AUTUMN QUARTER 2018 ISSUE 30

IMPORTANT DATES FOR AUTUMN QUARTER

Sept 26

First Day of Instruction

Oct 2	Last day to drop a class without a fee thru MyUW
Oct 3	Biology Apparel Day
Oct 3	All courses require entry codes to add
Oct 5	Last Day to apply to Biology major in Autumn
Oct 9	Last Day to drop a class without the use of the Annual Drop
Oct 16	Last Day to add a class through MyUW
Oct 31	Last Day to Apply for Grad Reg Priority GSP for Winter
Nov 7	Biology Apparel Day

Nov

Nov 12

Nov 13

Nov 2-Nov 18 Winter Reg Priority Period 1

Veterans Day Holiday

Last Day to use ANNUAL

DROP or convert to S/NS

v 19 - Jan 6 Winter Reg Period 2		
ov 22-23	Thanksgiving & Fri Holiday	
Nov 30	Mystery Flower contest ends	
Dec 5	Biology Apparel Day	
Dec 7	Last Day to Withdraw (from all Aut Qtr classes)	

Dec 10-14 **Final Examination week**

Dec 17-Jan 6 Holiday Break

Winter Quarter Starts Jan 7

CHAIR OF THE DEPT: Dr. Toby Bradshaw

Welcome (or welcome back) to UW Biology!



Dear Biology undergraduate students,

A few weeks ago we cut the ribbon on the new Life Sciences Building (LSB) – a \$171M, 5-year project to provide state-of-theart teaching and research facilities for Biology.

For me, the most inspirational aspect of the Life Sciences Building is that it is a monument to optimism about the future. The two major activities that will take place within this building - curiositydriven research into living systems and teaching students to think like biologists - are inherently long-term investments whose full benefits are not realized for years or even decades, yet whose impacts will be felt throughout the biosphere and civil society for centuries, or even millennia, to come.

Dr Toby Bradshaw

The long-term value of basic research is not an abstract concept here in the Department of Biology – our own Professor Emeritus Ben Hall's pioneering research on protein synthesis in yeast has resulted in vaccines that have saved millions of human lives over the past 30 years. And while we cannot predict what discoveries will be made in this building over the next generation, or which of our students will go on to change the world, based on our own experience we trust that the research and teaching that will happen in the Life Sciences Building have the potential to create the future that we all want for the planet that we share.

I hope that, in addition to the classes that you will take in LSB, you will enjoy the original art on the walls and elevators, the Evolutionary Grounds Café, the beautiful outdoor deck, the firstfloor lounge/study areas and student conference room, the greenhouse (scheduled to open this winter), and – most of all – the opportunity to participate in undergraduate research with Biology faculty, postdocs, and graduate students.

Welcome to the Life **Sciences** Building the **Future** of Biology!





A 90-foot-long wall features an original installation by Seattle artist Claude Zervas.

WHERE ARE THEY? The Life Sciences Building list you have been waiting for



BE SURE TO CHECK OUT THE ELEVATORS:

Wood from Douglas fir trees was donated by Leopold-Freeman Forests LLC and installed in the elevator core in such a way that the trunk of each tree was put back exactly as the tree stood in the forest. From top to bottom, the trees were reassembled. If the donor's name sounds familiar, it is because it is our own Dr Scott Freeman known for his teaching and many education contributions to the Department of Biology.

Another component of the elevators is the incorporation of bird songs at each floor. UW professor emeritus Sievert Rohwer worked with Mike Webster and Matt Young of Macaulay Library of Natural Sounds (part of the Cornell Lab of Ornithology) to identify bird species that tend to dwell from treetop to forest floor. The result: A different bird call greets the arrival of the elevator at each floor. B2: Swainson's Thrush, B1: Red-breasted Sapsucker, 1st Floor: varied thrush, 2nd Floor: Red-breasted Nuthatch, 3rd Floor: Western Tanager, 4th Floor: Townsend's Warbler and 5th Floor: Olive-sided Flycatcher.

