UNIVERSITY of WASHINGTON | DEPARTMENT OF BIOLOGY

BIOLOGY STUDENT NEWSLETTER

AUTUMN QUARTER 2020 ISSUE 36

IMPORTANT DATES FOR AUTUMN QUARTER

Sept 30	First Day of Instruction
Oct 6	Last day to drop a class without a fee thru MyUW
Oct 7	Biology Apparel Day
Oct 7	All courses require entry codes to add and fee
Oct 9	Last Day to apply to Biology major in Spring
Oct 13	Last Day to drop a class without the use of the Annual Drop
Oct 20	Last Day to add a class through MyUW
Oct 29	Dr Millie Russell Day
Nov 4	Biology Apparel Day
Nov 4	Last Day to Apply for Grad Reg Priority GSP for Winter
Nov 6-22	Win Reg Priority Period 1
Nov 11	Veterans Day
Nov 17	Last Day to use ANNUAL DROP or convert to S/NS
Nov23-Jan3	Winter Reg Period 2
Nov 26-27	Thanksgiving & Day After
Dec 2	Biology Apparel Day
Dec 11	Last Day to Withdrawl (from all Aut Qtr classes)
Dec 12-18	Final Examination week
Dec19- Jan3	Winter Break
Jan 4	Winter Quarter Starts

David Perkel, Chair of Biology

NOTES FROM THE CHAIR

Welcome to Autumn quarter 2020, one unlike any that we have ever experienced. We know that our returning students, new first-year students and seventeen new graduate students, along with our faculty and staff will be up for the challenge to make Autumn quarter a successful endeavor of learning in our "new normal".

Because of the ongoing COVID-19 pandemic, the vast majority of our courses will be taking place remotely, with only six Biology lab courses operating with limited in-person activities. Students in these in-person labs will be asked to navigate additional COVID-19 protocols in the buildings and labs. The protocols may seem extreme at first, but it is for the safety & health of everyone in the department and will soon feel more normal.

Despite these challenging circumstances, UW Biology remains dedicated to supporting our students. Instructors have spent substantial effort to adapt to this new learning environment, and we recognize that it's a huge adaptation for students and staff members as well as the faculty. We are counting on everyone to show flexibility and to be extra mindful of the need for clear communication in these stressful and challenging times. It is also critical that we remain vigilant in all of our efforts to help contain the coronavirus, including: washing our hands; maintaining social distance; and wearing facemasks while indoors or near others. Thank you all for continuing to do your part to keep the virus at bay here at UW and in your community.

In the wake of the killings of Ahmaud Arbery, Breonna Taylor, George Floyd and others, the country is going through a reckoning on inequity, racism and police brutality. We acknowledge that our history as a public university is part of a system that has caused harm to historically marginalized communities. Here at UW Biology, we are redoubling our efforts to root out practices that lead to racially disparate outcomes. We encourage you to join us in taking responsibility and taking action by participating in anti-racist activities through the department or through other venues.

We also face an unprecedentedly polarized and volatile political climate, with the upcoming elections. I urge all in our community to inform themselves and to participate in the democratic process through voting. If not registered, the state of Washington offers online voter registration with a registration deadline of Oct 26 to vote in the November 3 election. Your voice matters, so please make sure you use it!

Our students, faculty, and staff here at UW Biology form an amazing community and I am grateful to be a part of it. I am looking forward to a great quarter with you all.

David Perkel

For those of us who have not been on campus, the tree & bush lined sidewalks from Hitchcock to the Rotunda are gone along with the resident bunnies and Tohees.

It is construction for a new 4-story Health Sciences Education building. It will become a new student hub for the Health Science schools of Dentistry, Medicine, Nursing, Pharmacy, Public Health and Social Work with classrooms, study areas, library & a new anatomy lab.

HOW DO I TALK TO AN UNDERGRADUATE ACADEMIC ADVISOR? Use Email or Zoom!

Biology Academic Services in-office advising & services are closed until further notice, please do not call & leave a message.

We welcome UW and prospective students to contact us with any questions regarding a Biology option.
Here are the advisors, their emails and a little bit about each one of them.

Janet Germeraad
Academic Services Director
Janetjg@uw.edu

Janet's love of Biology was nurtured by her father, a career Park Ranger for the National Park Service. She grew up living on national park land in Arizona and because of that, also loves southwest culture and spicy food.

Jason Patterson
Academic Counselor Senior
patterj@uw.edu

Jason has kept exotic creatures in the Hitchcock advising office: Giant Millipedes*, a pair of* Axolotls *named Castor & Pollux and* Madagascar Hissing Cockroaches*. He also takes care of the invertebrates in the third floor atrium's cold seawater tank.*

Sheryl Medrano
Academic Counselor Senior
smedrano@uw.edu

Sheryl is a vegetarian and loves cheese. She can talk cheese for hours with her cheese sisters. The last two years she has been quietly getting an incredibly delicious WA cheddar cheese from somewhere outside of King County.

