit <http://expd.washington.edu/scholarshipfair> for updates and details.

## Biology Networking Night

November 6th - Save this date!

### A Networking Opportunity Featuring a Panel of Biology Alumni in Hitchcock 132. Look for postings.

Learn about a variety of professions, get advice about making the most of your time at the UW, and find out what it takes to get a job in different fields. Undergraduates, graduate students, and recent graduates are welcome to attend and network with alumni for their career development. Visit [www.biology.washington.edu/showcase/net/net.html](http://www.biology.washington.edu/showcase/net/net.html)



## Passion Flowers

In front of the Botany Greenhouse

*Passiflora*, known also as the passion flowers or passion vines, is a genus of about 500 species of flowering plants. The flowers only last a day, and depending on the species, they open and close at different times. The flower to the left was seen at 9:00 a.m. and by afternoon the flower had fallen off. Passion flowers have unique structure, which in most cases requires a large bee to effectively pollinate. The size and structure of flower of other *Passiflora* species are optimized for pollination by hummingbirds, bumble bees, wasps or bats.

### Discover what lies beneath the waves,

from deep-sea jellyfish to orca whales. Uncover why the ocean is salty, where life started, and how tides work. Ocean acidification, harmful algal blooms, overfishing, climate impacts – explore the issues facing the blue planet. Experience the ocean up close and personal as a Marine Biology Minor at UW!

The Marine Biology Minor is an interdisciplinary program that spans the entire campus connecting scientists and students from a diverse array of disciplines, in particular Biology, Oceanography, and Aquatic & Fishery Sciences. Marine Biology Minors are part of a small community of faculty and students dedicated to the study of life, human impacts, and conservation in the marine environment. Students can engage in hands on research at UW's Friday Harbor Laboratories marine field station, explore the marine environment from aboard a research vessel, and investigate coastal waters through the department's diverse array of field opportunities. The Minor is open to all students and can be declared as early as your Freshman year!

**To learn more or declare the minor, please contact our new Marine Biology Adviser, Christen Foehring.**

Christen Foehring joined the College of the Environment this summer as the Marine Biology Academic Adviser. Christen is an alum of the Aquatic and Fishery Sciences program, where she completed her undergraduate degree. She went on to complete a Master's of Education at Harvard University and returned to Seattle as an Education Program Coordinator for the Seattle Aquarium and Islandwood. She has also worked with the UW's Coastal Observation & Seabird Survey Team (COAST), the New England Aquarium, and NOAA.