KERRY NAISH and the NEW MARINE BIOLOGY MAJOR Launching Autumn 2018



Professor Kerry Naish, Director of Marine Biololgy photo by UW Environment

KERRY NAISH named inaugural director of Marine Biology

In recent years, faculty, staff, and students from across the College of the Environment have played a vital role in discussing, shaping, and ultimately creating a new Marine Biology major. This exciting new offering from UW Environment will launch during the autumn quarter of 2018.

"I'm impressed that the framers of this major could simultaneously create something that is stand-alone, and something that can

— and will — be used as a pathway to discover other majors, including Oceanography, Aquatic and Fishery Sciences, and perhaps even Biology and Psychology," Lisa Graumlich, dean of the College of the Environment, said. "With more students interested in marine sciences and studies turning their attention to UW, we all know we stand to gain."

Kerry Naish, an evolutionary geneticist and professor at the UW School of Aquatic and Fishery Sciences, has accepted the position of inaugural director of Marine Biology. Naish has been heavily involved in the development of the Marine Biology major, including co-developing a Marine Evolution course with faculty from marine sciences, collaborating with the first Marine Biology committee, and working across all three participating units — Oceanography, Aquatic and Fishery Sciences, and Friday Harbor Labs — to bring the major to fruition.

"She is an exemplary teacher and mentor and has been deeply involved in curricular work," Graumlich said. "Kerry leaps into Marine Biology fully committed to bringing a vibrant, experiential major to life, and to bringing faculty from across our college, campus, and university together to evolve and deepen this new major. I am simply thrilled that Kerry will lead this exciting effort."

This article was originally posted by the College of the Environment, and you can read the latest news from the College at environment.uw.edu/news.

Short-Spined Pisaste

MARINE BIOLOGY FREQUENTLY ASKED QUESTIONS

WHAT DOES MARINE BIOLOGY STUDY?

Marine biology involves the study of life processes of organisms inhabiting saltwater environments; from genetics and evolution to physiological traits and ecosystem functioning. The major is focused on the intersection of marine sciences taught in Oceanography and Aquatic & Fish ry Sciences, and examines the marine aspects of biodiversity, ecology and ecosystems and organismal processes, along with impacts from ocean change. All students complete an integrative field experience (research or field course at Friday Harbor Labs or similar site).

WHAT IS INVOLVED WITH A DOUBLE MAJOR IN BIOLOGY AND MARINE BIOLOGY?

Students can double major in Biology and Marine Biology, but adding a double major must be approved for you individually by advisers from both units (based on your academic plan to graduate). Please consider the following policies affecting double majors:

- You must complete the general education requirements for both the College of Arts & Sciences and the College of the Environment (individual courses can apply to both).
- Courses in general science and math (MATH 124, CHEM 142, etc.) can count for both majors without restriction.
- Up to an additional 25 credits used for your Biology major can apply to any requirement in the Marine Biology major (BIOL 311, BIOL 433, etc).

WHAT ABOUT THE MARINE BIOLOGY MINOR?

The minor is still here, and students from all majors are encouraged to make marine biology part of their studies! The new major program will expand course options for the minor as well.

WHERE DO I GO FOR MORE INFORMATION?

Visit marinebiology@uw.edu or contact the Marine Biology Academic Adviser Joe Kobayashi at marbiology@uw.edu



FOSTER'S BUERK CENTER FOR ENTREPRENEURSHIP Use your Biology experience!

There are a multitude of ways to expand your learning in Biology at the UW. These include volunteering, undergraduate research, internships, study abroad, and involvement in RSOs. But have you heard about some of the programs offered by the Foster School of Business? These programs are open to all students and thrive on bringing academically diverse populations of students together to solve current real world problems. A few are highlighted here but check out the Innovation Challenges! These challenges can be completed with skills you have already developed on the way to being a biologist. These challenges show that what you learn in Biology can be used in a multiplicity of ways.

2018 TEAM FORMATION NIGHTS FEATURE SPECIAL GUESTS: THE STARTUP, NANODROPPER

"None of us were trying to be entrepreneurs, (but) we saw something that was making us upset and we felt like we could solve it." Mackenzie Andrews believes in the process that helped make Nanodropper a reality. With its innovative technology the startup aims to disrupt the eyedropper market by reducing cost, waste, and side effects. Early on, the team realized they had significant backgrounds in biology, bioengineering, pharmacology, neurobiology, and mechanical engineering—but not business. That's where the workshops and Team Formation Nights offered by the Buerk Center for Entrepreneurship helped make a difference.