HELP US GIVE YOU QUALITY TIME ON YOUR ZOOM APPOINTMENT!

1) See if any of your questions can be first answered on:

- Our Department of Biology website https://www.biology.washington.edu/programs/undergraduate
- The UW website https://www.washington.edu/coronavirus/autumnquarter/

2) Make an appointment with an advisor:

- Email either a specific advisor or bioladv@uw.edu with days and time you have available
- Review your DARS and/or handout prior to your meeting
- Use your MYPlan to mark classes of interest

3) Then when we zoom with you, we have more time to:

- Get to know you
- Develop unique academic plans based on what you are curious about
- Navigate opportunities to refine your academic interests
- Prepare you for the world of work
- Help you cope with the typical stress & anxiety of being in college (overwhelming even without a global pandemic)

COVID TESTING

Any students coming to campus are strongly encouraged to participate in the testing that is available on campus. If students enroll in the testing, they will be contacted to do a daily attestation. More information about that is here: https://www.washington.edu/coronavirus/2020/09/14/student-coronavirus-testing-autumn-quarter/

All students, regardless of whether they are coming to campus or not, are asked to commit to the Husky PACK Pledge and instructors/TAs should remind and encourage their students to commit to that, but it will not be recorded or monitored. https://www.washington.edu/coronavirus/pack-pledge/

WHAT TO EXPECT IF YOU DO HAVE AN IN-PERSON CLASS In Hitchcock or LSB

If you are in one of the six classes for Biology that have in-person labs, there are Covid-19 protocols in each building and lab. Always keep a 6-foot distance from others and wear a mask at all times.

- **The UW Time Schedule is not up to date, check with your instructor before your class meets.**
- **Your instructor has emailed lab protocols and class room assignments, please read them thoroughly.**
- **LSB will not be open; access to LSB is via CAAMs access only & instructors should have provided information to staff to update the CAAMS system to permit students' access at the appropriate times.**
- **We encourage you to read the Biology Covid-19 Prevention Plan, in particular the Common Spaces Guidelines. There are signs posted through all the buildings to assist you.**
- **Lounging areas in both buildings are limited or closed, do not use furniture that is taped off or lounge areas that are or are at maximum safe social distancing occupancy. All tables have an occupancy limit of 1.**
- **There are eating areas with a 20-minute time limit: HCK 4th floor (limit of 2 at a time) & LSB kitchens on floors 2-5. Sanitize tables before/after use and obey all signs. Please be aware that employees working in these buildings have priority for these spaces.**

HITCHCOCK HALL (HCK)

BIOL 302 Lab Techniques in CMB (HCK 343 & 347)
BIOL 310 Human Anatomy Survey (HCK 443 & 447)
BIOL 441 Land Plant Evolution Trends (HCK 444 & 446)

Main outside east doors *of Hitchcock Floors 1&3 will be unlocked on a limited basis for these classes for security.*

HERE ARE SOME OF THE BUILDING PROTOCOLS

- Masks to be worn in the building at all times.
- Keep a 6-foot distance from others at all times.
- Restrooms are **ONLY ONE** person at a time
  - — Leave main door propped open
  - — If it is full, wait in the main corridor not the small hallway
  - — Wash hands after using restroom
  - — Wear mask
- Entire hallways are **ONE** person at a time.
  - — Look before you walk
  - — Wait for others to finish their journey
  - — (Step aside into door ways if you need to let someone by to maintain a 6-foot distance)
- Enclosed stairways in HCK are all one-way
- The open staircases is only one person at a time.
- Elevators are **ONLY ONE** person at a time.
  - — Take the stairs or wait for the next elevator
  - — Priority for those with mobility needs, carts or heavy objects
  - — Stand at least 6-feet from elevator doors.
  - — Wash or sanitize hands after leaving the elevator
  - — Wear mask
- Drinking fountains usage: Please fill water bottles only
- While waiting to get into your class room. Wait 6-feet apart.

LIFE SCIENCE BUILDING (LSB)

BIOL 400 Molecular Biology (LSB 111)
BIOL 427 BioMechanics (LSB 105)
BIOL 550 Evolution & System Seminar (LSB 110)

LSB is locked. *Enrolled students will have* ***CAAMS access to the 2 west doors*** *(Stevens Way and the Burke Museum)*

HERE ARE SOME OF THE BUILDING PROTOCOLS

- Masks to be worn in the building at all times.
- Keep a 6-foot distance from others at all times.
- Restrooms: Occupancy is every other stall/urinal.
- First floor restrooms have an occupancy limit of 3. — Leave main door propped open
  - — Maintain 6-foot distance, including in the stalls
  - — If it is full, wait in the main corridor not the small hallway
  - — Wash hands after using restroom
  - — Wear mask
  - — Space is sanitized daily
- The open staircases maintain 6-foot distance
- Elevators are **ONLY ONE** person at a time.
  - — Take the stairs or wait for the next elevator
  - — Priority for those with mobility needs, carts or heavy objects
  - — Stand at least 6-feet from elevator doors.
  - — Wash or sanitize hands after leaving the elevator
  - — Wear mask
- If you need ADA access, DO NOT go out on the deck! The only way to exit is via stairs to the ground level.
- Drinking fountains usage: Please fill water bottles only
- While waiting to get into your class room. Wait 6-feet apart.

