



Guess the Mystery Flower!

STUDENT NEWSLETTER FOR THE DEPARTMENT OF **BIOLOGY** UNIVERSITY OF WASHINGTON

Winter Quarter 2015

Issue 21

Important Dates for Winter Quarter

Jan 5	First Day of Instruction
Jan 8	Biology Apparel Day
Jan 8	Charles R. Wallace's Birthday
Jan 9	LAST DAY to drop a class without a fee thru MyUW
Jan 12	All courses require entry codes to add
Jan 18	LAST DAY to drop a class without the use of the ANNUAL DROP
Jan 19	Martin Luther King Day Holiday - no classes
Jan 25	Friday Harbor Labs Spr Qtr Application deadline
Jan 25	LAST DAY to add a class through MyUW
Jan 27	Diversity Career Fair (All majors) 5:30-8:30 HUB
Jan 29	Biology Networking Night 5:30-7:00 HCK 132
Feb 4	Biology Apparel Day
Feb 11	Grad app due for GSP in Spring and Summer
Feb 12	UW Internship Fair 2:00-6:00 HUB
Feb 12	Charles Darwin's Birthday
Feb 16	Presidents' Day Holiday
Feb13-Mar1	Spring Reg Period I
Feb 23	UnderGrad Research Symposium App is Due
Feb 27	Mystery Flower contest ends
Mar 1	FHLabs Blinks NSF REU Beacon Internship Deadline
Mar 1	Exploration Seminar in Peru Deadline for application
Mar 4	Biology Apparel Day
Mar2-29	Spring Reg Period II
Mar 13	LAST DAY to Withdraw (from all classes)
Mar 13	Last Day of Instruction
Mar 17	St Patrick's Day
Mar14-20	Final Examination Week
Mar 23-27	Spring Break

Associate Chair **Dr. Jennifer Ruesink**

Welcome to Winter Quarter & a New Year!



Dr. Jennifer Ruesink

I'm delighted to have this opportunity to tell you how glad I am that you're part of Biology. The department is a big place at a big state university, but the massive size of the program also means it is bursting with opportunities and undoubtedly has something for everyone. To those who have already found your niche: in research, in leadership through peer facilitating or Tri-Beta, in hands-on application as a medical volunteer or on the UW Farm, or in making the most of your classes through study groups and conversations about what you're learning – congratulations! If you're still looking, search on. Find a passion or a question, and then ask around – advisers, instructors, classmates – to find ways to get involved.

My personal advice to everyone for winter quarter is to make a trip to the Botany Greenhouse part of your daily or weekly routine. The greenhouse is a hotspot of biodiversity – about 1% of all plant species on the planet are gathered in the teaching collection – plus a trip at this time of year gets you oxygen therapy from all that photosynthesis and extended daylight to counter seasonal affective disorder. The greenhouse is scheduled to be torn down to make room for a new Life Sciences Building sometime in the next year, at which point the collections will be off-site until the new greenhouse is constructed. So a trip to the greenhouse, which is open to students during business hours, also helps celebrate its long history as a central feature on campus.



The beginning of my two year rotation as head of the Undergraduate Program Committee in Biology coincides with several exciting developments. First, our department is leading the way in both developing national standards and aligning our curriculum with those standards. The standards emphasize Dobzhansky's famous quotation that "Nothing in biology makes sense except in the light of evolution." They also encourage biologists to do quantitative analysis, mathematical reasoning, and modeling and simulation of complex systems. Seize opportunities that you come across to become a better evolutionary thinker and biomathematician, in addition to learning how living systems function. A second new development for undergraduates is the inception of a competitive major. Just one term into the change, the competitive major application process already seems to have resulted in applications from students with strong abilities to see the connection between their own college and career goals and what they would get out of a biology degree. With a somewhat smaller undergraduate major, the department will be better able to plan for upper level courses necessary to meet demand.

This winter, I will spend a few midnight low tides studying the seagrasses and invertebrates that are the focus of my research in estuaries. I hope if you have to pull any all-nighters, it's for an equally interesting reason! Also, don't forget it is not too early to begin planning for spring and summer.

This link, <http://www.biology.washington.edu/Academics/Undergraduate/Degrees> will allow you to access information and opportunities in Biology. In addition, watch for e-mails from Biology and stop by the Biology Office, HCK 318, for additional assistance.

Have an enjoyable quarter, Jennifer Ruesink, Associate Chair, Professor, Dept of Biology



Scale-dependent and indirect effects of filter feeders on eelgrass

Each year since 2007, the University of Washington has provided an opportunity at the Friday Harbor Labs (FHL) for qualified students to become certified as scientific divers according to AAUS standards (American Academy of Underwater Sciences, www.aaus.org).

