

BIOLOGY STUDENT  
NEWSLETTER

SPRING QUARTER 2016

ISSUE 25

IMPORTANT DATES  
FOR SPRING QUARTER

Mar 28	First Day of Instruction
Apr 4	Last Day to DROP A CLASS WITHOUT A FEE thru MyUW
Apr 4	All courses REQUIRE ENTRY CODES TO ADD, beginning
Apr 6	Biology Apparel Day
Apr 6-7	Grad Fair (ordering stuff) 10:00-5:00 MGH
Apr 10	Last Day to DROP A CLASS WITHOUT THE USE OF THE ANNUAL DROP
Apr 11-May 18	Summer Reg Period 1
Apr 14	Spring Career Fair 3:00-7:00 pm Hub Ballrooms
Apr 15	Deadline for name in UW Commencement Program (must submit a grad app or SPR/SUM 16)
Apr 17	Last Day to ADD A CLASS through MyUW
Apr 27	Biology Networking Night
May 4	Biology Apparel Day
May 4	Last Day to Apply for GRAD REG PRIORITY GSP for Autumn
May 4-26	Register for Commencement Cap & Gown Signups
May 6	Autumn Registration starts
May 15	Last Day to use ANNUAL DROP or convert to S/NS
May 19-Jun 19	Summer Reg Period 2
May 20	UGrad Research Symposium
May 30	Memorial Day Holiday
May 31	Mystery Flower contest ends
Jun 1	Biology Apparel Day
Jun 3	Last Day to WITHDRAW (from all Spr Qtr classes)
Jun 6	RSVP for Dept Celebration
Jun 6 -10	Final Examination week
Jun 10	Biology Grad Celebration in Hec Ed 2:30-4:00
Jun 11	UW Commencement in Husky Stadium

DEPARTMENT OF BIOLOGY GRADUATION CELEBRATION  
FRIDAY JUNE 10, 2016 2:30 to 4:00 pm

Not to be confused with the big UW Commencement on Saturday

The **Department of Biology's Graduation Celebration** will be held at Hec Edmundson Pavilion.

At 1:30, Hec Ed doors open for family & friends. ( Hec Ed seats 10,000, we have lots of room.)

At 1:30, Graduating students check-in at the south Hec Ed loading docks.

The program will include the hooding of PhD candidates and the reading of names for all the graduating seniors present. Each student will walk across the stage to be congratulated by either the Chair, Toby Bradshaw or the Associate Chair, Jennifer Ruesink.

No tickets are required but ALL STUDENTS are required to RSVP by June 6 by completing the Biology Graduation Celebration catalyst form at: <https://catalyst.uw.edu/webq/survey/jgt3/296638>. This RSVP is an additional requirement if you are participating in the departmental celebration. Then we will know you are attending AND you will get a name pronouncing card at check-in.



2015 PhD candidates before their hooding.

## SPRING Biology Department Award Winners: Congratulations to you all!



### UNDERGRADUATE AWARDS:

Casey:	Tunyi (Jude) Achombom
Franco Award:	Alec Baird
Frye-Hotson-Rigg Award:	Melissa Wong
Susan Huscroft Scholarship:	Natalie Pearlman
May Garrett-Hayes Scholarship:	Melissa Wong
Porath-Johnson Scholarship:	Ariana Kupai
Porath-Johnson Scholarship:	Mina Sultana
Riehl Scholarship:	Alex Rodriguez
Farner Scholarship:	Naima Alver
UW Biology Scholarship:	Luke Johnson
UW Biology Scholarship:	Rachel Levenseller
UW Biology Scholarship:	Taelon Parson

### GRADUATE AWARDS

Beacon Evolution Award:	Megan Whitney
Giles Award:	Laura Frost
Edmondson Award:	Will King
Paine Experimental & Field Ecology Award:	Katie Dobkowski
Paine Experimental & Field Ecology Award:	Meera Lee Sethi
Friday Harbor Labs Award:	Leonard Jones
Harris Award:	Kory Luedke
Harris Award:	Eleanor Lutz
IUVO Award:	Katie Dobkowski
IUVO Award:	Kathryn Stanchak
Riddiford-Truman Award:	Nassima Bouzid
Riddiford-Truman Award:	Gideon Dunster
Sargent Award:	Marlies Kovenock
Sargent Award:	Katrina Van Raay
Snyder Award:	Stephanie Smith
Wingfield / Ramenofsky Award:	Marlies Kovenock
WRF-Hall Fellowship:	Charles Beightol
WRF-Hall Fellowship:	Ethan Linck

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.