HOW DID THESE PEOPLE CHANGE OUR WORLD? Estelle Leopold & Scott Edwards

ESTELLA BERGERE LEOPOLD

Born April 1927 Madison, Wisconsin

Estella Leopold is a paleobotanist and a conservationist who conducted groundbreaking research on fossilized pollen.

From 1955-1976, Estella worked for the US Geological Survey collecting and comparing fossils from the Rocky Mts and other places in the US and the world. Her work on the Tertiary flora of Colorado led her to a spectacular fossil deposit near the town of Florissant where paleontologists have found > 1,700 species from > 50,000 specimens. She teamed up with others as the Defenders of Florissant to block planned real estate construction until Congress established the 6,000 acre Florissant Fossil Beds National Monument with a bill signed by President Nixon in 1969.

As the co-recipient of the 1969 Conservationist of the Year Award from the Colorado Wildlife Federation and an elected member of the National Academy oof Scienes in 1974, Estella is widely recognized for her pioneering research on pollen from the Rockies to Alaska. She was awarded the 2010 International Cosmos Prize for her lifelong work that illuminates the harmonious conexistence of nature and mankind.

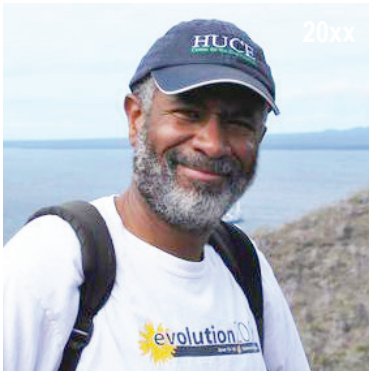
In 1976, Estella joined the UW. As a Professor of Botany and Forest Sciences and Director of the Quaternary Research Center (QRC), she researched the forest history of the Pacific Northwest and did collaborative research in China. Estella pioneered the use of fossilized pollen and spores to understand how plants & ecosystems respond over eons to climate change and other factors.

As a conservationist, she helped stop two dams which would have flooded parts of the Grand Canyon, helped block the burial of high level nuclear waste under Hanford, Washington. Along with her QRC colleagues and citizen environmental organizations, she made a case for a national monument at Mt St Helens, where scientists could study and the public could learn about how an ecosystem responds to traumatic disturbance. “Love is very important in conservation work,” she said “If you don’t love it, how are you going to work to protect it? And to love it, you have to know it.” **As the author of 100+ scientific publications,** Estella has had profound impact in the fields of paleobotany, forest history, restoration ecology, & environmental quality.

Today, she serves on the board of the Aldo Leopold Foundation (www://Aldoleopold.org) which is located in Baraboo, Wisconsin on the 80 acres with the Shack, made famous by her father, Aldo Leopold in *A Sand County Almanac*. In 2012 she published *Saved in Time* with H. Meyer to tell the story of the Floirssant Fossil Beds Monument. In 2016, she published stories of her childhood experiences with family and ecological restoration in *Stories of the Leopold Shack, Sand County Revisited.*

SCOTT VERNON EDWARDS

Born July 1963 Honolulu, Hawaii



1986 A.B. Biology, Harvard, 1992 Ph.D., UC Berkley

1995-2003, UW Biology Professor & Curator of Genetic Resources, Burke Museum.

2003- present, Harvard Alexander Agassiz Professor of Organismal & Evolutionary Biology and the Curator of Ornithology, Museum of Comparative Zoology

His impressively broad research which includes some at UW, covers diverse aspects of avian biology (evolutionary history and biogeography, disease ecology, population genetics and comparative genomics).

Combining fieldwork and benchwork, Scott studies mechanisms that generate biodiversity. He contributed the first phylogeographic analysis of Australian birds based on DNA sequencing and built the case for the evolutionary “birthplace of all songbirds,” a taxonomic group to which over half of all bird species today belong. Unmolested by the glaciers that once scraped across parts of the N. Hemisphere, Australian species inhabit a gradually changing environment that has preserved geographic distributions & caused many species’ ranges to change in concert with one another.

