



May 2011

Undergraduate Newsletter

Spring 2011 Important Dates

May

- 6 – Classes End and Last day to complete University Withdrawal from all classes
- 9 – 13 – Final exams week
- 13–14 – Commencement ceremonies

Science Quote of the Month:

"Science is simply common sense at its best."

— Thomas Huxley, a.k.a. "Darwin's Bulldog" (1825-1895).

To learn more about what faculty, staff, and students in the Department of Biology are up to, check out our website:
<http://www.biology.colostate.edu/>.

New this month:

CONGRATULATIONS GRADUATES!

Congratulations to all of the Biology and Zoology majors who will be receiving their diplomas this Spring and Summer! Best of luck in all that you do!



The Biology Undergraduate Newsletter will be taking a break for the summer. Check your Rams email account in September for the first issue of the fall semester. Have a fantastic summer!

Registration Reminders:

Registration Overrides- The Biology Academic Support Coordinators would like to remind students who are registering for courses that we cannot grant prerequisite overrides for courses offered by other departments. For example, if you plan to take the equivalent of CHEM 245 and 246 over the summer at a college other than CSU, RamWeb will not let you register for BC 351 for the fall. You will need to contact the Biochemistry Department and inquire about a prerequisite override.

Please remember that Academic Support Coordinators also cannot override a student into a section of a course that is full or grant you an override to take a course and its prerequisite in the same semester. Please direct these questions to the course instructors.

Summer Course Highlights:

Summer Field Mammalogy Course (BZ 380A3)- Register Now! The Department of Biology encourages students to register for this intensive field course that focuses on approaches and techniques used to study wild mammals. Students enrolled in this course will spend twelve days at the Shortgrass-Steppe Long- Term Ecological Research Site, in Nunn, CO. Students can register for BZ 380 through Ramweb and must also register for BZ 380A3.L01.

Looking For An Online, Upper Level, General Microbiology Course This Summer?- The Department of Microbiology, Immunology, and Pathology are offering a new, online general microbiology course that is equivalent to MIP 300. The course is 3 credits and runs from June 13 to August 5. To register for this course, visit the Continuing Education website at <http://learn.colostate.edu>.

New Course for Fall 2011- Cognitive Ecology, BZ 505- The Biology Department will be offering a new behavior course this fall, Cognitive Ecology. Undergraduates who are interested in registering for this course must contact course instructor, Dhruba Naug, for information.

New Minor in Biological Mathematics- The minor in Mathematical Biology appeals to students with interests in biology and mathematics and is available through the Department of Mathematics. This minor focuses on building skills in modeling a variety of biological processes. Mathematical modeling is an important field of biology because it is the main method by which biologist can predict the outcome of biological processes in the future or under (experimental) manipulation. Mathematical modeling is relevant to all aspects of biology, and courses in the minor address several biology fields including among others, ecology, evolution, cell biology and medicine.

New Minor in Global Environmental Sustainability- The School of Global Environmental Sustainability is now offering an interdisciplinary minor in Global Environmental Sustainability. Sustainability is a growing priority for many industries and this minor can help students prepare to enter the workforce. For more information on the education programs and courses offered by the School of Global Environmental Sustainability, visit <http://soges.colostate.edu> or contact Patrick Canavan at patrick.canavan@colostate.edu or by calling (970) 492-4070.

Don't forget from previous issues:

For more info on these stories, previous issues of the newsletter can be found online at:

<http://www.biology.colostate.edu/undergraduate-newsletter>

Academic Probation ~ The Department of Biology placed an advising hold on your account if you were placed on academic probation at the end of Fall 2010. This hold will only be lifted once you've met with an Academic Support Coordinator to discuss your options and plan for repairing your GPA (you must complete the self-assessment that we emailed to you). You can make a half-hour appointment online at <http://www.biology.colostate.edu/advising-scheduling> to meet with an Academic Support Coordinator.

Math Placement – Do you need to take/retake the Math Placement Exam or the Entry-Level Mathematics (ELM) Tutorial and Prerequisite Exam so that you can register to take math in fall? If so, don't forget that both exams are given on a "walk-in" basis (when classes are in session) in the PACe Testing Center (Weber 138). Bring a pencil or pen, and your RamCard (CSU ID card) with you. PACe Center hours of operation can be found online at http://www.math.colostate.edu/placement/MPE_schedule.shtml.

Composition Placement/Challenge Examination Dates – The next Composition Placement Exam is scheduled for Monday, June 13, 2011 at 4:00pm in Natural Resources 113. Students don't need to sign up for a test session, just show up with a pen and a photo ID. It's best to show up 10-15 minutes early--testing will begin promptly!!