## BIOLOGY NETWORKING NIGHT: Save the Date: Wednesday April 27, 2016 5:30-7:30

**Want to know what people have done since they earned a degree in Biology? What would they do differently?**

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.



*Biology Networking Night is hosted by Jason Patterson in HCK 132.*



## Friday Harbor Labs: Drew McWhirter took the UW Scientific Diving Course



*Drew McWhirter  
measuring Kelp*

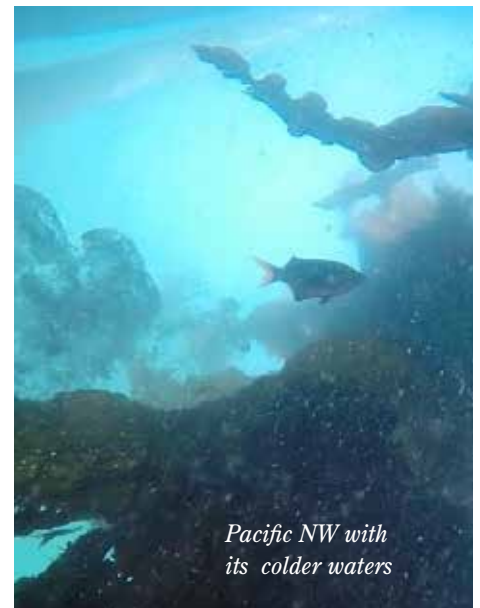
**There was never any doubt that Marine Biology minor and Oceanography major Drew McWhirter loved the ocean.**

While living on Oahu for three years in middle school, he surfed, paddled canoes, snorkeled, played water polo and was a junior lifeguard. While he always wanted to learn how to dive, it wasn't until he got into the colder waters of the Pacific Northwest that he started. In less than a year, Drew was conducting research of his own as a certified scientific diver.

Drew spent his spring quarter in 2015 studying marine invertebrate zoology and botany (zoo/bot) at Friday Harbor Labs (FHL), and he learned that FHL offers an annual summer course which certifies students as 'AAUS Scientific Divers'. The American Academy of Underwater Sciences (AAUS) sets the standard for scientific diving that is recognized by OSHA for marine

biologists and other scientists to conduct research. Before starting on the certification at UW, students must already have their open water certification along with a minimum of 20 logged dives, but Drew hadn't ever dived before. To get started, Drew first connected with the UW Underdaws, a group for students, faculty and alumni interested in recreational SCUBA diving. Through the group, he was connected with a basic open-water certification class in Seattle as well as potential partners to start logging dives with. He spent the first part of summer diving off Alki in West Seattle with a variety of people: other marine bio minors, fraternity brothers, connections from FHL, and even a chef he worked with. **"It's such a thrill being able to breathe underwater. Regardless of what you're seeing, everything blows your mind. It's like taking a step on a new planet."**

By late July, Drew was ready to get started with the more advanced skills included in the UW Scientific Diving Course at FHL. Under the instruction of FHL Dive Safety Officer Pema Kitaeff, he learned advanced safety skills, underwater research methods, and how to plan and communicate with your partners. He started putting his skills into practice through the 'Ecology Between and Below Pacific Tides' summer course at FHL with a research project on the growth and survival of young bull kelp (*nereocystis leutkeana*). The certification allowed Drew to measure and compare the growth of kelp in the lab and out in the field at 1 Mile Reef. This period of intensive training is just a start for Drew, and he hopes to get back to more scientific research underwater after graduating this spring.



*Pacific NW with  
its colder waters*

### **Want to learn more about scientific diving?**

The first step is to get open-water certified through a local dive shop (certification options include PADI, NAUI, SDI and SSI). Or, if you're already a certified diver from another environment, try a local orientation to get acquainted with waters in the Pacific Northwest.