Scott began his work on Immunogenetics as a University of Florida postdoc studying the Major Histocompatibility Complex (MHC) which encodes genes critical for animals’ interactions with various pathogens, their disease susceptibility, and even mate choice. An important study system has been the epizootic disease of House Finches *(Haemorhous mexicanus)* caused by the bacterium *Mycoplasma gallisepticum*. This finch is common in Massachusetts and was devastated a decade ago by a bacterial infection that had originated in chickens. However, the damage was not random, and Edwards investigated the exact genetic and biochemical nature of the outbreak’s selectivity: *“It culled certain sectors of the house finch population, paradoxically sparing smaller males while decimating populations of larger males.”* His work on the MHC led him to study the large-scale structure of the avian genome and informed his current interest in using comparative genomics to study the genetic basis of phenotypic innovation in birds. **His recent work** are on House Finch parasites, the evolution of flightless ratites, such as the Ostrich and Emu, and the role odor and genetics play in mate choice for Leach’s Storm Petrels.

Scott just completed his life time dream of a coast-to-coast bike ride this summer. Why we are also inspired by this project by our friend and former colleague? See page 7.

HOW DID THESE PEOPLE CHANGE OUR WORLD? Millie Russell & Jane Goodall

MILLIE BOWN RUSSELL

Born 1926 Seattle, Washington

Millie Russell is a legend in Seattle's Black Community and at UW because of her outstanding work as a community leader and educator. She was born in Seattle in 1926 to parents who were political activists. She was the first African American to enter Seattle University's Medical Tech Program and subsequently earned her B.S. in Medical Technology. Leader of Seattle University's NAACP Chapter, she and other leaders to the South on a bus with Thurgood Marshall, which she described as *"an education of how things really are"*.

She worked for the Puget Sound Blood Center for 26 years, before joining the UW in 1974 as the Director of the Pre-professional Program for Minority Students in Health Science and later Assistant to the Vice President, Office of Minority Affairs and Lecturer in Biology. Her experience and sucesses as a rare black woman in her field made her want to help others along. That was a major reason for moving to the UW after a long career at the Puget Sound Blood Center. **Millie continued her education**: M.S.(Kinesiology, 1978), then Ph.D. (Education,1988) from the UW at age 62.

Over all these years, she raised her family but she was also a mentor, role model and teacher to hundreds of UW students, thousands of middle-school and high school students from across Washington State. She shared her love of science, connected students to community networks, and encouraged a sense of belonging. **In 2004, the UW honored Millie** with its Outstanding Public Service Award for her devotion to education & equality. As a UW Biology Lecturer and Office of Minority Affairs Administrator, Millie was especially dedicated to students who were the first in their family to attend college. When she retired in 2007, UW created the Dr Millie Russell Endowed Scholarship in her honor to benefit low income, first generation students who are interested in health sciences. **Her community involvement** consisted of international & local programs including Seattle-Mombasa Sister City Association and Early Scholars Outreach. Under her leadership, **Blacks in Science sponsored the Dr. Ron McNair Overnight Camp-In** for 26 years at the Pacific Science Center to give underprivileged kids and kids of color an opportunity to explore the Science Center and learn science in camp workshops. No kid was ever turned away as the scholarship sponsored those who could not pay the fee.

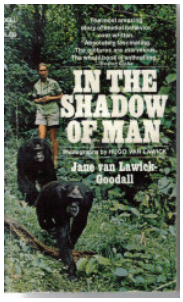
Honoring a lifetime of service, **in 2001 Seattle Mayor Schell, WA State Governor Locke & Congressional Rep McDermott named a "Dr. Millie Russell Day". You can help us honor Millie on her day, Oct 29th,** & learn more about her story, which includes engaging in the historical fight for voting and worker rights, here: https://www.youtube.com/watch?v=z5Cem4oH1rU

JANE MORRIS GOODALL DBE

(Dame Commander of the British Empire)
Born April 1934 London, England

For more than half a century, Jane Goodall has been a researcher, conservationist and champion for one of the world's most enigmatic primates, the chimpanzee... she discovered that chimpanzees make tools, eat and hunt for meat, and have similar social behavior to humans – she completely transformed our understanding of our closest relative in the animal kingdom. In doing so, she trailblazed a path for field study for other women primatologists.

More reading: author of 25 books. Four you should read: *In the Shadow of Man*, 1971 (her time in Gombe), *The Chimpanzees of Gombe*, 1986. (her research of chimpanzee society), *Visions of Caliban*, 1991 and *Reason for Hope*, 1999 (biography)



Established the Jane Goodall Institute 1977, https://www.janegoodall.org
She founded the Jane Goodall Institute to ensure that her vision and work around the world continues for generations to come. It supports the continuing research at Gombe and is a global leader in the effort to protect chimpanzees and their habitats as well as her pioneering work in community-centered conservation and development programs in Africa that improve the lives of people, animals and the environment.

In 2004 she was named Dr Goodall, a United Nations Messenger of Peace. Spreading hope through action, encouraging each of us to "use the gift of our life to make the world a better place".