**Marine Biology Adviser:** Christen Foehring

**Email:** marbiol@uw.edu **Phone:** 206-543-7426

**Office Hours:** Mon-Wed 9 am – 5 pm  
Fishery Sciences Building, Room 116

**Map:** <http://uw.edu/maps/?fsh>

**Marine Biology at UW:**

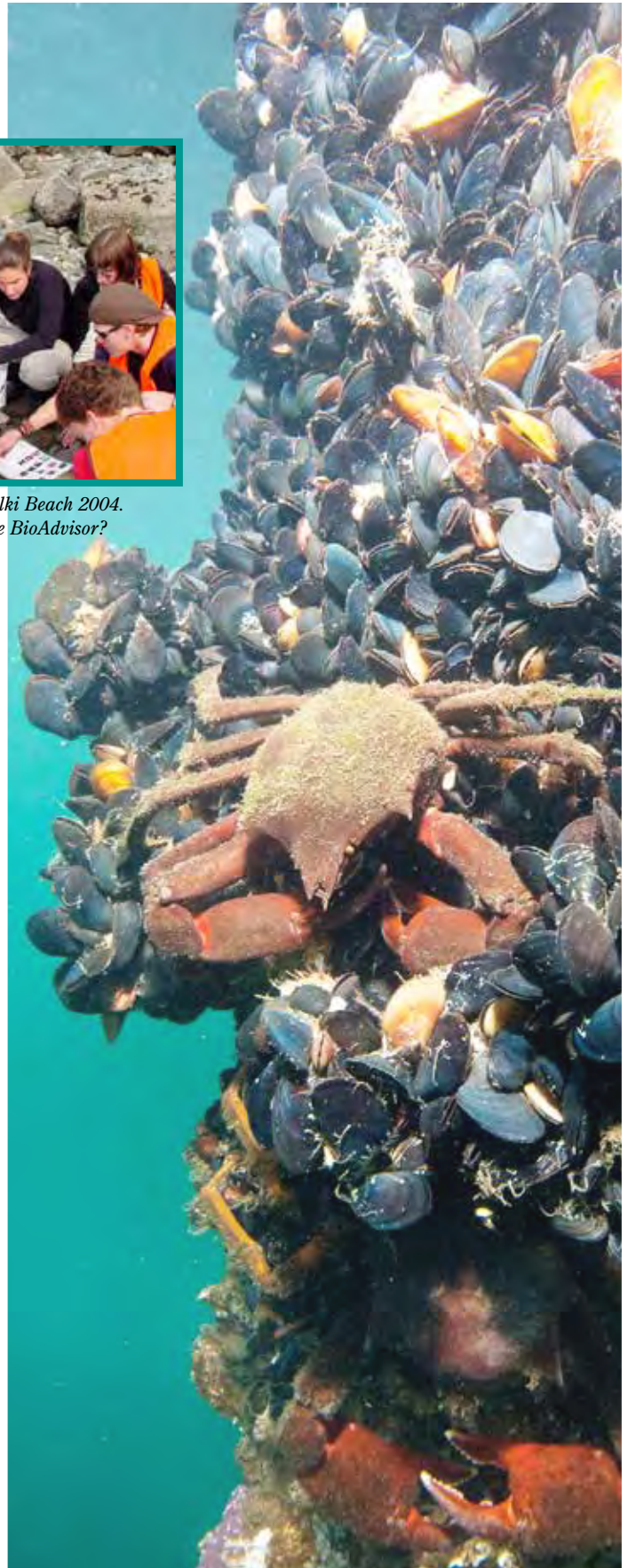
<http://depts.washington.edu/marbio/>

**Marine Biology Facebook Group:**

<https://www.facebook.com/groups/21863387329/>



*Marine biology students at Alki Beach 2004.  
Can you spot the new Marine BioAdvisor?*



## JOIN THE FUN!

Marine Biology & Friday Harbor Laboratories  
Information Session  
Monday, October 21st 10:30-11:30 AM, FSH 203



### *Brandon Peecook PhD candidate*

*Grad Advisor: Dr Christian Sidor*

My name is Brandon and I am a vertebrate paleontologist. Yes, part of my job includes digging up great big dinosaurs like Triceratops, but the reason I am in graduate school is to get a handle on the rich diversity of Life that has existed on this planet and how it has changed over all those hundreds of millions of years.

My research deals with questions related to extinction recovery. How are assemblages of animals affected by an extinction event? Has the extinction affected their taxonomic (have new animals evolved?) or ecological composition (more predators relative to herbivores now?)? How long until communities have rebounded to pre-extinction levels of diversity?

To try and answer these questions I am using both pre- and post-extinction assemblages of land-living vertebrate

animals from fossil basins in southern Pangea on either side of the end-Permian extinction in the Upper Permian (~255,000,000 years ago) and Middle Triassic (~242,000,000 years ago) epochs. The end-Permian extinction happened about 252,000,000 years ago and was the largest mass extinction event recorded in the fossil record, with estimates of over 90% species extinction. Our understanding of how this extinction affected land-living animals is based on basically two places: the Karoo Basin of South Africa and the Trans-Ural Basin of Russia, which tell similar stories. The lab of my advisor, Dr. Christian Sidor, has been looking for fossils in areas where we know much less; basins in Zambia, Tanzania, and Antarctica. These new places are showing us a completely different side of the end-Permian extinction, particularly of the recovery in the Triassic period. Animals that are not apparent in South Africa, like early relatives of crocodilians, dinosaurs, and some mammal relatives, are only being found in these other basins.



*RIVER CROSSING: My advisor, Dr. Chris Sidor, masterfully navigates the two of us through some high water during a rather treacherous crossing of the Luangwa River in Zambia while in pursuit of Permian and Triassic fossils.*



*ANTARCTIC FOSSIL: Me posing with half of a freshly excavated fossil in the Transantarctic Mountains of central Antarctica. This specimen is likely the skeleton of a little lizard-like animal that is actually a close relative of the common ancestor of birds and crocodiles.*

The Triassic is a very exciting time period as the earliest dinosaurs, crocodilians, turtles, pterosaurs, large marine reptiles, and mammals appear during that time. The bulk of my dissertation deals with teasing apart the patterns of the end-Permian extinction recovery.