Students can check their placement on RAMweb - under Records, select Composition Placement/Challenge Exam Results. If you have questions, contact Sue Russell at 491-1898. For more information visit <http://writing.colostate.edu/comp/placement.cfm>.

To aid you through the registration process, we have put together a table of **common registration error messages**, what they mean, and how to fix them. See below:

Error message	What it means	When you might get it	What to do
Class level	Only students in a certain class level (fr/so or jr/sr) can register for a given course.	Few (if any) Biology courses have this restriction but other departments' courses (e.g., Psychology) may have it.	If you NEED the course, contact the home department for access.
Additional Component Required	In addition to the lecture, you have to register for another component (lab or recitation) <i>at the same time</i> .	Many biology, chemistry, and physics courses are commonly associated with this error.	Check boxes for each component PRIOR to hitting "register." Click the CRN for the lecture to see specifically which sections of lab/recitation that must be selected.
Major	You do not have the right major for a class.	Some classes are restricted just to students in that major (Business/Art are examples); other classes allow non-majors to register after a certain date.	Click on the CRN for details about major restriction—if the class opens to non-majors at a certain date, it will tell you that info here.
Prerequisite	You fail to meet at least one prerequisite for the class.	BZ310 is an example (though most biology courses have prerequisites). It requires a semester of organic chemistry as a prerequisite.	You'll need to take the prerequisite courses prior to registering for the course in question. If you think this is an error, contact your advisor.
Dept./Instructor approval	Registration for a certain class is limited and only approved on a case-by-case basis.	An example is BZ505 Cognitive Ecology (being offered in Fall 2011) - it requires permission from the instructor for undergrads to enroll.	If you seek access to a class requiring dept./instructor approval, contact the instructor listed or the department.
Stop enrollment	A department has stopped enrollment so that no one can register for the class until a problem is resolved.	Hard to say—stop enrollments can happen in any department due to unforeseen changes.	Try registering for a different section of the same class, or contact the department to find out more information.

Automated Waitlist on RAMweb Don't forget - if you try to register for a class and it's full, sign up for the waitlist for that class directly on RAMweb. Check out the Waitlist FAQ's on Registration Ready for more information on the automated waitlist feature.

Faculty Corner

Each month we will be interviewing a professor in the Department of Biology so you can get to know the faculty on a more personal basis. This month, we sat down with Dr. Colleen Webb.

How long have you been at CSU and what has been your fondest memory since you started your career here? I started my career at CSU in 2003. The most exciting moment of my career so far would probably be getting my first National Science Foundation grant in 2006 to model trait-based predictors for ecosystem response to environmental change. Getting that grant made me totally confident that I could have a successful career at CSU.



What courses do you teach and what are your research interests? I teach half of BZ220 (Introduction to Evolution) with Mark Simmons, BZ348 (Theory of Population and Evolutionary Ecology), part of the new Bioinformatics course, and multiple graduate seminars.

I am broadly interested in the evolution of traits important in ecological interactions and in how such evolution shapes communities and ecosystems. For example, I investigate how selective processes on traits determine community and ecosystem function responses to environmental change. I am also interested in the evolution and ecology of highly virulent diseases (like plague, rabies and avian influenza) in the context of persistence. I work in a number of different systems and use a variety of analytical and simulation methods.

Do you include undergraduates in your research program, and will you be looking to add any undergraduates to your lab in the near future? Yes! I encourage undergraduate participation in my lab, although my undergraduate positions tend to differ from those in other labs. Because my lab is primarily theory and model based, much of our research involves mathematical and computer simulation models. Undergraduate students with a strong background and interest in math, statistics or computer modeling are encouraged to email me if they would like to work in my lab.

What is something that students do not know about you? A lot of students already know that I am married to Dr. von Fischer (featured in the January newsletter) and that we have 4 awesome children. I also really enjoy playing piano in my free time.

Do you have any advice for students in our department? I have two bits of advice for our students:

- 1) There are lots of great opportunities for biology students at CSU and around Fort Collins. Because there are many biology students, however, those opportunities do not seek students, so it is up to students to seek them. Be proactive and seek out/take advantage of the opportunities that are available to you!
- 2) Get enough sleep! With all the work and distractions as a college student, it is easy to fall into the trap of not getting enough sleep. Recent research has clearly shown a link between amount of sleep and job/school performance (http://www.nytimes.com/2011/04/17/magazine/mag-17Sleep-t.html?_r=1&emc=eta1), so make sure to get at least 8 hours per night!

Thanks Dr. Webb!