Today, she travels an average of 300 days a year to visit school children and speak about the threats facing chimpanzees and other environmental crisises we face and her reasons for hope that human beings will ultimately solve the problems we have created. She emphazises the interconnectedness of all living things and the collective power of individual action, urging her audiences to recognize their personal responsibility and ability to effect change. "Every individual matters," "Every individual has a role to play." "Every individual makes a difference.

TRIBETA TUTORING ONLINE for AUTUMN: Monday - Thursday 3:30-6:30: starts Mon Oct 5

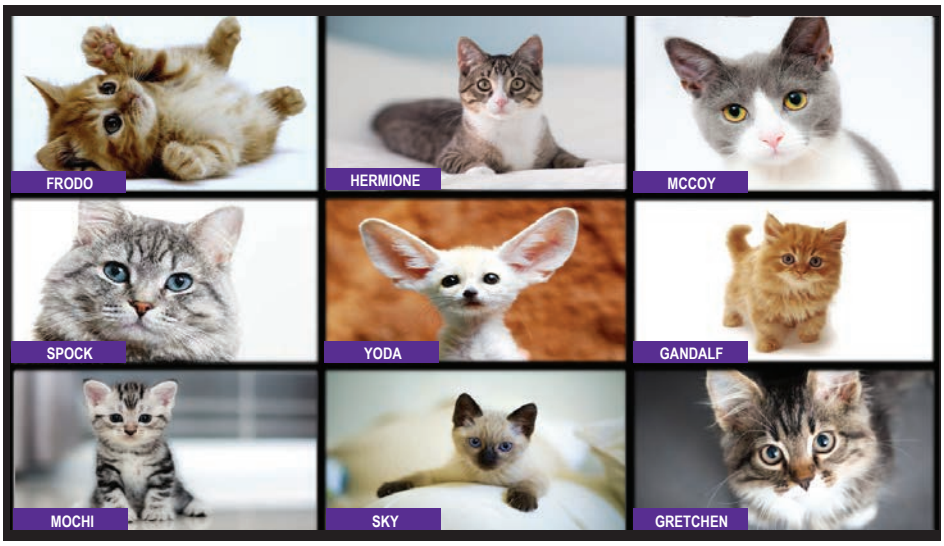
TriBeta Tutoring will be offered Fall Quarter online using Zoom.

Tutoring starts during the second week of the quarter on October 5 and ends the week before final exams. Tutors will be present in this Zoom meeting Mon-Thurs to answer your questions about BIOL 180/200/220: **https://washington.zoom.us/j/93541787414**

INSTRUCTIONS:

Click on the above Zoom link to join.

When you join, a tutor should be present to assist you. Tutors will have a tutor designation in their Zoom name. If multiple students are present in the meeting, then the tutor might move you into a "breakout" room so that they can assist you more individually or encourage you to work with other students in your class. If no tutors are present in the meeting, then it is likely all tutors have moved into breakout rooms to assist other students. Please wait a few minutes for a tutor to become available. This is a new system for tutoring, so thanks in advance for your patience as we get adjusted to this transition!



On Monday October 5, 2020 there will be human TriBeta Tutors available to help you with your questions at the zoom link that is listed above. Tutors are still getting up to speed on their new system and we have no photos of them. The cat photos are here to get you to read this article about free tutoring for Intro Biology.

We provide free tutoring for introductory biology (BIOL 180/200/220) students at the University of Washington. Our tutors are undergraduate students at the UW who have very successfully completed the introductory biology classes and are eager to help other students succeed too. Web site tutoring page: **https://sites.google.com/view/uwtribeta/tutoring?authuser=0**

TriBeta Biological Honor Society

2020-2021 Executive Board

President, AMANDA GARDINER amadamg@uw.edu
VP of Tutoring RD PANT..... rdrpant@gmail.com
SARAH KEE..... sk7716@uw.edu
Vice President, MONICA HU .....haorah5@uw.edu
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Vice President, BILL YOUNG ..... younbill@uw.edu
Adviser, BRIAN BUCHWITZ..... bjb@uw.edu

Full Membership is eligible to **any** student who has completed two Intro Biology courses (180/200) and one additional biology course with a GPA of 3.0 or higher.

WHAT IS TRIBETA?

Beta Beta Beta is a national honor society dedicated to improving the understanding and appreciation of biologial studies. It is a platform for students to earn recognition for their efforts and accomplishments while networking with other students and UW Biology staff with the same interests.
In short: a really great organization.

Be on the lookout for TriBeta virtual events for this quarter.

BSE

Greetings from
Biology Students For Equity

We are an RSO started about 4 years ago, but never more relevant. “Unprecedented” is overused, but you know now, more than ever, we need community, safe spaces for difficult conversations, and action to help make the department climate kinder and more productive for our BIPOC (black, indigenous, people of color) community members.

We seek to give undergraduates a voice in the biology department through our collaborations with the Diversity, Equity, and Inclusion committee. And our main goals are to discuss, call out, and address inequities in STEM. Visit our facebook page to see what activities are upcoming (https://www.facebook.com/biologystudentsforequity/)!