Some of the most exciting animals I have helped discover belong to a group of animals that are the earliest, and closest, relatives to the dinosaurs, the silesaurids. The discovery of these animals in Middle Triassic rocks in Zambia and Tanzania has helped to push back the estimated origination date for the dinosaur lineage many millions of years. I just published a paper describing a new genus and species of silesaurid from Zambia (which I got to name!), and a good portion of my dissertation consists of the anatomy and biology of these fascinating animals, including looking at the microscopic structure of their bones to infer how fast they grew.

Why did I go to graduate school and get a PhD in

Biology? Because the diversity of Life on Earth all around us is staggering as it is. When you realize that Life on Earth has been adapting, diversifying, and dying for the last 3,600,000,000 years and that current diversity is just the tip of the iceberg, your eyes glaze over and your imagination explodes. More concretely, I want to professionally learn about Life, contribute to humanity's understanding of our past, and share my joy of the subject with others through teaching and outreach. To do those things with impact, you need to have a PhD.

**Plus, I've wanted to be a paleontologist all my life!**



*SILESAURUS: A rendering of a silesaurid, the group of animals most closely related to the dinosaurs. They evolved near the beginning of the Triassic Period.*





*Back row, L to R: Karlyn Beer, Samantha Halstead, Kaiwen Sun, Daniel Stofleth, Katrina Claw, Kevin Tsuchida, Emily Hsieh, Stephanie Liapis.  
Front Row, L to R: Catherine Opie, Cori Bucherl, Stephanie Morriss, Nicola Follis, Alex Taipale, Daniel Miller.*

## 2013 Bonderman Travel Fellows named UW students to traverse the world by means of unusual fellowship

SEATTLE—Fourteen University of Washington students were recently awarded Bonderman Travel Fellowships that will enable them to embark on solo journeys that are at least eight months long and take them to at least two regions and six countries around the world.

These fellowships, established in 1995 and worth \$20,000 each, aim to expose students to the intrinsic, often life-changing benefits of international travel. While traveling, students may not pursue academic study, projects or research. UW graduate students and undergraduate students in the UW Honors Program and in UW Tacoma's Global Honors Program are eligible to apply.

Collectively, the 2013 Bonderman Fellows will travel to Costa Rica, Brazil, Ecuador, the Galapagos Islands, Peru, Chile, Argentina, Mauritius, Nepal, India, Sri Lanka, Indonesia, Myanmar, Laos, China, Vietnam, Singapore, Bali, Thailand, Japan, Bhutan, Australia, Tahiti, Mongolia, Kyrgyzstan, Armenia, Kazakhstan, Ethiopia, Botswana, Zambia, Kenya, Madagascar, Greece, Iceland, Spain, Switzerland, France, Great Britain, Jordan, Pakistan, Morocco, Egypt, Turkey and Israel. Their interests include SCUBA diving, folk wrestling, culinary traditions, conflict resolution, the environment,

While traveling, students **may not** pursue academic study, projects or research.

the rituals surrounding death, visual and literary art, bicycling and reptiles.

Since 1995, 193 UW students—120 undergraduate and 73 graduate students—have been named Bonderman Fellows, including the 2013 fellows. The application process includes an essay and an interview with a selection committee, composed of University faculty and staff and former Bonderman Fellows. The process is designed to select students who are open to the transformative potential of their journeys and capable of succeeding at what is an often challenging experience, explained Brook Kelly, Assistant Director of academic services for the UW Honors Program and a 2003 Bonderman Fellow who chairs the selection committee.

"The 2013 fellows are a passionate and inspiring group," Kelly said, "and we are thrilled to watch their adventures unfold."

CONTACT: Elizabeth Lowry Director of Marketing and Communications UW Graduate School 206-685-6793 [elowry@uw.edu](mailto:elowry@uw.edu). List of Biology fellows on next page.