Student Successes



An Interview with Senior Biology Major, Valencia Peterson

Hometown: I moved around a lot because my mom was in the military but now we call Denver, CO home.

Interests: Travel, photography, and spend time with family. I am also involved in Alpha Kappa Alpha Sorority, Inc., the Black/African American Cultural Center and I was a Key Mentor. This year, I'm a program coordinator for a community of science students.

Future Goals: Attend medical school.

How did you decide to major in Biology at Colorado State? I decided to stay in state for college to be close to family and friends. Fort Collins isn't too far away from Denver so that was a major factor in coming to CSU. I knew in high school that I wanted to pursue a biology degree and originally, I was pre-dental. I came to CSU because of the excellent science program and facilities.

Tell us about some of the resources you've used on campus or in the Biology Department that have helped you to be successful. I definitely utilize the programs in the TiLT building. There are so many talented students on campus and many of them tutor at the TiLT building. I go there when I have questions on homework problems or need help with a concept from a class. I think that going to tutoring at TiLT can take you from being a "B" student to an "A" student because you get that extra help. It's peer to peer learning. It's also a great way to form study groups. I've met quite a few friends just going to tutoring. The lectures are so large but then when you get to TiLT, there might be a few students from your same lecture section. Then you can plan on studying together. I've also just gone to TiLT to do my homework and then, if I need help, I can just ask the tutor.

Going to my faculty members' office hours also has helped me a lot. When I study for exams, I keep a sheet of paper out and note questions that might come up. Then, the week before the exam, I go into office hours and get answers to those questions. In my experience, the faculty have always welcomed my questions and are willing to talk through the material with me.

What advice would you give someone coming out of high school into the biology major? Again, definitely go to your professors' office hours and don't be afraid to ask for help if you need it. There are so many people that are willing to help. I couldn't have completed this major on my own. There are always other students in your classes that are going through the same thing- so get to know them. Pair up and study! Become a support system for each other. Also know that the courses are challenging but they are worth it.

What challenges have you had as a biology major? The overall course load has been a challenge. Often, you are taking several science or math courses at once. Balancing the course load with your social life can also be difficult. I've had to always remember that academics come first. It can be hard to always live by that but, at the end of the day, academics have to come first. As a biology major, you may not be able to go out as much as your friends who major in other areas. A number of my friends from other majors really don't understand why I have to study so much. I just have to keep my goals in the forefront of my mind.

What has been your favorite biology class? My favorite course for my major has been Human Gross Anatomy with Mark Frasier. In this course, we were working with cadavers and it was such a great hands-on experience. I don't think that a lot of schools offer anything like this to undergraduates.

What has been your most difficult biology class? It's all pretty relative. I took calculus as a sophomore and I thought it was really difficult but, in retrospect, it was just really time consuming. I was taking a heavy course load for the first time and it really hit me how much work was ahead of me. I had to make sure that I was balancing that course with my other difficult science courses so it didn't consume all of my time.

What are your plans for the future? I would like to attend medical school at CU and then join the military. They offer programs to pay off medical school and since I grew up in a military family, the lifestyle is almost second nature to me. I would love to be based in another country, working as a military doctor.

Involvement Opportunities



Join the Biology Club! Interested in biology but not sure where your degree will take you? Let the Biology Club help you out! We are a student-run club focused on providing career ideas for students majoring in biological sciences, or who are just interested in learning some cool things about the world around us. We have monthly meetings with speakers from different biological fields, as well as field trips and community service opportunities. Please contact Claire at willis.c7@q.com with any questions. **We are also looking for some new officers**, so let her know if that sounds like something you'd be interested in! To stay up-to-date with the club's happenings, visit our website at <http://rydberg.biology.colostate.edu/bioclub/>. We hope to see you at our next meeting!

Join the Zoology Club! Zoology Club is for those passionate about animals of any major (not just Zoology)! We meet every other week and host guest speakers ranging from zookeepers to professors here at CSU. We also provide an average of 3 trips a semester. Last semester's trips included camping at an Emu Ranch, and behind the scenes tours at Cheyenne Mountain Zoo and the Downtown Aquarium in Denver! With summer internships on the way we will also be providing resources for those looking to get involved in research, wildlife, zoos, aquariums, etc! To be part of our mailing list, which will allow you updates on meetings and trips please contact us at csuzoologyclub@gmail.com. We look forward to seeing you!



