“Life starts all over again when it gets crisp in the fall.”
—F. Scott Fitzgerald, The Great Gatsby

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Faculty Spotlight: Elizabeth Haswell

Elizabeth Haswell grew up in Pullman, a small college town in eastern Washington State, where her father was an English Composition professor at Washington State University. Her mother was a Spanish instructor and spent time early in her career working for the Peace Corps in Peru. Her father’s sabbaticals allowed the family to spend two years in Central or South America. They lived in Mexico for a year when she was 4 and Ecuador for a year when she was 12.

Even in high school, Dr. Haswell knew that she wanted to be a biologist. A particular memory that stands out for her is looking at cross-sections of leaves under a microscope and seeing the different cell layers, each with their own structures and functions. Her experience with a real life observation of concepts she’d just read about in a textbook was the start of her fascination with plant biology, an interest she returned to late in her research training.

Dr. Haswell was excited to leave her small town for college at the University of Washington in the big city of Seattle. While completing her undergrad degree she worked as a technician in Botany lab at UW. She moved on to the University of California in San
Course Spotlight: Bio 3041: Plant Biology & Genetic Engineering

This 4 credit lecture course provides an introduction to plant development, genetics, physiology and biochemistry with emphasis on processes that can be manipulated or better understood through genetic engineering. The course is divided into 3 sections. The first section of the course discusses basic plant biology, development and genetics. The second part of the course emphasizes gene structure, expression, and cloning as well as methods for introducing foreign DNA into plant cells and regenerating fertile plants in tissue culture. During the third part of the course we discuss a variety of examples of genetically engineered traits, including: herbicide resistance; fruit ripening; pathogen and/or insect resistance; the use of plants for production of industrial and pharmaceutical compounds. Friday discussion sections focus on critical reading of the primary literature related to the material covered in lecture. Prerequisites: Bio 2960 and Bio 2970.
Course Spotlight: Cancer Biology Courses

There are some new course offerings through University College that may be of interest to biology undergrads. U29 Bio 4715 Basic Cancer Biology is taught by Dr. Jason Weber, Co-Director of the Breast Cancer Program at Siteman Cancer Research Center. He runs a cancer research lab at Washington University consisting of eighteen researchers, graduate students, undergrads, postdocs, and junior faculty members. Their emphasis is on identifying novel new therapeutic targets for the treatment of breast cancer. Right now, they are participating in a large breast tumor genome sequencing project aimed at uncovering mutations in patients that drive their breast cancer with the hopes of catering future clinical treatments to each individual patient.

The Breast Cancer Program at Washington University includes dozens of faculty members in both the basic and clinical sciences programs with the collaborative goal of discovering new treatments for breast cancer. Learn more at http://hematology.im.wustl.edu/people/faculty/Weber/Weber_Res.html.

New Fall Course: Bio 4715: Basic Cancer Biology
Course Description: Over two-thirds of all people know someone who has cancer. This course provides students with a more extensive understanding of what cancer is and how it affects the human body. We will discuss the history of cancer research, the many different types of human cancers, and basic chemotherapeutics. The topics will be presented in a basic scientific nature with an emphasis on gaining a broad understanding of the subjects. Mondays 6:00-8:30

New Spring Course: Bio 4716: Advanced Cancer Biology
Course Description: Pre-requisite: Basic Cancer Biology. This advanced course aims at providing students with a more in-depth understanding of the molecular mechanisms of cancer. We will discuss tumor suppressors, oncogenes, signaling pathways, animal models in cancer, and novel targeted cancer therapies being developed by biotechnology and pharmaceutical companies. The topics will be presented in an advanced forum with an emphasis on active discussions of the subjects. Classes will consist of a lecture (2 hours) followed by a class discussion of a recent or classic science paper (30 minutes). Students will be graded on two exams (mid-term and final). Mondays 6:00-8:30

Research Opportunities

Professor Garland Allen is interested in identifying students who would like to do independent study on issues relating to societal aspects of biological research such as GMOs, stem cells, cloning, agribusiness, etc. Work could be adjusted for one, two or three credits, and for either fall or spring semester. He is available in Life Sciences 202D at 314-935-6808 or at allen@biology2.wustl.edu.
Career Center Fall Events
Locations: Danforth University Center, Suite 110 with satellite offices in Lopata Hall, Brauer Hall and Steinberg Hall
Main Office Hours in the DUC Monday-Friday: 8:30-5:00
Contact Us:
Phone: 314.935.5930
Fax: 314.935.5905
E-mail: careers@wustl.edu
Website: careercenter.wustl.edu

Upcoming Events
S.T.E.M. SLAM: Sept. 16
Looking for a science, technology, engineering, or math opportunity? Come hear employers ‘open mic’ pitch their internship and job opportunities at this fast-moving and fun event. Students can see participating employers and RSVP in CAREERlink.

Fall 2014 Internship & Job Career Fair: Sept. 17
The fair will take place 3-7pm in the Mallinckrodt Center. Students can research positions and sign up for employer-hosted information sessions by logging into CAREERlink.