## 2013 UNDERGRADUATE BONDERMAN FELLOWS

**Emily Hsieh** *Major: Biochemistry and Biology Hometown: Kent, Wash. Travel objectives: To observe the communications between scientists and civilians in the context of wildlife preservation, to explore the biodiversity in dynamic ecosystems and to walk in Darwin's footsteps. Destinations: Vietnam, Thailand, Indonesia, Nepal and Mauritius, Brazil, Ecuador and the Galapagos Islands*

## 2013 GRADUATE BONDERMAN FELLOWS

**Karlyn Beer** *Molecular and Cellular Biology & Epidemiology Hometown: Ramsey, Minn. Travel objective: To travel by bicycle and find out how people and cultures interact with the living world around them by observing the dwindling reptile and amphibian diversity in various countries and how human activity influences animal, environmental and our own health. Destinations: Central and South America, Turkey, and parts of Southeast Asia*

## Angel Trumpets

## Blooming in front of the Botany Greenhouse



*Brugmansia Charles Grimaldi*

*Brugmansia* are native to tropical regions of South America, along the Andes from Venezuela to northern Chile, and also in south-eastern Brazil. They are grown as ornamental container plants world wide.

*Brugmansia* is a genus of seven species of flowering plants in the family *Solanaceae*. Their large, fragrant flowers give them their common name of angel's trumpets.

The genus *Brugmansia* are large shrubs or small trees, with semi woody, often many-branched trunks. They can reach heights of 3-11 meters (10-36 ft). Most *Brugmansia* are fragrant in the evenings to attract pollination moths.



*Brugmansia sp.*

## New Minors this Autumn

## In Nutrition and Entrepreneurship

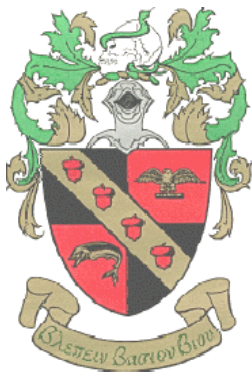
**NUTRITION** The School of Public Health is offering a new minor starting in Autumn 2013 allows students to explore the world of nutritional sciences, food studies, food systems, and population health. <http://depts.washington.edu/nutr/minor.html>

*The minor offers a multidisciplinary perspective of the food environment, including the interplay of food and nutrition, human behavior, culture, and the environment.*

**ENTREPRENEURSHIP** The Business School is offering a new competitive minor starting in Autumn 2013. Some people are just born to change the world. They see opportunities everywhere—from the daily annoyances to the grand challenges that face our society. But we can tell you that it takes more than a great idea. It takes the savvy skill set, knowledge, and energy of an entrepreneur.

<http://www.foster.washington.edu/centers/entrepreneurship/Documents/Buerk%20Onepager-Undergrad.pdf>

*You will actually create a new start-up company as part of this innovative and hands on learning minor.*



## Tribeta Officers 2012-2013

President

**Minkyung  
'Monica' Shin**

VP of Meetings & Events

**Jenna Lebedev**

VP of Mentorship

**Jacob Mouser**

VP of Membership

**Taylor Wilkins**

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**Jessica Latimer**

VP of Advertising

**Nikki Barber**

Treasurer

**Heather Shen**

VP of Tutoring

**Julia Riel**

VP of Community Events

**Aseel Alsamarraie**

Webmaster

**Courtney Chai**



Terrariums 2013

Hello Biology students!

**Welcome back to another school year!** I hope you are looking forward to another year filled with biology, from dorsal root ganglia to Mendelian genetics to phototropism! (If any of these words sound exciting to you, you are in the right place!) UW Biology is a pretty amazing, albeit big, department, so I encourage all of you to work towards creating a community by getting involved in all the programs UW Biology offers. To help get started, take a look at all the events and services offered by your very own Beta Beta Beta Biological Honor Society!

**TUTORING:** Come to Tribeta Biology Tutoring, either for help with Biology 180, 200, 220, or as a tutor yourself! Our tutors have excelled in the intro series and other Biology courses, so let them help you to do well as well and understand the material. Hours run Monday-Thursday, 3:30-5:30 PM, in the HCK 4th floor student lounge with snacks provided. Email officer Julia to get involved. [juliar4@uw.edu](mailto:juliar4@uw.edu)

**MENTORSHIP:** Join our mentorship program to connect with an upperclassman that can show you the ropes. We'll set you up with a mentor and will follow up to make sure your questions are answered, whether they are about UW, the Biology major, research, etc. To become a mentor or mentee, email officer Jacob. [mouserj@uw.edu](mailto:mouserj@uw.edu)