Connect with the UW Underdaws to get recommendations for classes through local dive shops (which sometimes offer discounts to the Underdaws and for UW students). Friday Harbor Labs offers an AAUS certification course annually in the summer. This is a non-credit training course taught over two weeks. You must be medically cleared, have your own equipment, and you must show a logbook with a minimum of 20 dives in order to take the class.

### **Apply for the 2016 Scientific Diving Course at Friday Harbor Labs (deadline: April 15)**

**Contacts & Resources:** Pema Kitaeff, FHL Dive Safety Officer: pema@uw.edu  
Will Love, UW Dive Safety Officer: wlove@uw.edu  
UW Underdaws  
American Academy of Underwater Sciences



*Bull Kelp  
Nereocystis leutkeana*

## STUDY ABROAD PROGRAM: Elise A Logger goes to Port Elizabeth, South Africa - 5 months

### ELISE A LOGGER

Senior, Biology ( Ecology, Evolution & Conservation)



*The last week I spent in Africa I went to Chobe National Park in Botswana. Here we saw over 700 elephants in one day.*

**"I will be surprised if you don't catch the Africa bug," the woman on the plane said to me as we parted ways in the Johannesburg, South Africa, airport. I blew it off, half hoping the next five months would speed by and I would be back in the US in no time.**

Last January, on a whim, I applied through UW to a direct university exchange study abroad program in South Africa. Little did I know that the time I would spend attending Nelson Mandela Metropolitan University (NMMU) in the coastal town of Port Elizabeth (PE) would be the most memorable chapter of my university career. Most people do not think of South Africa as the first place to go when studying abroad but I wanted to go somewhere completely, both culturally and biologically, distinct from the western US.

I knew no one when I left for PE and I entered my first class irrationally terrified. The students I met that day would be the most difficult people I would say goodbye to in December. The biology classes I took consisted of about 30 students, and the same students were in more or less all of my classes. Since the school system is closer to a European system, students enroll in a program with prescribed classes instead of choosing their own classes. Due to the small class sizes, lecturers were easy to access and each week I went on two field trips to places such as oyster farms, nature reserves, and estuaries. I had the opportunity to assist in data collection on elephant use of watering holes in Addo Elephant National Park with one of my professors as well as survey ghost frogs in the bush with South Africa's Eastern Cape herpetologist.

"If you see a rhino, run." You don't hear that every day out in the field in Washington, but in South Africa, I'd learn that it was common practice. My evolutionary ecology class took a week-long excursion to a nature reserve in South Africa's Eastern Cape where we spent five days conducting vegetation, rodent, and monkey research. We also conducted a mark-recapture study on domestic Angora goats. While in the field, black rhino and hippos were almost always visible and large ungulates such as kudu, eland, and sable regularly grazed on the slopes across from camp. Coming from the US where I could identify most species, seeing African animals I had never even heard of before in their native animals was truly...wild.

Living in PE is a biologists' dream because NMMU sits on a nature reserve bordering the ocean. I saw zebra and springbok daily on my bike ride to school and vervet monkeys frequently tried to snag free meals (sometimes straight from your hands). Port Elizabeth lies on





*A game reserve outside of Port Elizabeth has some very friendly giraffe. (Right up to the vehicles.)*

*While in Kruger, my parents and I spent four days on a walking safari. These two women were studying to become guides in Kruger (which is fairly rare for women). My mother worked for a decade as an interpretive ranger in Glacier National Park and I do seasonal work as a park ranger for North Cascades National Park. It was really cool to see women becoming rangers in a very male dominated profession in South Africa.*



the edge of a bay with some of the highest diversity of fish species allowing for amazing snorkeling right off the shore and I regularly saw whales and dolphins while in the morning on the beach.

Studying at NMMU didn't end at merely a scholarly learning experience. Traveling in South Africa allowed me to see concepts I learned in class play out in front of me. While driving in Kruger National Park with my parents, I was explaining about rhino latrines and as we turned the corner a white rhino was contributing to a latrine. The schooling deepened my understanding of interactions and opened my eyes to things I never knew existed.