This year (Summer 2015) we're trying something a little different. "Ecology Between and Below Pacific Tides" represents a new iteration that we've wanted to put together for a long time: scientific diving training and certification, in combination with a for-credit 500-level Ecology Course. Scientific divers will complete an independent research project underwater, applying the Ecological principles they're learning in the classroom. To broaden the scope and audience, we decided to add a second track for non-divers, covering intertidal ecology as well.

Similar academic opportunities existed at FHL in the past. In 2007, there was a Subtidal Apprenticeship that focused on

the transport of algal subsidies to consumers at different depths. In 2009, the Marine Biology Quarter at FHL included a scientific diving/subtidal ecology component in which newly-certified scientific divers conceived of and executed their own subtidal research projects.

In 2010-2014, we switched gears and offered a two-week intensive workshop that involved 12 subtidal data-collection training dives resulting in scientific diving certification, but no academic credit. Students' evaluations of these short courses were consistently high, and many of the students went on to pursue scientific diving in graduate school or in internships and jobs at other AAUS institutions around the world. But many commented that they would have liked the opportunity to earn academic credit, and to apply their diving skills toward more actual scientific research underwater.

The summer 2015 "Ecology Between and Below Pacific Tides" (EBBPT) (FHL/BIOL 568B) will be the first opportunity since 2009 for students to simultaneously become AAUS-certified as scientific divers and also get research experience. It will differ from the past courses in at least two ways: first, it will allow students to earn 9 credits in an intensive 5-week course during the second half of the summer. And second, rather than being primarily a scientific diving course with aspects of Ecology, EBBPT will be an upper-level Ecology course with tracks available for both diving and non-diving students. Those applicants who are qualified to pursue scientific diving (i.e., already SCUBA-certified and with their



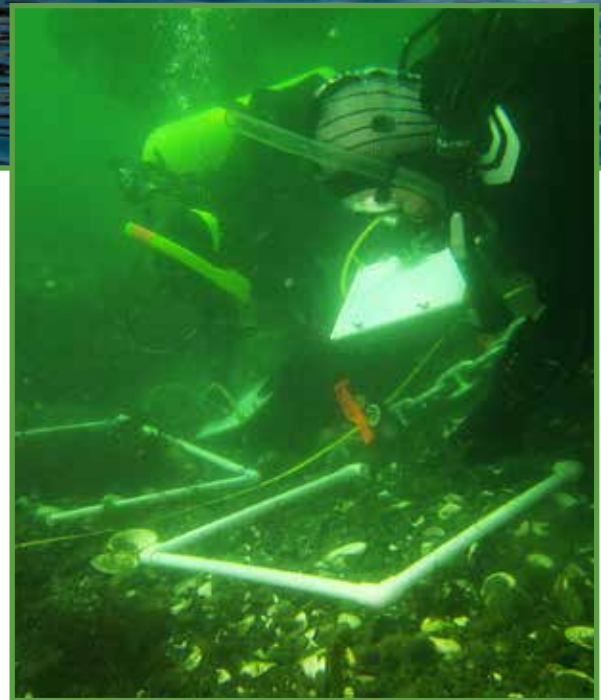
Class photo of scuba lesson.



Diving in Friday Harbor

Own gear) can gain AAUS certification and carry out subtidal research projects. Non-divers can pursue a parallel intellectual track, learning about a variety of shoreline habitats in the San Juan Islands and applying the same ecological knowledge and principles to projects in the intertidal zone or in the lab. Both tracks will learn local marine organisms and relevant research techniques, and put them into practice in their chosen habitat types.

Therefore, this class will be a unique opportunity for students to study temperate Pacific marine organisms and their interactions across a gradient of habitats. Both subtidal- and intertidal-track students may be working with similar species, questions, and systems but from different perspectives. They'll not only get to learn from and collaborate with one another throughout the completion of their projects, but the whole group will gain broad exposure to the variety of applications for study in Marine Ecology.



Subtidal ecology sampling for qualified scientific divers

Biology Networking Night ***Save the Date: Thurs Jan 29 5:30***



Want to know what people have done since they earned a degree in Biology?

Then come to Networking Night with alumni from our department. Students will get a chance to hear people speak about a variety of professions, all with one thing in common: a degree from UW Biology (or Botany or Zoology from pre-merger years).

This event will be a small panel in a Q&A format of alumni where they share their career building experiences since graduation, talk about their respective career paths, what experiences influenced their decision to pursue a certain profession, successes and lessons learned. After the event, you might have the opportunity to talk to or get contact info from the participants.

Raymond B. Huey Award from SICB

Matt McElroy

Matt McElroy received the 3rd annual Raymond B. Huey Award for the best student presentation at the Society for Integrative and Comparative Biology (SICB) meeting. The competition is open to graduate students who are presenting independent research in ecology and evolution. Matt presented his dissertation work on thermal adaptation in Puerto Rican Anolis lizards.