**EVENTS:** Tribeta seeks to host fun events to promote community building within our department, like pumpkin carving, terrarium night, Theo's Chocolate Tour, and more! Everyone is welcome to come and meet others who love biology while doing something that might not be biology-related at all. Contact officer Assel or Nikki with any event ideas or questions. [alsamarraie@yahoo.com](mailto:alsamarraie@yahoo.com) or [barbernikole@gmail.com](mailto:barbernikole@gmail.com)

**MEETINGS:** Every quarter, we host an engaging lecturer to discuss the innovating research they are doing! We have had talks based on neuroprosthetics, morphological diversity of bats, and more. Come and learn about a topic you have never heard before in this informal seminar held on a Thursday at 4 PM. Pizza is always provided. Email officer Jenna with any questions or suggestions. [lebedj@uw.edu](mailto:lebedj@uw.edu)

**T-SHIRTS:** Everyone wants these geeky, stylish UW Biology shirts! These shirts can only be found here, with Tribeta, for \$15. Shirts are sold every first Wednesday of the month, so come buy one and wear it to be entered for a prize in the Biology Advising office! Sweatshirt pre-orders are also available. All proceeds go towards funding Tribeta events for the Biology department. Email officer Heather or Jessica with any questions. [hzshen@uw.edu](mailto:hzshen@uw.edu) or [jessica.m.latimer@gmail.com](mailto:jessica.m.latimer@gmail.com)

**HONORS SOCIETY:** While Tribeta's events and services are for everyone in the biology department, we also encourage you to consider being part of the Tribeta Biological Honor Society! Anyone can become an Associate Member, while only those that have met the curriculum and GPA requirements may become a Full Member. You can also join the Biology Club, which is open to everyone. Email officer Taylor with any questions. [wilkit51@uw.edu](mailto:wilkit51@uw.edu)

If you have any questions or want to get involved, feel free to contact me or any of the officers. I hope to see all of you at our events and meetings, since who doesn't love carving pumpkins, having study buddies, and getting free pizza?



**On behalf of the Tribeta Officers, we hope you have an amazing autumn quarter!**

"Monica" Minkyung Shin UW Tribeta President 2013-2014 [minkshin@uw.edu](mailto:minkshin@uw.edu)



Halloween pumpkin carving 2012.



**UW Introductory Biology students: The secret to excelling in Biology 180, 200, and 220**

is discussing those new concepts and information with other students or asking your instructors questions to know if you fully and correctly understand the concept. This is where TriBeta can help! TriBeta Tutors are students who have taken the full 180-220 series, done well, and enjoy teaching. They can help you with material, concepts, study habits and many studying tips!.

**The study lounge also provides snacks FOR FREE.**

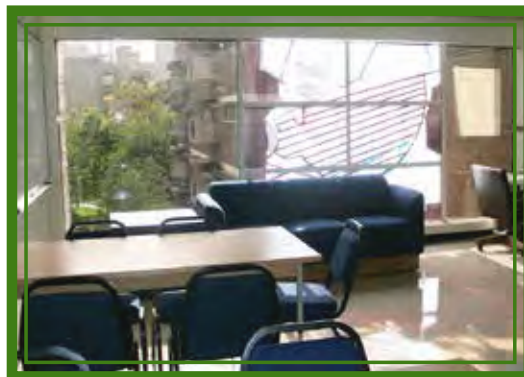
**There are two ways to take advantage:**

- 1) Come to our study lounge on the 4th floor lounge in Hitchcock Monday - Thursday from 4:30-6:30 pm. The lounge is located right above the HCK 3rd floor entrance.
- 2) Sign up for 1 on 1 tutoring at the following link  
<http://students.washington.edu/tribeta/tutoring.html>.

If you want to do well in the intro series, try us out!

If you have any questions or you would like to apply to be a Tribeta tutor for Fall quarter feel free to e-mail me! **juliar4@uw.edu**

Julia Riel Tribeta, *Tutor Coordinator* **All questions are welcome.**



*Tutoring area in the fourth floor lounge in Hitchcock Hall.*

**Eat Dirt!****A Glimpse into the UW Student Farm**

**Where does your food come from?** Started in 2004, the UW Farm is a space for students to explore this question, and seeks to directly connect students with what they're eating. The UW Farm achieves this by encouraging students to ask questions and learn from one another.