As I stepped onto the plane that would take me on my incredible journey I had not considered doing homework by headlamp due to blackouts or needing to buy internet by the gigabyte to complete assignments, but that was Africa. I have barely touched on the welcoming culture and, as cliché as it is to say, lifelong friends I met which made my study abroad experience incredible. To say the least, the woman on the plane knew my future: I caught the Africa bug and I cannot wait to return.

— *Eliise A Logger*

*As part of the excursion for my evolutionary ecology class we did a mark-recapture study on Angora goats. This is the entire class of students and some of the goats we used for mark-recapture.*



## Terry's Spring Medley: 66 Years, Medicinal Herb Garden, MOVING, and Plant Research

**MEDICINAL HERB GARDEN** As the sun begins its reign again and winter looses its icy strangle, nature isn't far behind bursting forth with fervent activity and growth. Though as we slip deeper into the warm embrace of spring, sadly we will have to say goodbye to our beloved Botany Greenhouse. After 66 years it is finally retiring, but in its place a new Life Sciences Complex and Biology Greenhouse will be built.

Now that the greenhouse will be gone for two years, where else can you go? If you are in need of a plant fix the Washington Park Arboretum just on the other side of the Montlake Bridge is a great forest of rare and unusual plants and trees. Or if you are longing for something more nostalgic, visit The Conservatory up in Volunteer Park where their breathtaking seasonal displays will not disappoint. Though if these two destinations seem like a trek, there is a closer place teeming with botanical treasures: the Medicinal Herb Garden. Just across Stevens Way from the greenhouse, the two-acre garden is a sheer delight to stroll through. Thanks to Keith Possee's passionate dedication, he has singlehandedly transformed this historic garden into a treasure trove of plants from all around the world. Visit the garden throughout the year and you'll catch wonderful seasonal surprises like the mandrake blooming in February or chocolate scented daisies in high summer.



Photos provided by Keith Possee.

### Five crowd-pleasers Keith says to look forward to in the garden this year:

***Paeonia lactiflora*** (Section B) With the early warm weather, this classic beauty has quickly emerged from the ground stretching its slender shoots and glossy leaves in the sunlight. It won't be long until its leafy stems are smothered with puffy white blossoms filling the air spring air with its signature fragrance. These flowers don't last long, so check back often to catch them at their peak

***Leonotis nepetifolia*** (Section C) This tall and delightfully quirky plant is something that Dr. Seuss would have dreamed up. Look for its spacey orbs of burnt orange flowers in the height of summer and if you get lucky you may catch a hummingbird enjoying its sweet nectar.

***Ipomoea tricolor*** (Section C) True blue is rare color in nature and this heirloom vine does not disappoint! Be sure to visit the plant before early afternoon or you'll see why its sky-blue flowers are nicknamed 'morning glory'.

***Silphiums spp.*** (Section A –E) Keith has nice collection of these North American sunflower relatives hailing from the woodlands of the Northeast to the prairies of the Midwest. Visit the garden from summer through autumn to stand beneath the towering flowers of *S. terebinthinaceum*, admire the cheery flowers of *S. integrifolium*, and all the other species in between.

***Aconitum carmichaelii*** (Section F) Before the chilling breath of late autumn ends the floral parade of summer a few brave souls, put on one last spectacular show. Monkshood is one of these plants. Its purple-blue hooded flowers can look quite sinister, but its floral display is most welcomed this time of year. Just remember, don't nibble on this for it can make you deathly ill!

### We hope to see you in the Medicinal Herb Garden!

Starting April 1<sup>st</sup> the greenhouse will only be open on Fridays from 8:30 am – 4:30 pm, closing permanently after April 29<sup>th</sup>. This will give the staff much needed time to concentrate on preparing the plants for their big move in May. If you are interested in helping on the big days of the move, please send an email to the greenhouse staff and we'll be more than happy to fill you in.

## GETTING TO THE ROOT: PLANT RESEARCH IN THE BOTANY GREENHOUSE

Back in 1949 our quirky greenhouse was originally built for growing corn for genetic research. Though the initial researcher switched to yeast a few years later, the greenhouse gave many new researchers a place to unravel the mysteries of the natural world by looking at plants. In the 1960's the C.V. Muhlick Collection moved down from a small greenhouse by Parrington Hall and continued to grow evolving into the botanically rich teaching collection we see today.