Matt tested predictions from the Bogert Effect, a classic hypothesis described by Ray Huey, Paul Hertz, and Barry Sinervo (Huey et al., 2003). The Bogert Effect describes how thermoregulatory behaviors may buffer natural selection acting on thermal physiology. Thermoregulating species are able to maintain specific body temperatures despite inhabiting different thermal environments. The Bogert Effect predicts that gene flow should be high – and divergent natural selection weak – for populations of thermoregulating species that span a thermal gradient. Matt tested these predictions in *Anolis cristatellus*, a thermoregulating species that inhabits a range of thermal environments on Puerto Rico, including a xeric and hot scrub forest in the Southwest.



Anolis gundiachi

Instructional Support Office/Study Area HCK Room 302

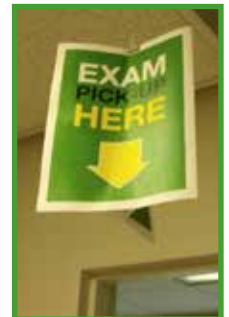


In addition to the Biology Study Area on the second floor, Hitchcock 302 offers you an area to study with several tables and whiteboards for your use. We also host TA office hours throughout the week. Come by and check out the calendar outside our office to see if /when your TA(s) office hours are here.

This is the place to pick up your Exams. **Please note:** Exams will be kept for one quarter. If you took an exam in Autumn, it will be kept until the first week of Spr Qtr.

This is also the place to drop off your 180, 200 and 220 Regrades. *Just follow the signs!*

Staff members, Gretchen Shirley-Bellande and Jeannette Takashima can help you.



Biology Departmental Awards Deadline March 1 at 11:59 pm



Thanks to the support of our amazing alumni, faculty, staff, and community members, the Department of Biology awards thousands of dollars annually to students to support their research endeavors.

Deadline Sunday March 1 at 11:59 pm.

To be eligible for departmental awards, you must be a declared Biology major. For more information, including how to apply, visit the Scholarships website at <http://www.biology.washington.edu/academics/undergraduate/scholarships>.

A call for proposals is announced twice annually – once during Autumn Quarter, and once during Winter quarter. Different awards are given each quarter, so be sure to check the current listing of the awards that will be distributed!

Botany Club For Undergrads & Graduates



Greetings planty people! After a short hiatus, the Botany Club is resuming full force this quarter! We are looking to have our general meeting this week on Thursday 1/15. Location to be announced, but it will likely be in or nearby the greenhouse (how can we resist?!), around 2:30pm. The meeting will be a short welcoming for our new members, and we are looking to plant some plants and make some plans! Things like a plant growing contest and involvement and opportunities regarding the Washington State Nursery and Landscape Association.

Like us on Facebook (<https://www.facebook.com/pages/The-Botany-Club-at-UW/198908630127686>) and email us at clubbot@uw.edu to join our mailing list - also, keep a lookout for our flyers around campus!

Hope the quarter is off to a great start! Hope to see you soon! Best, The Botany Club

Pitcher plant species.



Spring is just around the corner and UW marine biology minors and others with a passion for marine science are preparing to spend a quarter studying at Friday Harbor Labs! Friday Harbor Laboratories (FHL) is UW's marine field station, located in the beautiful San Juan Islands in the Strait of Juan de Fuca. Faculty and students from all over the world flock to FHL during spring, summer, and autumn quarters to conduct research and be a part of this immersive hands-on learning environment.

UW undergrads and graduate students can apply to spend a quarter at the labs taking marine biology courses and/or taking part in a research apprenticeship. Spending a quarter at Friday Harbor Labs is a great way to complete credits towards a marine biology minor, gain research experience, connect with faculty, and learn about marine ecosystems and organisms of the Pacific Northwest.

The SPRING & SUMMER 2015 schedule is now set and applications are currently being accepted for 2015.

Choose from the following opportunities:

SPRING QUARTER

Application Review Begins January 25

During Spring Quarter students may either focus on research through a 15-credit research apprenticeship: Marine Protist Ecology (OCEAN 492)

or... they can take part in The Zoo-Bot Quarter, a package of advanced marine biology field courses that includes Marine Zoology (FHL/BIOL 430), Marine Botany (FHL/BIOL 440), a 6-credit research apprenticeship [students may choose to focus on Aquatic Animals (FHL 460) or Nearshore Ecology (FHL 450)], and an optional 1-credit Marine Sciences Seminar (FHL 490).

Learn more and apply online: <http://depts.washington.edu/fhl/>

Questions?

Please contact Stacy Markman, FHL Student Coordinator: fhladmin@uw.edu

To learn more about the marine biology minor and how a quarter at FHL might fit into your academic plan, please contact the marine biology adviser, Christen Foehring: marbiol@uw.edu

SUMMER QUARTER

Application Review Begins February 1

Friday Harbor Labs offers advanced marine science courses during Summer A & B terms. Students may take one 9-credit course per term for up to 18 total credits.