This is an exciting year for The Farm! The Farm has expanded from a few raised beds outside the Botany Greenhouse to three spaces in and around campus, totaling over an acre in cultivation. Our newest space is located in the Mercer Court Apartments where we hope to work directly with the students in the Food Exploration Community. The Mercer Court space is the epitome of urban agriculture. Located smack dab on Pacific Ave, one cannot tune out the passing cars and passersby. This is an excellent opportunity for The Farm to further explore the possibilities of growing food in the city in order to create an edible urban landscape.

Also new this year is our first farm manager, Sarah Guerlink. Originally from Michigan, Sarah brings new energy and experience from managing Groundswell Farm in Zeeland, Michigan. She recently returned from her honeymoon in the Amazon, her favorite farm produce are tomatoes and garlic and she has a dog named Eddy. We are exceedingly happy to have her on our team!

There are endless ways for students to get involved with the UW Farm. Attending weekly Dirty Dozen (our main volunteer force), meetings and volunteering with other farmers is a great way to get introduced to the farm community. During these meetings students collaborate and work together on self-directed projects, and create the weekly "to-do" list. Another way to get involved is to attend biweekly weekend work parties and posted intern hours. Volunteers do not need to have any prior farm knowledge! Lastly, attending quarterly pizza bakes and other events is a great way to stay connected with the farm community.

The Farm is looking forward to the fall, harvesting our first pumpkins ever, and meeting all new farmers and foodies!

If you are interested in learning more please visit our new blog: <http://blogs.uw.edu/uwfarms/> where you can sign up for our email list. You can also like us on facebook: <https://www.facebook.com/UWFarm>.

*In sunshine and dirt, UW Farm Team*



*On the acre plot at the Center for Urban Horticulture*

## New Graduate students Welcome to the department!

UW Biology PhDs have earned a reputation for excellence and innovation. We value a diversity of people and approaches to solve the most important problems in biology. Accordingly, our students and faculty study a wide range of topics—at spatial scales ranging from molecules to the entire planet, and time scales ranging from nanoseconds to millennia. Many work at the intersections of fields, developing cutting-edge technologies and forging interdisciplinary collaborations.

**Christopher Battey** ..... *John Klicka*  
**Fabio Berzaghi**..... *Sam Wasser*  
**Camilla Crifo**..... *Carolyn Strömberg*  
**Alexander Fodor** ..... *Billie Swalla*  
**Leonard Jones** ..... *Adam Leaché*  
**Hannah Jordt**..... *Benjamin Kerr*  
**Rochelle Kelly**..... *Sharlene Santana*  
**Marlies Kovenock**..... *Jennifer Nemhauser*

**Alexander Lowe** ..... *Jennifer Ruesink*  
**Leith Miller**..... *Sharlene Santana*  
**Foen Peng** ..... *Toby Bradshaw*  
**David Slager** ..... *John Klicka*  
**Itzue Caviedes Solis**..... *Adam Leaché*  
**Melissa Steele-Ogus** ..... *Alexander Paredes*  
**Joshua Swore**..... *Billie Swalla*  
**Katrina Van Raay**..... *Benjamin Kerr*

## Biology Apparel Day The first wednesday of each month



**Biology Apparel Day happens the first Wednesday of every month.**

If you are wearing Biology Apparel on a first Wednesday of the month throughout the year, you can come to Hitchcock, Room 318 (Advising) to receive a sweet treat AND an opportunity to submit your name for a chance at a grand prize.

The Tribeta Biological Honor Society started up T-shirt contests as another way for Biology Students, Staff and Faculty to support Tribeta and Biology club efforts and of course, show our UW Biology pride! Your T-shirt purchase supports Tribeta and events put on for Biology Club members, like tutoring for the introductory biology courses, the annual Halloween party and their Spring BBQ.

T-shirts are 15 dollars, cash or check. You can purchase them from Hitchcock 318 OR on T-shirt day in the atrium of Hitchcock hall. You can contact [tribeta@u.washington.edu](mailto:tribeta@u.washington.edu) with any questions! **Wednesdays in Autumn Quarter are Oct 2nd, Nov 6th and Dec 4th.**

## Biology Departmental Awards For Undergrads & Graduates



**The deadline for Fall 2013 applications is Sunday, October 20 at 11:59 p.m.**

Interested in getting an award to help fund your research or a scholarship to reduce the cost of tuition? The Department of Biology offers numerous awards and scholarships that give you the opportunity to enrich your undergraduate career - and they look great on your resume! Apply for awards related to research and travel in the fall and spring, and for substantial scholarships in the spring. The fall application deadline is October 20, 2013 at 11:59 p.m. Visit <http://bit.ly/1cCOUpT> for application instructions and more information.