The new Biology Greenhouse will be equipped with even more research space for researchers and students alike. So if you've got a budding curiosity for plant research, try teaming up with a lab and get some experience in research, and maybe you'll just end up working on your own project in the greenhouse. Don't let our 'glass ceiling' stop you.



As we prepare for the construction of the Life Sciences Complex and new Biology Greenhouse, let's look back at some of the research that has taken place in greenhouse in the past year.



Melissa Lacey – Ph.D.,  
Van Volkenburgh Lab

**Can leaf shape give clues to how well a plant can tolerate drought?** This is a question paleobotanists have touched on by looking at fossilized leaves in the fossil record. They found that leaf shapes deposited in specific layers inferred those ancient plants were adapted to the climatic conditions of that era. However, that is all correlative, so by using this as a foundation, Melissa has been testing that question in the greenhouse by using wild tomatoes as her model plant.

Wild tomato plants come in all shapes and sizes, so perfect for testing a wide range of leaf shapes. Melissa can look at whether a tomato with toothy leaves is better at tolerating drought than one with smooth leaves, or compare a veiny species with more simplistic ones. Through testing her tomato plants, she has found that in parched conditions tomato leaf margins have higher rates of photosynthesis than their leaf centers. In addition, veins also play a big part of drought tolerance, but currently she is crunching data to see exactly how well each leaf shape moves water around during drier periods. This type of research hasn't been conducted on herbaceous plants before; so by looking at an economically important crop, this can help breeders in the future to breed for tomatoes that can handle the swings in our changing climate. Long live the BLT!

**Since the beginning of human history flowers have always captivated us.** Perhaps it's the splendid beauty of their forms or their couth fragrances, whatever the reason may be there is something magic about flowers. However, flowers did not evolve to please us. Really, flowers are an evolutionary collection of leaves ingeniously modified to signal to potential pollinators and to safely house their gametes. When poet Alfred R. Ferguson referenced in his poem, *Nothing Gold Can Stay* that "[an] early leaf's a flower", he actually wasn't too far off.

Trying to discover the origins of petal formation, scientists discovered the genes that determine the developmental fate of those primordial leaves through extensive poking and prodding of model plant *Arabidopsis*. *Arabidopsis* has true petals, but *Thalictrum* does not. Instead they have modified sepals that are petaloid – meaning they take on the biological role of petals. Intrigued by this mystery, Jesus is diving deeper and testing plants in the greenhouse to see if the genes responsible for petal formation in *Arabidopsis* are the descendants of the same genes that form petaloid sepals in *Thalictrum*. Though magicians never reveal their secrets, hopefully studying these flowers will help us unravel the nature of their floral enchantment.



Jesus Martinez-Gomez – Senior,  
Di Stilio Lab



Winnie Ho – Postdoc,  
Riffel Lab

**Carnivorous plants can be found all over the world** in nutrient poor areas, evolving to supplement their diets with unwitting insects and (rarely) animals. However, this poses one risk: how do they avoid attracting and digesting their pollinators? To help reconcile this undesirable fate, carnivorous plants have evolved to separate their flowers from the traps temporally and spatially: blooming before new traps open or keeping flowers well away.

Things aren't always perfectly executed in nature, so sometimes traps and blooming flowers overlap. Could fragrance be another way to divert pollinators away from doom? By analyzing the traps and flowers of temperate and tropical pitcher plants, Winnie and her team of undergraduate researchers are looking at the greenhouse's carnivorous plant collection to see if compounds produced in flowers are more attractive to pollinators than the compounds in traps. Winnie has found that the traps of Pacific Northwest native *Darlingtonia* emit a strong sweet (linalool) and woody (E- $\beta$ -farnesene) fragrance – perhaps mimicking a flower – whereas its flowers have a spicy tea aroma (eucalyptol and trans- $\alpha$ -bergamotene) attractive to solitary bees. See, even bees appreciate a good cuppa!