Message us at Biologystudentsforequity@gmail.com to find out about how to plug in to our community. We hope to work with you and for you. Come tell us your stories and share your dreams!

All Humans Are Welcome.

GOING THE DISTANCE FOR HIMSELF AND A LARGER PURPOSE Scott Edwards’ Coast-to-Coast Covid Bike Ride

As a professor and curator of ornithology at Harvard University, Scott Edwards usually spends summers immersed in conferences, museum collections, fieldwork, & laboratories.

But this year, when COVID-19 halted most scientific endeavors and closed campuses across the United States, Edwards decided to attempt his dream of cycling from the Atlantic to Pacific.

Scott Edwards stopping in the great state of Wyoming.

Two weeks before his departure, though, people nationwide took to the streets to protest the murder of George Floyd by a police officer, police brutality, and systemic racial injustice. On the same day as Floyd’s death, May 25, a viral video of an encounter in Central Park involving a black birdwatcher threatened by white woman further fanned the flames of outrage. The incident inspired a group of naturalists to start “Black Birders Week”, a social media campaign that elevates the voices of Black naturalists and takes on racism encountered outdoors and in the sciences.

When Edwards learned about Black Birders Week, he created a Twitter account to participate. Then on June 6, he ceremoniously dipped his wheel in the sea off Massachusetts and started pedaling. A few days in, Edwards fixed Black Lives Matter signs to his bike and began documenting the journey on Twitter.

You can check out his 77-day trip including a video when he reached his final destination on August 20. (https://twitter.com/ScottVEdwards1?lang=en) Viewing that last video will makes you wish he still taught here.

A GoFundMe account was set up by the Society of Systematic Biologists to support Black and African Americans, Latinx, native American/Pacific Islanders or economically disadvantaged students from the US to participate fully in evolutionary biology and biodiversity sciences. It raised over $57,000.

Scott says: *A bicycle trip is in some ways a good metaphor for a journey in science. You will run into hills, roadblocks and flat tires. Just don’t let it stop you. We need more diversity in science and we need more success stories. It’s a matter of hard work and creating your community. Don’t let anyone tell you that you’re not supposed to be doing this.*

POLLINATION IS THE DESTINATION: Our Plant Version of the Cosmopolitan Magazine

Unlike animals, plants do not have the luxury of picking themselves up to search for water, sunlight or mates. Instead they are anchored to the place they landed as a seed and forever more are at the whim of nature. Plants have evolved a multitude of cunning ways to deal with their limitations, but among their greatest feats is the creation of the flower. Flowers did not evolve to beautify the planet, but rather to entice mobile creatures to carry precious pollen from one flower to another of he same species. Like billboards along the biological highway, flowers promise a worthwhile detour to potential pollinators. Whether bat, bird or insect, each flower has evolved to best cater to their 'delivery men'.

COSMOS'
GET THE POLLINATOR OF YOUR DREAMS: Helpful Tips and Tricks

by Terry Huang

Do you close your eyes and dream about your pollenmate?

You try your hardest all season long to find a pollinator, but not one bats an eye at you? Then you agonize over all your desires of crosspollination and ripening to nearly the point of senescence? Don't worry you are not alone, this is something that we all go through. Being a flower can be tough, but you don't have to let it control your life.

During these dark winter times when you just want to pull your bud scales close and tight, it's really the perfect time to learn the art of attraction. By taking planned action your dreams will be closer to coming true; you are not destined to a lonely fate. Attracting your pollinator is all about marketing yourself. Perhaps you are just sending out the wrong signals – something we all do when we get desperate.

What is your message and what is your brand? Are you a generous soul or a sly schemer? Are you a free spirit or are you a devoted partner? These questions and more all matter, and figuring them out will help you send out the right signal to get the right pollinator. Here are seven tips to attract the best wingman to help you find your perfect mister and missus.