"Going to these types of events was really crucial to our success, because most of us didn't know what to expect going into competitions," said Andrews (Neurobiology and Bioengineering '19).



Buerk Center for

Entrepreneurship

They also can't wait to give back to students just like them. Andrews is currently in a graduate program in Bioengineering at the University of Washington, as is co-founder Jennifer Steger, who is a Pharmacology PhD candidate. Co-founder Allisa Song graduated back in 2015 from UW with a dual degree in Psychology Honors and Biology. Song is the only founding member to compete with—and create a company prior to—Nanodropper.

"[he Buerk Center] has tons of people that are willing to reach across disciplines and help people out in a way that they need it," said Andrews. "They were okay with hearing that we don't know as much as we needed, but we were willing to learn."

Nanodropper will be leading Team Formation Night on Tuesday, November 13 at 5:30 p.m. in Foege N130. They will discuss health care and life sciences innovation.

There are two Team Formation Nights leading up to the Nanodropper event. The first is on **Wednesday**, **October 17 at 5:30 p.m.** in the **CoMotion Fluke Hall MakerSpace**. This first night is particularly fun because it explores one of the spaces on campus where ideas truly take shape. Students will learn how to use the 3D printers, sewing machines, and other tools. Best of all, these spaces are among the many ways to use prototype funding available through the Buerk Center, should you choose to apply.

The next Team Formation Night focuses on building a sustainable future. Angel investor Eric Carlson will speak on **Thursday**, **November 1 at 5:30 p.m. in Gould Court** at the event, which is aimed at all students, environmentally-focused or not.

"There aren't many places where you can be completely open about your early concepts, but these events are just that," said Terri Butler, manager of the Health Innovation Challenge. "If you have any inclination at all toward new, innovative ideas, you won't want to miss these!"

The Team Formation Night series caps off with our most popular entry, the Panel of Past Participants. Join us **Wednesday, November 28 at 5:30 in HUB 145** and hear from entrepreneurs who were students just like you as recently as last year. Some had startups up and running by the end of the year, but even if they didn't, they had an experience they could add to their resume and build on for the rest of their life.

For more information on these opportunities, or anything else, please check the website or contact us at the Buerk Center or stop by our office in Dempsey Hall, Room 227.



WANT TO STUDY ABROAD BUT HOW DO YOU PAY FOR IT? Financial Planning Workshops!

Students interested in studying abroad, it is never too early to begin planning how to pay for expenses.

Our first Financial Planning workshop is on Thursday, October 11th from 2:30-4pm in the Ethnic Cultural Center Rm. 207. In these workshops, we will cover program fees, scholarships, how financial aid and study abroad work together, hidden fees, how to save money on airfare, and saving and budgeting strategies.

The full schedule for these workshops for fall quarter is below. Thurs, October 11th 2:30-4:00pm, ECC 207 Mon, October 22nd, 2:30pm-4:00pm, MGH 171 Thurs, November 15th, 2:30pm-4:00pm, SMZ 450

Also don't forget about **Study Abroad Week from Nov. 6-8th.** We have really wonderful events planned to encourage UW students to go global.



STUDY ABROAD MIXER – Tuesday, November 6, 5:30-7pm, ECC Unity Suite (Please RSVP)

"REMIXING YOUR REALITY" with Blake Brandes – Wednesday, November 7, 6-8pm – Intellectual House (Please RSVP)

STUDY ABROAD FAIR – Thursday, November 8, 10am-2pm, HUB Ballroom (no RSVP required)





2018-2019 Executive Board

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To keep up to date with TriBeta, visit our website and subscribe to our emails or follow us on Facebook!

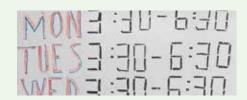
http://tribetauw.weebly.com/

TriBetaBiological Honor Society:



Patrick Ngo, Marlowe Keller, Lexus Pina, Jess Hall, Laura Strawbridge, Sonja France, Garrett Britt, and not present Devon Feaster.