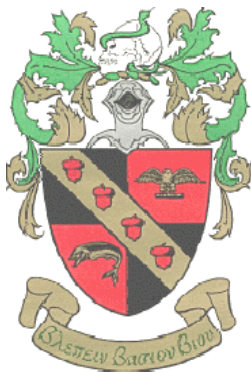
**Colorado and Utah would not be the same without its silver and gold aspen forests.** Hiking through the forests of the mountain states, aspens can be found growing in nearly every environment. Whether it's a crack on a dry, rocky slope or along the waterway of a coursing river, aspens are well adapted for these extreme conditions. However, if you compare an aspen from a drier site with one from a saturated area they definitely would not look the same. You would find that the water-stressed aspen would have smaller stiffer leaves and large lush leaves its wetter counterpart.

Alec found that the plastic ability of aspen was an ideal model plant for studying the effects water stress on leaf development. When Alec compared the leaves of the two treatments in the greenhouse, he found they both had a similar rate of photosynthesis per unit area despite the differences in leaf size with those of the well-watered plants even though the drought-stricken plants limited opening their stomata. It seemed like this was because the smaller leaves of the water-stressed aspens had a denser arrangement of cells allowing carbon dioxide to be taken up more readily. By looking at these aspen trees the results can give scientists a good idea how plants may respond to our increasingly changing climate. So the next time you are in a pinch, think like an aspen!



Alec Baird – Senior,  
Van Volkenburgh Lab  
Hille Ris Lambers Lab

# TRIBETA AND BIOLOGY CLUB: Calling all UW Biology Students



## Tribeta Officers 2015-2016

### President

CiCi Alsamarraie

### VP of Communications

Jennifer Look

### VP of Events

Julie Erlemeir

Elsha Egglink

### VP of Meetings

Ellie Taagen

### VP of Mentorship

Rajvir Singh

### VP of Membership

Maddy McKeague

### Secretary

Katie Sturtevant

### VP of Advertising

Erica Alcantara

### Treasurer

Aaron Neal

### VPs of Tutoring

Sidney Drury



2015 T-shirt Winner

## READY TO MAKE THE MOST OF A NEW QUARTER?

If you're looking to make the University of Washington feel more like home by finding your niche, look no further! At TriBeta Biological Honor Society and Biology Club, we are proud to be part of UW's largest major and offer students the tools for success through a community of experienced Biology faculty and students – all we're missing is you! TriBeta is ready to work with you in studying, volunteering, and socializing via the services listed below!

**TUTORING:** Tutors who have excelled as students in BIOL 180, 200, and 220 are available to help students currently taking these classes through free one-on-one appointments (scheduled at <http://tribetauw.weebly.com/tutoring.html>) or free Monday-Thursday 3:30-6:30 PM drop-in tutoring at the HCK 4th floor lounge. Snacks, reference books, and other materials are provided! To become a tutor, email [VP of Tutoring Sidney Drury \(sdrury3@uw.edu\)](mailto:VP of Tutoring Sidney Drury (sdrury3@uw.edu)).

**EVENTS:** TriBeta hosts multiple social events each quarter such as signature fall Pumpkin Carving, spring Terrarium Night (will resume once the new Greenhouse is built), and a quarterly Study Night just before finals. Along with promoting community within the Biology department, TriBeta's network extends to the campus and city via volunteering with organizations like UW Farms and United Way of King County. Send your ideas and requests for events to [VP of Events Elsha Eggink \(elshae17@uw.edu\)](mailto:VP of Events Elsha Eggink (elshae17@uw.edu)).

**MEETINGS:** Each quarter, an engaging lecturer is invited to discuss his/her innovating research. Past talks have been on neuroprosthetics, morphological diversity of bats, the most effective ways to teach Biology, and more. Come learn about a topic you've never before delved into in this unique informal seminar, typically held on a Thursday around 4:30 PM in Hitchcock with refreshments provided. Email [VP of Meetings Ellie Taagen \(etaagen@uw.edu\)](mailto:VP of Meetings Ellie Taagen (etaagen@uw.edu)) with questions or suggestions for talks, panels, and meet-and-greets with professors and professionals.