SUMMER SESSION A

Choose from:

- FHL/BIOL 432 Marine Invertebrate Zoology
- FHL/BIOL 539 Marine Algae
- FHL/BIOL 536 Comparative Invertebrate Embryology
- FHL 528A Sensory Biology & Behavior of Fishes

SUMMER SESSION B

Choose from:

- FHL/FISH 492 Ecology & Conservation of Marine Birds & Mammals
- FHL 568A Ocean Acidification
- FHL 528B Fish Swimming
- FHL 568B Ecology Between & Below Pacific Tides
– see full feature on page 2&3

Students interested in summer research should check out Friday Harbor Lab's paid undergraduate internships, funded by NSF REU, BEACON, and the Blinks Endowment. More details available here: <http://depts.washington.edu/fhl/REU.html>

Exploration Seminar in Peru: From Andes to Amazon: Biodiversity, Conservation, and Sustainability

The exploration seminar From Andes to Amazon: Biodiversity, Conservation, and Sustainability, led by Drs. Ursula Valdez and Tim Billo, has become somewhat of a tradition or rite of passage for UW Biology's ecology, evolution, and conservation undergrads. For the past 7 years Valdez and Billo, who both earned their doctorates in the UW's Department of Biology studying tropical biology, have been taking UW biology students to southeastern Peru for intensive field study of the ecology and conservation of one of the most diverse places in the world. The course starts in the spectacular ancient Inca city of Cusco, set at a breathtaking 11,000 ft. of elevation in the Andes, with views of 20,000 ft. high glacier-clad peaks. One week of the program takes place in the relatively arid highlands surrounding Cusco. Students examine current and past human land-use practices and their impact on biodiversity. These themes are explored through visits to Machu Picchu, a women's weaving cooperative, local fruit and vegetable markets, service projects at an organic farm and environmentally focused school, and a symposium featuring current research in biodiversity and conservation in southeastern Peru.

Ten days of the course are spent in the Amazon basin of Peru, beginning with a long and arduous, but fantastic journey, up and over the crest of the Andes. This journey -jostling its way by bus down a narrow, winding dirt road-involves dropping some 13,000 ft. in total, to the tributaries of the Amazon that lead into the heart of the wilderness of Manu National Park and Biosphere Reserve. After 2 days of boat travel, students camp and work for a full week at the legendary Cocha Cashu Biological Station, a privilege only recently opened to students. This is an unparalleled opportunity for students to interact with, and hear lectures from an international group of scientists doing cutting edge tropical biology research. For most this is also a first foray into the tropical rainforest, and the sheer diversity of life is overwhelming. Valdez and Billo spend the first half of the week teaching basic taxonomy and research skills with a

variety of organisms, before students spend the second part of the trip designing and embarking on their own projects.

The course next retraces its travels of the previous week, spending several days at a biological field station positioned in a third ecosystem: the ecotone between cloud forest and puna ecosystems in the mountain buffer zones of Manu National Park. By exploring three distinct ecosystems through the course of their travels, students begin to understand how the Andes influence climate and consequently what organisms live where, and how each of these ecosystems is linked to the other in the landscape. They also begin to understand the scope of anthropogenic pressures (including gold mining, oil exploitation, road building, legal and illegal timber harvest, hunting, and climate change) that the region faces. Threats to natural resources (and traditional indigenous cultures) are palpable. Yet these ecosystems are some of the least well understood in the world. Much discussion ensues on the best strategies to overcome these threats.

The sustainability of the course itself is also an important component of the offerings. Participants track their personal ecological footprint on the course, and at all times the course strives to use as few resources as possible (while accounting for basic safety and comfort). The money the course brings to remote areas of Peru helps provide an alternate source of income for people who might otherwise be involved in industries detrimental to the environment. Still it is probably UW students who stand to gain the most from this immersive experience; an experience that goes beyond tourism and changes students' perspectives on biology and sustainability forever. *(March 1 application deadline)*



Emperor Tamarins saying hello! Photo: Chang



Peru Exploration Seminar 2014 Group Photo

Cody Rose Knaub
Senior in Biology (General)