Join the Gillette Entomology Club! The Gillette Entomology Club (GEC) is a great opportunity to learn more about some of the most common organisms in the world. There are over a million known species of insects and about sixty thousand arachnid species. The GEC is devoted to the challenge of teaching its members and the community. We hold monthly meetings that often feature guest speakers from throughout the profession, and we also organize outreach events. Our mission is partly accomplished through the bug zoo in the Plant Sciences building that houses many local and exotic species of arthropods. GEC is also getting its first bee hives up and running soon. If you have any interest in helping us care for our bugs, understanding more about them, or helping us spread knowledge of them to our community, please consider the GEC. To join the mailing list, please email Kyle Conrad at krcon@rams.colostate.edu, and also search "GEC" on Facebook to join our group.



Career Connections

Interested in research experience, an internship, or a job? If so, be sure to visit the Undergraduate Opportunities page on the Department of Biology's website. We are currently working to substantiate this webpage, so check back often for new updates and opportunities: <http://www.biology.colostate.edu/undergraduate-opportunities>.

- **Need help planning your future?** Looking for a new adventure? Look no further! **Judy Brobst**, the Career Center Liaison for the College of Natural Sciences can assist you with all aspects of your career development!

Drop in Career Counseling with Judy Brobst: Every other Friday starting February 18 in E-108 Anatomy/Zoology Building from 9 – 11:45 a.m. – No Appointment Necessary.

Services offered: Internships & volunteer experiences, resume development, choosing/changing majors, graduate school, on-line assessments, job search skills, etc. **To set up an appointment** contact Judy at judy.brobst@colostate.edu or 970-491-1190. General walk-in hours for the Career Center are Monday – Friday from 8:30 – 4:30 in 116 Lory Student Center.

- **Additional Career Center Events and Announcements:**

Attention Seniors! As graduation approaches you will be receiving emails from the Career Counselor (Judy Brobst) with graduation information from the College of Natural Sciences. All students at Colorado State University are requested to complete the graduation survey that the Career Center administers. You will be sent a link that will take you to the survey – it will take about 3-5 minutes to complete. If you are planning to walk at graduation, please complete the survey **BEFORE** you come to graduation. If not completed before, you will be asked to sit at a computer and complete on site. This is important information that we use and must report back to the Board of Governors for the University.



Are you interested in a health professions career? If so, you need to get connected to Health Professions Advising at CSU! Health Professions Advisors at CSU offer advising for students interested in careers in: Chiropractic, Dentistry, Medicine, Nursing, Pharmacy, Physician Assistant, Physical Therapy, Occupational Therapy, Optometry, Podiatry, and Veterinary Medicine. These advisors will work with you to prepare for a professional program and set you in the right direction! **To schedule an appointment** with a Health Professions Advisor call the Center for Advising and Student Achievement (CASA) at 970-491-7095. For more information on Health Professions Advising visit <http://hp.casa.colostate.edu/>.



Health Professions Happenings



If you are interested in health professions, we encourage you to sign up for the health professions electronic mailing list (at <http://hp.casa.colostate.edu/hpmailinglist.aspx>). Subscribing to this list enables you to receive email messages about Health Professions advising, workshops related to Health Professions and special events sponsored by the various Health Profession student organizations.

To schedule an appointment with a Health Professions Advisor call the Center for Advising and Student Achievement (CASA) at 970-491-7095. For more information on Health Professions Advising visit <http://hp.casa.colostate.edu/>.



Upcoming Opportunities for Health Professions Students:

Pets Forever-Are you looking for a great summer opportunity to build your resume or graduate school application while earning college credit? Pets Forever is a CSU non-profit community program designed to help low income elderly keep their pets by providing a variety of services. Requirements for volunteers include:

- 5 hours of volunteer work a week: work at your convenience Mandatory background check;
- 1 mandatory class hour a week.

About the class – the class will meet either Tuesday 9-10 or Wednesday 12-1 on the CSU campus. You need to be able to attend EITHER Tuesday or Wednesday each week. The rest of the hours, when you see clients, is based on your schedule and can be done in the late afternoons/evenings and weekends in addition to during the day. You can attend the class during the summer and get credit in the fall, so that you do not have to pay for an extra course credit this summer. For more information contact Dr. Kogan (lori.kogan@colostate.edu) or visit http://csuvth.colostate.edu/diagnostic_and_support/community_programs/pets_forever/

VIDA is a non-profit humanitarian organization based in Costa Rica and Nicaragua that helps provide free basic medical, dental, and veterinary assistance to needy communities. To complement the work during clinic days students have the opportunity to experience the culture through planned activities and excursions. A trip to Nicaragua for CSU students is planned for January 3-12. If you are interested visit VIDA's Website: vidavolunteertravel.org to review the specifics of each program and to read students' testimonials. You can also contact Jenny Dragan at jndragan@rams.colostate.edu or phone: (505) 720 9020.