"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.**



TUTORING

TriBeta offers free tutoring for the Intro Biology series (180/200/220) starting the third week of class. Tutors are available for drop-in tutoring in the Hitchcock 4th floor lounge Monday–Thursday 3:30 pm–6:30 pm







MONTHLY MEMBER MEETING

Our first Monthly Member Meeting will be Thursday, October 11, at 5:00 in the Life Sciences Building second floor conference room. Join us for Pizza and Cards Against Science!

UPCOMING EVENTS

Oct 11th - Monthly Member Meeting

Oct 31st –Quarterly Event: Pumpkin Carving

Nov 7th – Biology Apparel Day **T-shirt Sales**

Nov 8th - Monthly Member Meeting

November 15th – **Quarterly Seminar**

Dec 5th – Biology Apparel Day **T-shirt Sales**

Dec 6th - Study Night



HOW TO JOIN

Full Membership is eligible to **any** student who has completed two Intro Biology courses (180/200) and one additional biology course with a minimum 3.0 GPA or higher. Details on other levels of membership and a short application can be found on our website.



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

The secret to excelling in Biology 180, 200, and 220 is discussing course content with others and asking questions to make sure that you fully understand new concepts. This is where TriBeta can help! TriBeta Tutors are students who have taken the full 180-220 series, been successful, and enjoy teaching. They can help you with course material & concepts, study habits, and test preparation! The study lounge also provides FREE snacks during tutoring hours.



Take advantage of this opportunity by dropping by the Study Lounge on the 4th Floor in Hitchcock.

We are here to help you Monday – Thursday from 3:30-6:30 p.m., no appointment necessary.

You can work with other Intro Biology students, or receive individualized help from our tutors who are always eager to help you understand. The lounge is located right above the HCK 3rd floor entrance.

If you have any questions, or have completed the series and are interested in tutoring, please contact Jess Hall at *tribetatutoring@gmail.com*.

BIO BOOK CLUB: Being Mortal by Atul Gawande

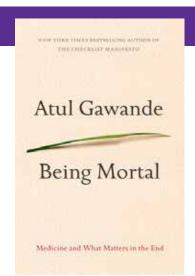
Get Ready for Bio Book Club! NOV 20 HCK 132 4:00pm

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: Being Mortal by Atul Gawande

Full of eye-opening research and riveting storytelling, *Being Mortal* asserts that medicine can comfort and enhance our experience even to the end, providing not only a good life but also a good end.

Future books: The Thing with Feathers by Noah Strycker and Saving Tarboo Creek: One Family's Quest to Heal the Land by Scott Freeman & Susan Leopold Freeman



UW FARM: The UW Farm is a 1.5 acre student-powered urban farm and educational facility



All are welcome to stop by and visit the Farm or volunteer during any of our volunteer hours but if you've never been to the UW Farm before, please begin by signing up to be a volunteer. This helps us track volunteers and insures you in case of injury.