1. **TIMING IS EVERYTHING.** Are you an early riser or a late-night socialite? Though it may sound obvious, trying to attract someone when they are not even up is a terrible idea. If you're up during the day maybe try your luck with bees, flies, butterflies, or birds. If you're up at night bats, moths, and beetles just might be your thing.
2. **GET IN SHAPE.** Not all flowers are created equal especially when it comes to accommodating a pollinator. The way your flower is shaped will naturally determine who would be best at reaching your pollen. If your flower is a long thin tube, maybe go for a long tongued bee or moth instead of that chunky, clumsy bat. Comfort and accessibility is a trait everyone likes.
3. **SIGNATURE SCENT.** Floral elegance, avant-garde musk, or a clean slate: whatever your preference in fragrance there are pollinators who will find it irresistible. Knowing the preferences of your target audience well is key. Fresh and sweet? Sounds like a honeybee. Fetid and acquired? Perhaps a fly. Once you get the recipe right apply liberally and they will come.
4. **COLOR ME POLLINATED.** They say blue is calming and red is energizing, but whatever the case, all pollinators have their proclivities. If you are a fiery scarlet, birds and butterflies will flock to you, or if you are pristine white like snow on a moonlight night, you'll be a beacon to moths and bats. Pick your colors wisely because every hue has something to say.
5. **REWARD…OR NOT.** In this world there are givers and takers, and most of the time the lines are not that clear. Whether you are a nectarous sweetheart or a cunning seductress you can offer whatever reward you wish. Just remember, you've got to make an offer that is too good to refuse.
6. **QUALITY CONTROL.** To give your seeds the best start in life, keep yourself clear and ready for crosspollination. Station your style(s) well away from your stamens, and timing it so that your stigma matures before your anthers shed pollen is further insurance. If worse comes to worst self-pollination can help you in a pinch, but remember nothing good ever came from inbreeding.
7. **HAVING THE ONE.** Or maybe five. Pollination is one of those tricky things where you must trust that your pollen has found its way to a suitable mate. If you are detailed oriented then finding a pollinator that will solely service your species is great reassurance. If you are more laissez faire however, by hiring a retinue of pollinators one is bound to eventually deliver the goods to the right place. Do what feels right.

To get you on the right track take this short compatibility quiz to see who is your ideal pollinator. Remember what letters you get. Who knows, the results may just delight you.

1. What is your ideal fragrance?
- a. Acrid, but oh-so-au naturel!
- b. No scent. I am hypoallergenic.
- c. Sweet and fresh like a clear spring day.
- d. Rich and sumptuous like Chanel No.5.
- e. Musky and boozy.
- f. I can't pick one.

2. When are you the most productive?
- a. Anytime during the day, but more in the afternoon.
- b. More morning, but throughout the day really.
- c. Busy, busy from dawn until dusk.
- d. At dusk. Secretly under the cover of darkness.
- e. Late night. I really come alive after dark.
- f. Depends.

3. What's your type?
- a. Chubby and cute.
- b. Svelte like a swimmer.
- c. Nimble like an acrobat.
- d. Light like a dancer.
- e. Built. I lift, bro.
- f. I don't have a type.

4. When friends come over you offer:
- a. Nothing. I got out of bed and got dressed, isn't that good enough?
- b. Nectar. They can help themselves.
- c. Nectar and pollen. I like to cook meals for my friends.
- d. Some nectar. Just light refreshments.
- e. Lots of nectar. We love drinking!
- f. I don't invite friends.

5. What colors do you associate yourself with the most?
- a. Earth tones: burgundy, browns, and blacks.
- b. Hot colors: reds, oranges, and magenta.
- c. Pretty blues or warm yellows.
- d. Crisp whites.
- e. Muted tones: beige, mauve, sage, and creams.
- f. Whichever.

—Your ideal pollinator results on page 11

Can you guess the ideal pollinators for these flowers? Each have evolved traits to attract them.

Aristolochia grandflora

Aristolochia gigantea

Caesalpinia pulcherrima

Tagetes erecta

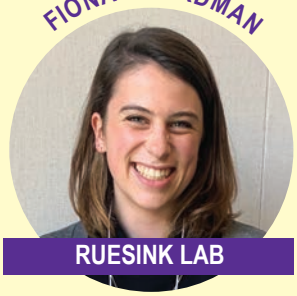
Datura metel

Agave parryi

Cobaea scandens

Zea mays (maize)