**Undergrads: Fall Awards** Casey Award, Frye-Hotson-Rigg Award, Sargent Award.

**Graduates: Fall Awards** Edmondson Award, Robert T Paine Experimental and Field Ecology Award, Sargent Award, Melinda Denton Writing Fellowship, Frye-Hotson Rigg Writing Fellowship, Kathryn C. Hahn Writing Fellowship, Tunnicliffe Writing Fellowship, WRF-Hall Fellowship.

Grads, help support your research by applying for one of our Departmental Awards! Departmental Awards are offered every Autumn and Spring quarters, and cover a variety of subjects. Award eligibility and usage vary, so please visit our website at <http://www.biology.washington.edu/grad/awards-and-travel>.

**Info session for WRF-Hall Fellowship on October 1st at noon in PAA A023D.**

If you are interested in applying for the WRF-Hall Fellowship this fall or in the future, it is recommended that you attend the info session on Tuesday, October 1 at 12pm in PAA A023D. This meeting is meant for potential applicants and faculty advisors, and we will clarify the purpose of the fellowship, discuss successfully funded projects and talk about what the graduate committee is looking for in the applications. We are happy to answer questions that you may have. It will be a short meeting lasting 30 minutes or less, and you can feel free to bring your lunch.



## Biology Undergrad Listserve

The Biology Advisers maintain a listserve called biostudent. Anyone can request to be added to this email notification system. Notices regarding jobs, research, internship and scholarship opportunities as well as course announcements and event notices are sent out to this list. Want to be in the know? Visit this site and enter your information to request to be added to biostudent: <http://mailman1.u.washington.edu/mailman/listinfo/biostudent>:

**Go to this site and you will see two gray boxes**

1: Need to type in your email address (*uw.edu* address **ONLY**)

2: Need to type in your name (*optional*)

3: Need to check the box about list mail being batched

No — you will receive them separately

Yes — you will receive them all in one daily batch

4: Click the subscribe button and your part is done

## UW Biology Department Website

[www.biology.washington.edu](http://www.biology.washington.edu)

## UW Biology Facebook Page

[www.facebook.com/UWBiology](http://www.facebook.com/UWBiology)

## UW Undergrad Research Program

<http://www.washington.edu/research/urp/>

## Career Center at UW

<http://careers.uw.edu/>

## Conservation Magazine

<http://www.conservationmagazine.org>

Want to learn about cutting edge science that is making for smarter conservation? Then you'll want to look at Conservation Magazine. It's a quarterly publication (produced in the UW Department of Biology) that focuses on the remarkable efforts people are making to protect species and habitats. And it features some stories you won't find

anywhere else. Recently, for example, Conservation reported on an interesting little study about sharks. It turns out that sharks appear to be color-blind. That little nugget could help conservationists design better ways of keeping them out of fishing nets – and even away from beaches. That's just one example of the unusual, interesting stories you'll find in every issue of Conservation. Subscription are just \$19. Check it out at: [www.conservationmagazine.org](http://www.conservationmagazine.org).

## TriBeta Honor Society & Bio Club

<http://students.washington.edu/tribeta/>

Beta Beta Beta is an honor society for students, especially undergraduates, dedicated to improving the understanding and appreciation of biological study.

The Biology Club is sponsored by Tri-Beta and is open to all UW students, faculty and staff interested in biology. The purpose of the club is to reach out to the larger UW community and allow anyone interested to attend Tri-Beta's meetings and events. There is no fee, GPA requirement or need to have taken a biology course.

## UW Farm

New blog: <http://blogs.uw.edu/uwfarms/> and

<https://www.facebook.com/uwfarm>

The UW Farm is now a registered student organization with over 600 members. If you would like to learn more about the farm please join our listserve and facebook page and show up for a work party, or come to our next all-farm meeting.

## Burke Museum

<http://www.burkemuseum.org/>

General Admission FREE to Burke Members, children 4 and under, and **UW staff/faculty/students**

Free Admission—First Thursdays Admission is free to the public on the first Thursday of each month.