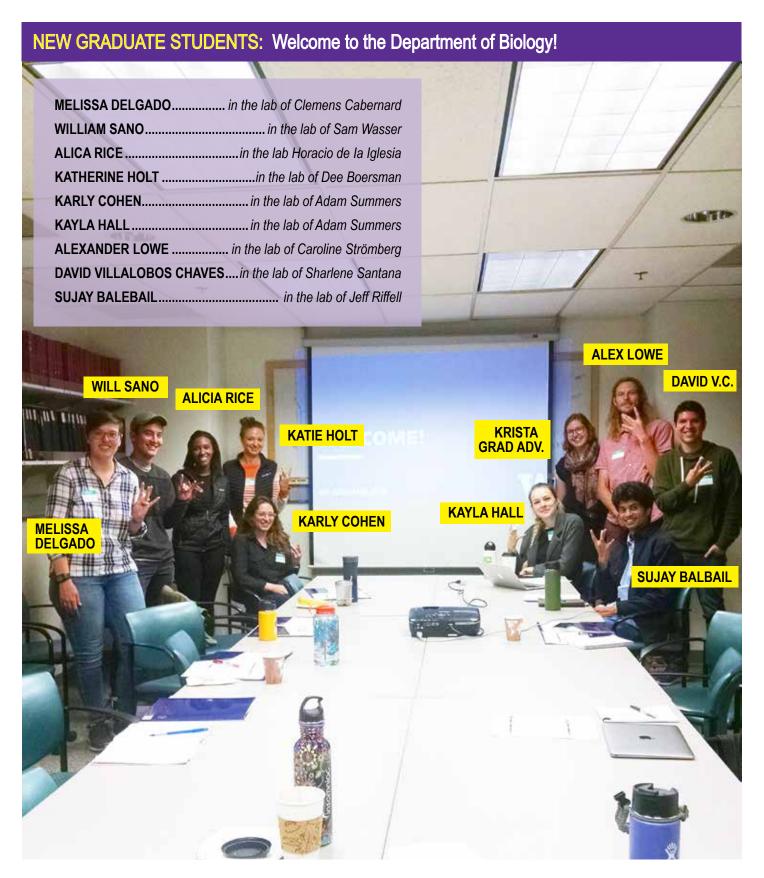
Our work day revolves around the seasons, planting and harvests for most of the year. Harvest Hands volunteer work involves primarily helping with the harvest, picking, washing, packing and some field work. Farm Team volunteer work involves weeding, transplanting, pruning, direct seeding and other tasks related to maintaining the farm's produce production and management of perennial plants.

Minimum volunteer shift is two hours.

For more information go to:

https://botanicgardens.uw.edu/center-for-urban-horticulture/gardens/uw-farm/volunteer/





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

HCK 302: Instructional Support Office / Study Area / TA Office Hours / 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 weekly schedule of TAs outside our office to see 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 week between Winter & Spring Qtrs.

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



GET CONNECTED IN BIOLOGY: Where to look today!

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/

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: https://botanicgardens.uw.edu/center-for-urban-horticulture/gardens/uw-farm/ and https://www.facebook.com/uwfarm

The UW Farm is now a registered student organization. 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.

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

Biology Apparel Day happens the first Wednesday of every month.

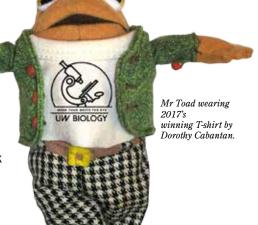
If you are wearing Biology Apparel on a first Wednesday of the month throughout the year, you can come to Hitchcock Room 318 (Advising), to receive a sweet treat AND an opportunity to submit your name for a chance at a grand prize.

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 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 20 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** with any questions!

Biology Apparel Wednesdays in Autumn Quarter are Oct 3, Nov 7 and Dec 5.

9



BIOLOGY ADVISORS: Undergraduate Advising in Hitchcock 318



Jason Patterson, Janet Germeraad, Resident Mr Bones, Julie Martinez, Owl, and Sheryl Medrano

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 staff of Room 318. Advisors are: Jason Patterson, Janet Germeraad & Sheryl Medrano. Staff: Julie Martinez.

Mystery Plant: Guess and win an 8 card set of flowering plants at the Medicinal Garden!

This is the Autumn Quarter mystery plant and it is blooming right now in the Medicinal Garden. 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 Autumn Quarter in the MH Garden will be after Nov 26. Cards displayed in HCK 302.

QUESTIONS:

- 1) Genus species for this plant in the mint family?
- 2) How tall will the plant usually grow to?



The Mystery flower hints: 1. Sunbirds and ants are attracted to the flowers 2. The leaves are cordate with serrated edges except the top pair. 3. In Trinidad the leaves are brewed as a tea for fever, coughs, womb prolapse and malaria.

Advising Available

Biology Department

Walk-in Advising

Janet Germeraad
Jason Patterson • Sheryl Medrano
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:

https://www.biology.washington.edu/programs/undergraduate

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 askoma@uw.edu jttp://www.washington.edu/omadcs

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

All students are welcome — not just Biology majors!

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

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 21 computers for general use, a Dawg-Print printer and one scanner.

Hiren Ajudia (Biology), Lyudmila Polevoy and Maura Kilpatrick will be staffing the Biology Study Area and programming.



Miss Crab is typing up her research work on one of the computers in the Biology Study Area. She thinks the three support staff are awesome.