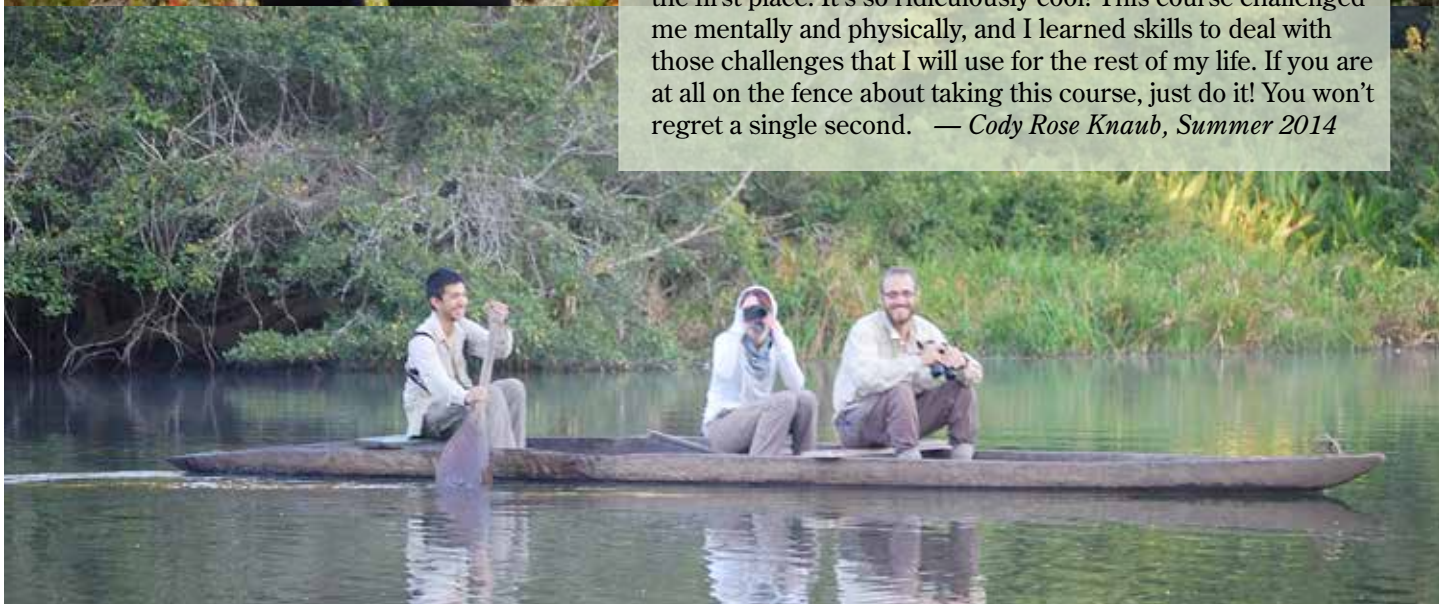
The jungle is filled with many things, but sleep is definitely not one of them. The jungle doesn't rest, so it's sure not going to let you sleep either. Not that you'd want to waste any time sleeping anyway.

Every hour holds the possibility to see something new. I wake up to a howler monkey's loud, guttural call right above my tent, navigate my way through orb spiders' webs on my way to breakfast, learn first hand about ant and plant mutualism, get charged by a furious peccary, spot a mammoth black caiman, all before lunch.

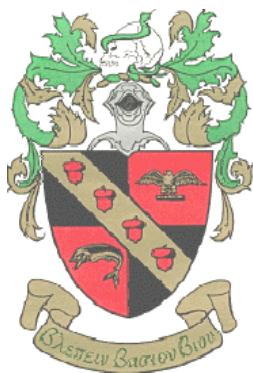
Maybe I can catch a nap before dinner? No way. I spot seven species of fungi and a tree boa, catch a pygmy kingfisher in a mist net, and get a lecture on tropical ecological systems by fantastic researchers all before dark. Every day is packed with new, wonderful, exciting experiences.

Sure, the insects are EVERYWHERE and I think a large chunk of me was eaten by them, but how often do you get to see cicadas dive bomb your classmates or ants the size of your pinky finger? Not often.

The Peru Exploration Seminar changed my life. I know that is a cliché thing to say, but it's true. I have always loved biology, but the jungle caused a resurrection in my passion for the natural world. I remembered why I chose to study biology in the first place. It's so ridiculously cool! This course challenged me mentally and physically, and I learned skills to deal with those challenges that I will use for the rest of my life. If you are at all on the fence about taking this course, just do it! You won't regret a single second. — Cody Rose Knaub, Summer 2014



David Chang, Sara Bannaman, and Kramer Canup look for wildlife on Cocha Cashu. Photo J Putz



Tribeta Officers 2014-2015

Co-Presidents

Taylor Wilkins
CiCi Alsamarra

VP of Meetings & Events

Sruthi Hariprasad

VP of Mentorship

Rajvir Singh

VP of Membership

Felicia Nguyen

Secretary

Jordan Krull

VP of Advertising

Fylie Robles

Treasurer

Keenan Milosovich

VPs of Tutoring

Kaylie Lungberg
Chris Kaperak

VP of Community Events

Sarah Heater



Terrarium Night.

Calling all UW Biology students!

Ready to make the most of this quarter? If you would like to make the University of Washington feel more like home by finding your niche, then look no further. At TriBeta Biological Honor Society and Biology Club, we are proud to be a part of UW's largest major. If you're looking to make the most out of your time at UW, then join our TriBeta community of experienced Biology students and expert Biology faculty - we're ready to work with you in academics, volunteerism, and all-around fun via the services listed below!