*Refreshments are provided for events, meetings tutoring and quarterly Study Night!*

**T-SHIRTS:** Show off your part and pride in what we deem the ultimate department on campus by sporting a UW Biology T-shirt! Shirts are designed, voted on, and made by TriBeta members to be sold every first Wednesday of the month in the Hitchcock 3rd floor lounge. \$15 T-shirts come in a myriad of colors and sizes, and long-sleeves, crew necks, and zip-up sweatshirts are also available. 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 entry for fun Biology prizes! Pre-orders are possible; inquire with [Treasurer Aaron Neal \(aaronn3@uw.edu\)](mailto:Treasurer Aaron Neal (aaronn3@uw.edu)).

**HONORS SOCIETY:** While TriBeta's events and services are for all to enjoy as part of the Biology Club, everyone is encouraged to strive to join the TriBeta Honors Biological Society. TriBeta membership is a lifetime membership in a nationally-recognized honor society that graduate schools and employers look for and hold in high esteem. Members at the University of Washington chapter gain access to member-only events and benefits, and receive a TriBeta certificate, key chain, sticker, and honor cords to wear at graduation. Anyone may become an Associate Member, but only those meeting the curriculum and GPA requirements may become Full Members. Full members have taken the entire intro Biol series (180-220) and have an average GPA of 3.0 or higher in these classes. If you do not yet meet these qualifications, you may join now as an Associate member, and obtain Full membership status when you meet them. To apply, email TriBeta advisor Dr. Linda Martin-Morris ([Imorris@uw.edu](mailto:Imorris@uw.edu)) an unofficial transcript and a photo of yourself. For further inquiry, email VP of [Membership Maddy McKeague \(mckeague@uw.edu\)](mailto:Membership Maddy McKeague (mckeague@uw.edu)).

On behalf of all TriBeta officers, we wish you the very best this springquarter and can't wait to see you soon!

**Aseel "Cici" Alsamarraie TriBeta President 2015-2016** [alsamarr@uw.edu](mailto:alsamarr@uw.edu)



## FREE TRIBETA TUTORING: UW Intro Biology Series Biology 180, 200 & 220

**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://tribetauw.weebly.com/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 feel free to e-mail [Sidney Drury](mailto:tribetatutoring@gmail.com), at [tribetatutoring@gmail.com](mailto:tribetatutoring@gmail.com)



Fourth floor lounge in Hitchcock

## UFARM : Today smells like spring! Come volunteer and appreciate the season.



This spring the UW Farm is trying something new;



we are going to have permanently raised beds at CUH. An exciting, but huge task; this will allow the farm to have a greater uniformity, better control nutrients, and make turnover from year to year easier, among other benefits.

Another new addition to the farm is the beautiful wooden beds for the children's garden which is located behind the hoop house - this will provide ample space for children who come on field trips from local schools to be able to plant. The wash pack station is nearly completed and provides a great gathering space, go check it out (the structure with the green roof). This spring will also see a composting toilet installed on the farm thanks to the generous grant from the Campus Sustainability Fund. Already seeding is happening and when students gets back from spring break, transplanting will commence. The Community Supported Agriculture (CSA) is already sold out for the year and we anticipate great collaboration with on campus restaurants. This season is sure to be great so come and join!

### Locations:

CENTER FOR URBAN HORT.  
and MERCER COURT

For more information about the farm please visit our website and/or sign up for our newsletter at [food.washington.edu/farm](http://food.washington.edu/farm)

**In Sunshine and Dirt,  
the UW Farm Team.**



Garden down by the Mercer Court.



Garden down by the Center for Urban Horticulture.



## UW Paleontology Field Methods and Research Biol 475A 3,4 or 5 credits: Hell Creek, MT

### EVER wanted to participate in a real dinosaur dig? Or learn more about their extinction and the rise of mammals?

Check out this amazing course for an incredible summer experience of paleontology fieldwork in Hell Creek, Montana. Get your hands dirty learning the basics of field geology and paleontology, excavating mammal and dinosaur fossils, like *Triceratops*, and analyzing data that contribute to research on the extinction of dinosaurs and the rise of mammals.