## Empowering Women - Artisan Cooperatives That Transform Communities ends Oct. 27, 2013

From Africa to Asia to the Americas, female artisans are creating grassroots cooperatives to reach new markets, raise living standards, and transform lives. Empowering Women provides an intimate view of the work of ten such enterprises in ten countries. This exhibition illustrates how the power of such grassroots collaborations transform women's lives, bringing together first-person quotes, stellar photographs, and stunning examples of the **cooperatives' handmade traditional arts**.

## Elwha: A River Reborn Nov. 23, 2013 – Mar. 9, 2014

Elwha: A River Reborn, a new exhibit from the Burke Museum, takes you into the Northwest's legendary Elwha River Valley to discover the people, places, and history behind the world's largest dam removal project, an unprecedented bet on the power of nature. Once legendary for its pre-dam wild salmon runs and Chinook weighing as much as 100 pounds, today the Elwha is being dramatically rethought as its two massive dams are torn down. With the start of the first dam blasts in September 2011 comes a chance for unprecedented environmental restoration and community renewal.

Based on the book by Seattle Times reporter Lynda Mapes and photographer Steve Ringman, Elwha: A River Reborn exhibit sheds light on this essential part of Washington State's history through compelling stories, stunning photographs, and Burke collections, from fish to cultural objects from the Elwha region.



Kay Suiter, Jason Patterson, Julie Martinez, Jeannette Takashima, Janet Germeraad, Andrea Pardo, Tom Freng

The Undergraduate Biology Advising Dept:  
OPEN: Monday thru Friday 8 am to 5 pm.  
General Phone: 206-543-9120

We welcome UW and prospective students to contact us with any questions regarding an option in Biology or Neurobiology.

Open walk-in: Monday - Friday 9:00 am to 12 pm and 1:00 to 4:00 pm (office closed 12 to 1) or contact one of our four advisors for an appointment by phone or email. The photo on the right (in the Greenhouse's Desert Room) includes the advisors and the office staff of Room 318. Advisors are: Jason, Janet, Andrea and Tom. Staff is Kay, Julie and Jeannette.

## Biology Study Area

Hitchcock 220 - All students are welcome!

The Biology Study Area (BSA) is a GREAT place to study with other students, use computers, or read.

Dave Hurley manages the BSA and can even answer your biology questions. If you forgot your textbook, you can check out one from the BSA staff if they have a copy.

The BSA has 27 computers, a Dawg-Print printer, scanners and a copier.

All students are welcome — not just Biology majors!

BSA is open Monday - Friday  
8:00 am - 5:00 pm.

Dave has one returning undergraduate computer support staff, Nick Clawson who will be staffing the Biology Study Area and programming, so you may see him around as well. Nick is an undergraduate majoring in Informatics.



Mr Grasshopper doing his research work on one of the computers in the Biology Study Area.

## Mystery Plant

Guess it and win!



This is the Autumn Quarter mystery plant and it is blooming right now in and around the greenhouse.

Find it's pollinator and it's genus species, then come to Hitchcock 318 and submit your name & email for a drawing for the prize of a special limited edition, eight Biology note cards featuring flowers blooming Autumn Quarter in the Greenhouse.

Drawing to be after Thanksgiving holiday.

### The hints:

1. Leaves shed early, so stem is the main organ used for photosynthesis.
2. From South Africa
3. Special tubular structure is specifically adapted to capture the pollinators. Traps them for about 4 days until the flower wilts and now covered with pollen, the pollinator moves to the next flower.

## Advising Available

### Biology & Neurobiology

#### Walk-in Advising

Janet Germeraad • Tom Freng  
Jason Patterson • Andrea Pardo

Mon-Fri, 318 Hitchcock Hall

9:00 am-12:00 pm

1:00 pm- 4:00 pm

Closed: 12:00 to 1:00 pm

Website URL:

<http://depts.washington.edu/biology/advising.htm>

### Undergraduate Academic Advising and Office of Minority Affairs & Diversity

141 Mary Gates Hall

206-543-2550

Quick Question hours (Mon-Fri)

9:00 am-4:30 pm

or email [advice@u.washington.edu](mailto:advice@u.washington.edu)

<http://depts.washington.edu/uaa/advising/index.php>

### Biology Study Area (BSA)

220 Hitchcock Hall

Mon-Fri

8:30 am-5:00 pm

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