TUTORING: Tutors, who have previously excelled in BIOL 180, 200, and 220 are available to help current students by offering free one-on-one appointments (scheduled at <https://students.washington.edu/tribeta/tutoring.html>) or free Monday-Thursday 3:30-6:30 PM drop-in tutoring at the HCK 4th floor lounge (snacks provided!). To become one of our prestigious tutors, email officers Chris (cjkapera@uw.edu) or Kaylie (kel93@uw.edu).

MENTORSHIP: Connect to a Biology upperclassman who will take the time to know you personally and show you how to make the most of your time as an undergraduate in the biology department. We set you up with your mentor and follow-up to make sure all of your questions are answered. Ask questions about UW, the Biology major, research, etc. To become a mentee or even mentor, email officer Rajvir (rajvir@uw.edu).

EVENTS: Quarterly, TriBeta puts on multiple events such as Study Night during finals week. Pumpkin carving, Terrarium Night, and a Bio-themed game night. TriBeta aims to promote community within the department, but also throughout the campus and city via volunteering, like parks clean-up on MLK Day.

Email officer Sarah (sbheater@uw.edu) with event ideas or questions.

MEETINGS: Also quarterly, an elite and engaging lecturer is invited to discuss his/her innovating research. Past talks have been on neuroprosthetics, morphological diversity of bats, and more. Come and learn about a topic you've never before delved into in this informal seminar.

Meetings are always held on a Thursday at 4 PM in Hitchcock and pizza is provided.

Email officer Sruthi (sruthihp@uw.edu) with any questions or suggestions for such talks, panels, and meet-and-greets.

T-SHIRTS and Buttons: You can show-off that you belong to the greatest department on campus by sporting a UW Biology T-shirt! Sold every first Wednesday of the month in the Hitchcock 3rd floor lounge, T-shirts are \$15 with long-sleeves, crew-necks, zip-ups, and sweat-shirts also available in a myriad of sizes, colors, and designs created and voted on by TriBeta members. Proceeds are the sole source of funding for TriBeta events, meetings, and programs put on for Biology students. Wear your Biology apparel to the Biology Advising Office on sale days for complimentary candies and to be entered for Biology prizes! Pre-orders are possible. Also, we began selling our unique TriBeta buttons for \$1 this past quarter. We currently have two designs. Email officer Keenan (keemilo9@uw.edu) with questions.

HONOR SOCIETY: While TriBeta's events and services are for everyone in the Biology department and the Biology Club is open to all, we encourage everyone to strive to join the TriBeta Honors Biological Society. Every quarter, we try to offer one special event that is only for TriBeta members. Last quarter we offered a free CPR class to our members. TriBeta membership also allows you to be a part of a nationally-recognized honor society, which is a recognition that future employers and graduate schools will love to see. Anyone can become an Associate Member, but only those meeting the curriculum and GPA requirements may become Full Members. Full members have taken the entire intro series (180-220) and have an average GPA of 3.0 or higher in these classes. If you do not meet these qualifications, you can join now as an Associate member, and obtain Full membership status when you meet them. You can email our advisor, Dr. Linda Martin-Morris (lmorris@uw.edu) with an unofficial copy of your transcript and a picture of yourself (so she can identify you) to apply. Email officer Felicia (fknguyen@uw.edu) with further inquiry into the benefits of joining the Honors Biological Society.

Who doesn't love a school year full of fun events, making study buddies, and eating free pizza?

On behalf of the Tribeta officers, we wish you the very best in this new school year and hope to see you soon!

Aseel "Cici" Alsamarra

TriBeta Co-President 2014-2015 alsamarr@uw.edu

Taylor Wilkins

TriBeta Co-President 2014-2015 wilkit51@uw.edu



The TRIBETA Biology T-shirt Contest is coming up in April. Start planning your entries now!

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!.

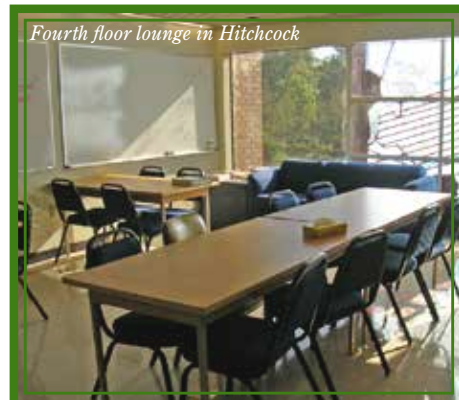
The study lounge also provides snacks FOR FREE.

There are two ways to take advantage:

- 1) Come to our study lounge on the 4th floor lounge in Hitchcock Monday - Thursday from 3:30-6:30 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 Winter quarter feel free to e-mail Kaylie Lungberg and Chris Kaperak, at tribetatutoring@gmail.com



Eat Dirt!

Be a part of the the UW Student Farm this spring



Since the glorious and productive 2014 season, the UW Farm has **been looking for some serious R&R.**

Under a blanket of cover crop, our soils are gearing up for the upcoming spring—legumes are fixing nitrogen and rye is breaking down to deeper depths with roots of steel, amending the tired soil and replenishing the vegetable's favorite macro and micro nutrients.