2020 NEW GRAD STUDENTS: And the Labs They are Going to



FIONA BOARDMAN

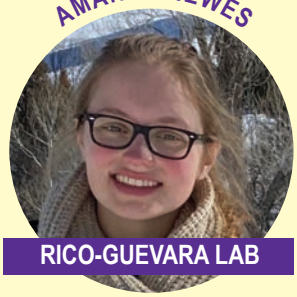
RUESINK LAB

DAVID CUBAN

RICO-GUEVARA LAB

YASMEEN ERRITOUNI

LEACHE´ LAB

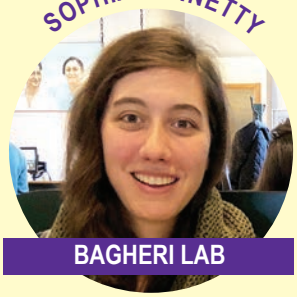


AMANDA HEWES

RICO-GUEVARA LAB

DONAVAN JACKSON

SANTANA LAB

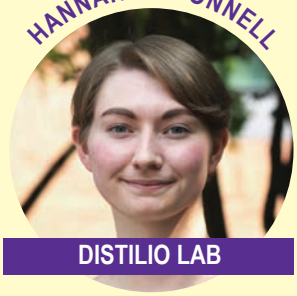


SOPHIA JANNETTY

BAGHERI LAB

JACK LITLE

CARRINGTON LAB



HANNAH MCCONNELL

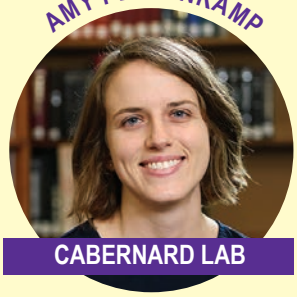
DISTILIO LAB

KINDALL MURIE

CARRINGTON LAB

CHRISTINE NOLAN

IMAZUMI LAB



AMY PLATENKAMP

CABERNARD LAB

MEGAN POWERS

SWALLA LAB

ALYSSA SARGENT

RICO-GUEVARA LAB

ELLIOTT SMITH

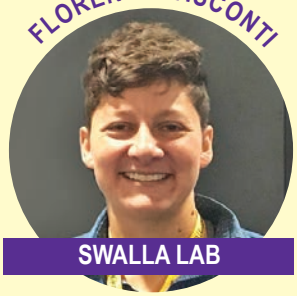
SIDOR LAB

JULIA SMITH

BUCKLEY LAB

JOB VELOSO

WARD LAB



FLORENCIA VISCONTI

SWALLA LAB

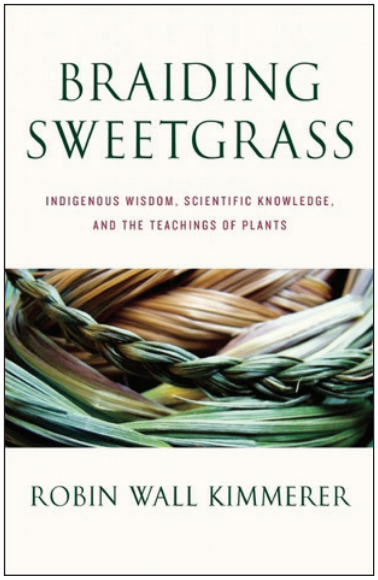
BIO BOOK CLUB: *Braiding Sweetgrass* by Robin Kimmerer

Get Ready for Bio Book Club! We will choose a fiction or non-fiction book each quarter with a scientific thread, but also examines social, cultural, and environmental topics. Please feel free to send book recommendations to **Sheryl Medrano** at *smedrano@uw.edu*.

This Autumn we will read: ***Braiding Sweetgrass* by Robin Kimmerer**

As a botanist, Robin Wall Kimmerer has been trained to ask questions of nature with the tools of science. As a member of the Citizen Potawatomi Nation, she embraces the notion that plants and animals are our oldest teachers. In Braiding Sweetgrass, Kimmerer brings these two lenses of knowledge together to take us on "a journey that is every bit as mythic as it is scientific, as sacred as it is historical, as clever as it is wise" (Elizabeth Gilbert).

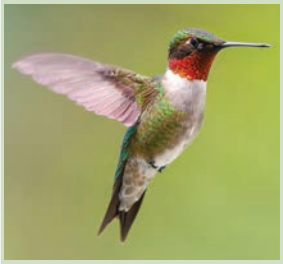
Drawing on her life as an indigenous scientist, and as a woman, Kimmerer shows how other living beings—asters and goldenrod, strawberries and squash, salamanders, algae, and sweetgrass—offer us gifts and lessons, even if we've forgotten how to hear their voices. In reflections that range from the creation of Turtle Island to the forces that threaten its flourishing today, she circles toward a central argument: that the awakening of ecological consciousness requires the acknowledgment and celebration of our reciprocal relationship with the rest of the living world. For only when we can hear the languages of other beings will we be capable of understanding the generosity of the earth, and learn to give our own gifts in return.



COSMOS': Key for your Ideal Pollinator

A's then your ideal pollinator is a **CARRION FLY**:
They love you because you stink of rot and death.
PLANTS THEY LOVE:
Aristolochia grandflora and *Aristolochia gigantea*

D's then your ideal pollinator is a **HAWK MOTH**:
They like the luxurious quality and style of your liaisons.
PLANTS THEY LOVE:
Datura metel



B's then your ideal pollinator is a **HUMMINGBIRD**:
They are captivated by your hot passionate colors and will fiercely protect your supply of nectar.
PLANTS THEY LOVE:
Caesalpinia pulcherrima

E's then your ideal pollinator is a **BAT**:
They are engrossed by your yeasty fragrance and torrents of thick nectar.
PLANTS THEY LOVE:
Cobaea scandens and Agave parryi

C's then your ideal pollinator is a **HONEY BEE**:
They are drawn to your wholesome generosity that they conjure into sticky golden amber.
PLANTS THEY LOVE:
Tagetes erecta

F's then your ideal pollinator is a **WIND**:
You have trust issues and would rather cut out the middleman.
PLANTS THEY LOVE:
Zea mays (maize) and Welsitschia mirabilis

And IF YOU HAVE A MIX OF LETTERS then you're a generalist: Really every and anybody will do!