Global & Public Health Internships & Jobs Work Group: Every other Tuesday, starting Sept. 9 through Oct. 7
Join this Work Group at any time. We’ll cover the basics of how to search for opportunities in the field, gain expert advice, and optimize the time you spend on your search. Throughout the weeks, we will connect with professionals in the industry, including WUSTL alumni, to draw on their expertise. RSVP each week in CAREERlink.

For more upcoming events, go to careers.wustl.edu/events.

Student Clubs: JCUBES & Synapse

The Journal Club for Undergraduates in Biological Engineering and Sciences (JCUBES) is a journal club for any and all undergraduates who are interested in the life sciences. We hold bi-weekly meetings on Thursday evenings during which an undergraduate gives a brief presentation on a piece of research. Throughout the presentation attendees can ask questions or make comments while enjoying free pizza generously provided by the Department of Biology and the BME Department. The presentations tend to center around a paper, either current or historical, which caught the presenter’s eye either because it is related to their own lab work or because it discusses a topic that interests them. In the past, we have had discussions on a variety of topics ranging from molecular biology, ecology, and medicine to computer science and chemical engineering, so the Journal Club is a great way to hear about different areas of research at Wash U and beyond.

In addition to undergraduate research talks, JCUBES has previously worked with faculty, graduate students, and the Career Center to provide additional resources to our undergraduate members. We also periodically host lab tours and other field trips in order get a behind-the-scenes look at innovative approaches to research.

Our events and meetings are open to the general undergraduate body, and all are welcome to attend. To get on our email list for updates on upcoming events, contact wustljcubes@gmail.com or check out our blog wustljcubes.wordpress.com.

Synapse is the premier neuroscience student organization at Washington University in St. Louis. We are dedicated to undergraduate students of all majors with an interest in neuroscience. Our mission is to provide students with opportunities to get involved with neuroscience-related activities in both the WashU and St. Louis communities. We organize research panels and opportunities to shadow physicians, and reach out to the St. Louis community through neuroscience-related volunteer activities. Some of the programs we offer include:

- Synapse Education: Teaching science classes about the nervous system to elementary and middle school students in St. Louis
- Synapse Shadowing: Shadow a neurosurgeon, neurologist, or psychiatrist at Barnes-Jewish or St. Louis Children’s Hospital
- Cerebral Palsy Sports Program: Play basketball, swim, dance, or martial arts with children with cerebral palsy
- Brain Bee: Help train high school students to compete in a national neuroscience tournament

One of our upcoming events is the MD Panel, in which a panel of physicians will speak about their medical experiences as well as answer any questions from the audience. This event will take place on Thursday, Oct. 16th, from 6:30 to 8:30 pm in DUC 276. Feel free to check out our new website: synapse.wustl.edu! You can also follow us on Facebook https://www.facebook.com/groups/WUSYNAPSE/ or on twitter @WU_Synapse.
Biology Department Calendar

Links to General Calendars and Regular Events:

Washington University Record Calendar: http://record.wustl.edu/calendar

Biology Department Seminars, Mondays, 4:00pm, Rebstock 322, check the website for topics/schedule: http://wubio.wustl.edu/events?field_event_tags_tid=19

Evolution, Ecology, & Population Biology Seminars, Thursdays, 4:00pm, Rebstock 322, check the website for topics/schedule: http://wubio.wustl.edu/events/eepb-student-seminar-schedule

History & Philosophy of Science Seminar Series: http://wubio.wustl.edu/events?field_event_tags_tid=20

Plant and Microbe Super Group Seminar Series, most Tuesdays at 9:00am, McDonnell 362: http://wubio.wustl.edu/events/pmb-supergroup-seminar-series

Donald Danforth Plant Science Center (DDPSC), Weekly Seminar Series—Wednesdays, 3:45pm, AT&T Auditorium, check the website for topics: http://www.danforthcenter.org/the_center/events/seminars_symposia/

Division of Biology and Biomedical Sciences (DBBS), all lectures and seminars: http://dbbs.wustl.edu/Pages/Events.aspx

October 2014

10th Parent and Family Weekend: October 10-12

11th Summer Undergraduate Research Fellows (SURF) will present the results of their summer research from 12:00–3:00 pm in Olin Library, October 11-12

17th FALL BREAK—NO CLASSES; “Life Sciences in the 20th Century: A symposium celebration in honor of Garland Allen’s retirement” 9:30am – 5:00pm; Rebstock 215. For more info contact Judy Musick jmusick@wustl.edu

24th WILD

27th Advising Period Begins, October 27th—November 7th

November 2014

11th Spring 2015 online registration for undergrads graduation class of 2015 or earlier

12th Spring 2015 online registration: undergraduates graduation class of 2016

13th Spring 2015 online registration for undergraduates graduation class of 2017

14th Spring 2015 online registration for undergraduates graduation class of 2018

26th Thanksgiving Break, Wednesday, November 26th-30th—NO CLASSES