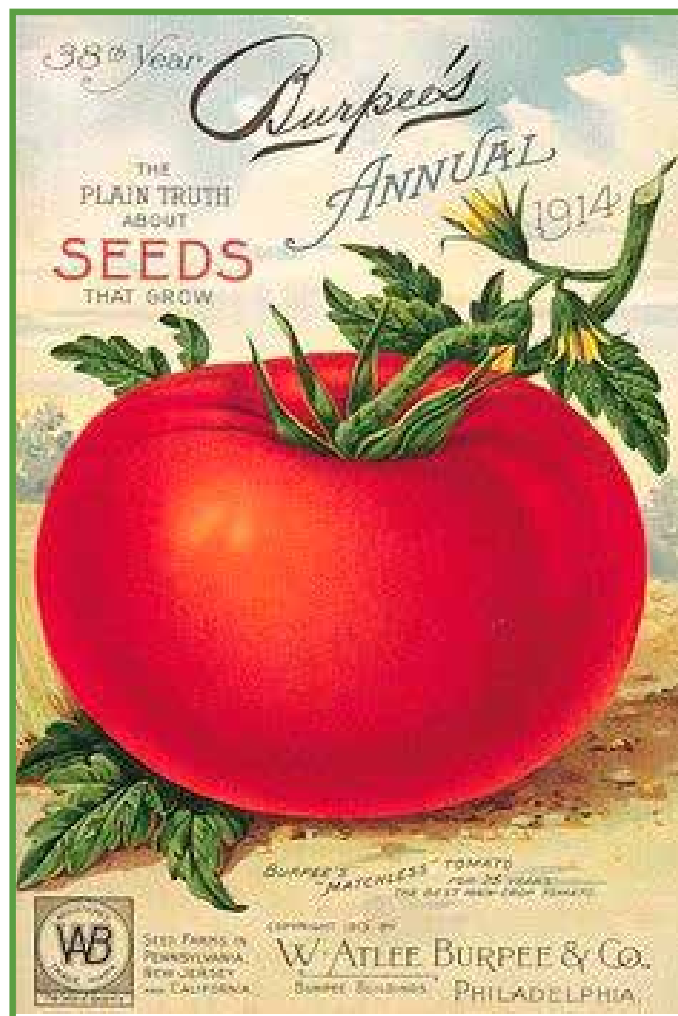
This winter we already have a line-up of great events!

- Tuesday, Jan. 13th there will be a leadership meeting and seed selection party! Join us at 6:00 pm at the Mercer Court Farm Clubhouse to look through catalogues and help choose what we'll grow for the 2015 season!
- And, Thursday the 27th there will be a potluck, where representatives from City Fruit will be coming to talk about the organization and maybe gather a few volunteers along the way. If you're interested in urban agriculture efforts in the greater Seattle community, here's your chance to get involved!

As always, keep checking the Facebook (search The UW Farm) and the website (food.washington.edu/farm) for updates on work parties and events!

In sunshine and dirt,

The UW Farm team

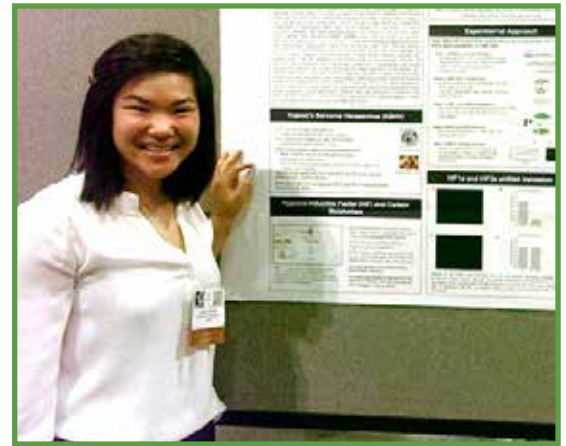


Seed Selection Party at 6:00 Mercer Court Farm Clubhouse Jan 15, 2015.

At the National SACNAS conference, judges recognized Hanna Hong's work, titled "Elucidating the Role of Hypoxia Inducible Factor during Latent KSHV Infection," as a standout among the student presentations, and have selected Hanna Hong to receive one of the 2014 SACNAS Student Presentation Awards.

SACNAS (Society for Advancement of Hispanics/Chicanos & Native Americans in Science) was founded over 40 years ago by career academics and research scientists committed to unifying their voice and offering guidance to Hispanics/Chicanos & Native Americans in the STEM fields. Today, the National Conference is a gathering of nearly 4,000 students and professionals. Taking place over three days, the conference showcases both undergraduate and graduate student presentations, and offers scientific symposia, keynote addresses, professional development sessions, and a grand exhibit hall in which students can interact with over 600 program representatives from colleges and universities across the nation.