A five-week intro to paleontological field methods and research, in which students develop skills in collecting, analyzing, and interpreting field data and designing research projects by participating in ongoing paleontological research on the Cretaceous-Paleogene mass extinction. Topics include excavation of fossils, identification and curation of fossils, collection/interpretation of stratigraphic and taphonomic data, and report writing.

**If you are a high-energy, enthusiastic student ready for a summer of hard work and discovery, please contact the instructor! Greg Wilson ([gpwilson@uw.edu](mailto:gpwilson@uw.edu))**

#### Course Details (June 20 – July 20, 2016):

- Lecture/Lab Component: 2 wks (Jun 20-Jun 24, Jul 16-20) Intro lectures on principles in fieldpaleontology, geology, and taphonomy as well as the scientific context of the research. Lab sessions to introduce the fossil vertebrates, curate collected fossil specimens, analyze data, and present final reports.
- Fieldwork Component: 3 wks (Jun 25-Jul 15) at the Hell Creek State Park in NE Montana learning basic paleontology and geology field techniques, gaining context of ongoing research, and engaging in group research projects.
- Course fee \$120, Program fee \$650 (covers transportation, meals, lodging, equipment for fieldwork), & UW Tuition <http://www.summer.washington.edu/summer/fees/undergrad.asp>
- More info: [http://faculty.washington.edu/gpwilson/BIO475\\_Paleo\\_Field\\_Methods.htm](http://faculty.washington.edu/gpwilson/BIO475_Paleo_Field_Methods.htm)
- Entry Code: contact instructor Greg Wilson ([gpwilson@uw.edu](mailto:gpwilson@uw.edu)) for an entry code

**In paleontology**, field work is at the frontlines of scientific discovery. The next hill or patch of outcrop could have buried within it the fossilized remains of a dinosaur like *Tyrannosaurus rex*, a new species of mammal, or some other precious find that in one fell swoop will overturn previous ideas about the history of life.





## HCK 302: INSTRUCTIONAL SUPPORT OFFICE / STUDY AREA / REGRADE DROP / EXAM PICKUP



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 Winter, it will be kept until the week between Spring & Summer Qtrs.

This is also the place to drop off your Exam REGRADES. *Just follow the signs!*  
Staff members, Gretchen Shirley-Bellande and Jeannette Takashima can help you.



## GET CONNECTED IN BIOLOGY: Where to look today!

### Biology Undergrad Listserve

The Biology Advisors maintain a listserv 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/>

### 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.

### 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 listserv 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.

## BIOLOGY APPAREL DAY: The first wednesday of every month & get a treat!

### 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 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!

**Biology Apparel Wednesdays in Spring Quarter are April 6, May 4 and June 1.**



Mr Toad wearing last year's winning T-shirt by Terry Huang.

## BIOLOGY ADVISORS: Undergraduate Advising in Hitchcock 318

The Undergraduate Biology Advising Department

OPEN: Monday thru Friday 8 am to 4:30 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 Thurs 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

## Mystery Plant: Guess it and win an 8 card set of flowering plants at the greenhouse!

**This is the Spring Quarter mystery plant and it is blooming right now in and around the Botany Greenhouse.**

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

A drawing for the prize of a special limited edition, set of eight Biology note cards featuring flowers blooming Spring Quarter in the Greenhouse. Cards displayed in HCK 302.



**QUESTIONS:** 1) Genus species? AND

2) What year was it first collected by Thomas Lobb, the collector for Veitch Nurseries in England.

### The hints:

1. Showy and long lasting
2. Occurs in Laos and from Java to Bali
3. Fragrance like grape juice or candy

## 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](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

The Department of Biology  
Undergraduate Newsletter

is published by the University of Washington,  
Department of Biology Seattle, Washington, 98195  
Editor: Jeannette Takashima

## BIOLOGY STUDY AREA :

### All Students are Welcome in Hitchcock 220

**The Biology Study Area (BSA) is a GREAT place to study with other students, use computers, or just to 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 undergraduate computer support staff, **Hiren Ajudia, Akash Jaswal, and Samuel Wesley** who will be staffing the Biology Study Area and programming, so you may see them around as well.

*Mr Grasshopper is typing up his research work on one of the computers in the Biology Study Area. He thinks the support staff is great.*