For the SACNAS conference, she was funded by the UW URP Travel Conference Award, SACNAS National Travel Scholarship, and the UW Mary Gates Research Scholarship. For the past, two and a half years, Hanna been doing research in Dr. Michael Lagunoff's Lab.



Hanna Hong, Senior, Biology (MCD) and BioChemistry
With her poster at the SACNAS Conference.

Herpetology

New class this Spring: Amphibian and Reptile Biology



Dr Charles Linkem demonstrating the lock-jaw bite of a juvenile *Crotophytus collaris*.

My interest in reptiles and amphibians began at a young age. During my undergraduate education at UC Berkeley, I decided to turn my interests into a career in evolutionary biology focusing on herpetology. My research primarily focuses on describing and characterizing patterns of reptile and amphibian diversity in Southeast Asia.

I am particularly interested in a family of lizards (Scincidae) for which diversity is high but understanding of natural history is limited. I combine biodiversity surveys, DNA sequencing, morphology, and statistical phylogenetics to shed light on the history of these organisms.

My research has resulted in the description of new species of reptiles and amphibians and new insights into the biogeographic patterns of lizards among the islands

of Southeast Asia. I continue to expand on my research at the University of Washington using new genomic tools.



Calotes emma in northern Vietnam

Ambystoma gracile laying eggs in a local Seattle pond.



I am excited to introduce a new course, BIOL 437: Herpetology, in the spring quarter.

We will explore amphibian and reptile biology, with an emphasis on evolutionary relationships, ecology, behavior, morphology, physiology, and taxonomy. Lectures will emphasize major trends and mechanisms maintaining diversity in form and function. Labs will cover morphology and taxonomy with emphasis on the local fauna. Multiple field trips, including an overnight camping trip, will provide opportunities for hands-on experience. Prerequisite for this course is BIOL 354.



Sceloporus occidentalis in eastern Oregon

Biology Undergrad Listserve

The Biology Advisors 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

UW Biology Facebook Page

www.facebook.com/UWBiology

UW Undergrad Research Program

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

Botany Club

(<https://www.facebook.com/pages/The-Botany-Club-at-UW/198908630127686>) and email us at clubbot@uw.edu to join our mailing list.

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.

Check it out at: 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—Admission is free to the public on the first Thursday of each month.

At the Burke Museum

General admission Free to UW Students

Here & Now: Native Artists Inspired

Nov 22, 2014 to July 27, 2015

The exhibit will explore the dynamic relationship between the Burke Museum and Northwest Native art, artists, and scholars. Featuring work by contemporary artists who have been inspired by the objects in the Burke collection, the exhibit will demonstrate how today's artists and art historians learn from past generations.

Join us for an exploration of the dynamic relationship between past and present, collections and creativity, and artists and their ancestors.

This British Columbia Kwakwaka'wakw transformation mask was thought to have inspired the Seahawks logo will be on view at this exhibit. On loan from the Hudson Museum at the University of Maine.



A color photo of the mask in its closed position. Hudson Museum cat. no. HM5521.

Biology Advisors

Undergraduate Advising Hitchcock 318

The Undergraduate Biology Advising Department

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.

Open walk-in:

Monday - Friday 9:00 am to 12 pm AND

M, Tu, W, F 1:00 to 4:00 pm, with Thursday 1:30 to 4:00

(office closed 12 to 1) or contact one of our three advisors for an appointment by phone or email. The photo on the right (in the office decorated for the Campus Decoration Challenge) includes the advisors and the office staff of Room 318.

Advisors are: Jason, Janet & Andrea. Staff is Julie.

And T. Armadillo, is a friend, of Dr. Karen P.



Andrea Pardo, Jason Patterson, Janet Germeraad, T. Armadillo and Julie Martinez

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 three returning undergraduate computer support staff, **Nick Clawson**, **Curtis Thompson** and **Meng Meng Zhao** who will be staffing the Biology Study Area and programming, so you may see them around as well.



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

Mystery Plant

Guess it and win cards!



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

Submit your best guess with your name and email into our Mystery Flower Box located within the third floor Atrium of Hitchcock Hall.

Questions: 1) the name of the genus species and 2) the common name

A drawing for the prize of a special limited edition, set of eight Biology note cards featuring flowers blooming Autumn Quarter in the Greenhouse. Cards displayed in HCK 302. Drawing to be held after March 1.

The hints:

1. *Originates from the rainforests (along streams or in ravines) of the Philippines*
2. *The vine's flowers are pendant, hanging in large clusters of claw-shaped flower in a remarkable turquoise color.*
3. *It is in the same family as peas and beans (Leguminosae)*

Advising Available

Biology Department

Walk-in Advising

Janet Germeraad

Jason Patterson • Andrea Pardo

318 Hitchcock Hall

Mon-Fri, 9:00 am–12:00 pm

M, Tu, W, F, 1:00 pm– 4:00 pm

Thursday 1:30 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

<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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