April 2011
Undergraduate Newsletter

Spring 2011 Important Dates

April
• Fall 2011 Registration begins (see specific dates in table to the right)

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:
"The most exciting phrase to hear in science, the one that heralds the most discoveries, is not "Eureka!," but, "That's funny...""
— Isaac Asimov (1902-1992), biochemist and science fiction author

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:

CSU Summer 2011 Registration is well under way. Detailed information about the summer session(s) can be found online at http://www.summer.colostate.edu/index.cfm. Students currently enrolled in degree programs at CSU may register for Summer Session courses according to the registration procedures listed on RAMweb http://RAMweb.colostate.edu. BEFORE registering, all students should read —“Pertinent Registration Information” available at: http://www.summer.colostate.edu/regIndex.cfm?disp=pertInfo#Registration.

Make your appointments now to select Fall courses! Don’t wait until the day before you register to schedule an advising appointment. Schedule now at: http://www.biology.colostate.edu/advising-scheduling. Graduating seniors: if you need BZ311, it is NOT offered fall semesters. See an Academic Support Coordinator ASAP if this affects you!

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

Walk-In Advising Hours will be held this semester on Wednesdays from 10:00 a.m. – 12:00 p.m. and 1:00 p.m. – 3:00 p.m. Please note that this is not a time to expect a full-service advising appointment! Please come with the intention of limiting your time to 10 minutes so others do not have to wait too long.

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 come in to meet with an Academic Support Coordinator during the walk-in hours listed above, or make a half-hour appointment online at http://www.biology.colostate.edu/advising-scheduling.

As we mentioned in last month’s newsletter, Fall 2011 registration is just around the corner! 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:

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

Publication record in recent years, the lab's grant funding, and what the current graduate students in that lab have to say about personality vs. your potential advisor's personality (go on to perform research in graduate school, take into account the following)

Charismatic megafauna, such as bears, eagles, and wolves, than other species, conservation of protected species, as evidence in criminal investigations, and fighting bioterrorism.

Molecular phylogenetics uses genomic data (typically DNA sequences) to reconstruct evolutionary relationships among species. This field is playing an increasingly central role in biology, from inferring the diversification of multigene families, to tracking invasive species, conservation of protected species, as evidence in criminal investigations, and fighting bioterrorism.

There's three main points that I have observed repeatedly. First, if you are a pre-med or a pre-vet, have a backup plan. If you have less than a 3.5 GPA, have two backup plans. Also, do not think that just because you're a CSU undergraduate that your application vet school will be given special consideration. Second, be realistic about your job prospects when choosing your focus within biology. For example, I expect that there are at least 10 times more biology students nationwide who plan to work on conservation of charismatic megafauna, such as bears, eagles, and wolves, than there are jobs available for them to do so. Third, if you are planning to go on to perform research in graduate school, take into account the following four factors when selecting potential advisors: your personality vs. your potential advisor's personality (e.g., "hands on" vs. "hands off" approaches to overseeing students), the lab's publication record in recent years, the lab's grant funding, and what the current graduate students in that lab have to say about your potential advisor in private.

**Faculty Corner**

**How long have you been at CSU and what has been your fondest memory since you started your career?**

I began as an assistant professor here in 2001 after arriving from the east coast, having grown up in the Virginia suburbs of Washington, D.C. One of my fondest memories was teaching a graduate-level class in Ethiopia during my fall 2009 sabbatical there. After class a student said to me, "We are not used to being taught this way. It is a new way of thinking for us." She did not say "better" or "worse," just "different." To introduce someone to a new way of thinking is a tremendous accomplishment that I consider far more important than being someone’s favorite professor, for instance. Whether at Addis Ababa University or CSU, I try to not just teach the basic material, but also confront students with material that challenges them, sometimes confronting their sensitivities as well as their intellect. Perhaps the best examples of this are my lectures on human sexual strategies, human evolution, and flaws of "creation science" in BZ220 Introduction to Evolution.

**What courses do you teach and what are your research interests?**

At the undergraduate level I co-teach BZ220 Introduction to Evolution every fall with Dr. Webb and then I teach BZ325 Plant Systematics during even-year spring semesters. My research program consists of two interrelated components: phylogeny and taxonomy of the flowering-plant family Celastraceae (spindle-tree family), and conceptual aspects of molecular phylogenetics. Molecular phylogenetics uses genomic data (typically DNA sequences) to reconstruct evolutionary relationships among species. This field is playing an increasingly central role in biology, from inferring the diversification of multigene families, to tracking invasive species, conservation of protected species, as evidence in criminal investigations, and fighting bioterrorism.

**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 have two undergraduates currently working in my lab on different projects and generally have two or three undergrads working in my lab during any given year. Different professors can have very different approaches to including undergraduate researchers. My preferred approach is to only have a few such students, recruit them early (their freshman or sophomore year), train them well (most of their first semester in the lab is simply getting up to speed with relatively little data produced), and then continue to have them in the lab until they graduate, earning first- or co-authorship on one or more publications. I think a common mistake made by students interested in conducting research is waiting to look for opportunities during their senior year, and consequently have little time to learn and make a substantial contribution before they graduate. I will probably be looking for one new undergraduate researcher to join my lab this coming fall.

Also, I am the curator of the CSU Herbarium (http://herbarium.biology.colostate.edu/), which has an active internship program with ~2-5 interns every semester. Jennifer Ackerfield (jrowens@lamar.colostate) runs the program and interested students should contact her directly.

**Do you have any advice for students in our department?**

There's three main points that I have observed repeatedly. First, if you are a pre-med or a pre-vet, have a backup plan. If you have less than a 3.5 GPA, have two backup plans. Also, do not think that just because you're a CSU undergraduate that your application vet school will be given special consideration. Second, be realistic about your job prospects when choosing your focus within biology. For example, I expect that there are at least 10 times more biology students nationwide who plan to work on conservation of charismatic megafauna, such as bears, eagles, and wolves, than there are jobs available for them to do so. Third, if you are planning to go on to perform research in graduate school, take into account the following four factors when selecting potential advisors: your personality vs. your potential advisor's personality (e.g., "hands on" vs. "hands off" approaches to overseeing students), the lab's publication record in recent years, the lab's grant funding, and what the current graduate students in that lab have to say about your potential advisor in private.

**Thanks Dr. Simmons!**
An Interview with Senior Biology Major, Jonathan London.

Hometown: Detroit, MI and Colorado Springs, CO  
Interests: Classic Literature and Boxing  
Future Goals: Attend Medical or Physician Assistant School.

How did you decide to major in Biology at Colorado State? It was a little bit of a fluke the way everything happened. I attended Pikes Peak Community College and UC-Colorado Springs after taking three years off out of high school. Then I transferred to CSU. When I came back to school, one of my first classes was biology. I really fell in love with it. I took a lot of different classes as well but nothing really grabbed me like biology did. I've found that I like every aspect of biology- it's made it a really fun ride.

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 am a habitual office hours user! Every time I need something or have a question, I go to my professors’ office hours. If I can't make it to their office hours, I email them to set up another time to meet. Every one of my professors and TAs knows who I am because I practically live in their offices. It’s made my classroom experience more personal that way. I’ve found that I pay more attention in class and my instructors pay more attention to me. I think my instructors also appreciate my work more since I’ve taken the time to get to know them.

I've also met with the pre-health advisors a great deal. Every time I meet with one of them, they put me on the right track. I love Jim (Zakely)!

What advice would you give someone coming out of high school into the biology major? Learn Latin- everything seems to be in Latin. Really, though, understand that if you are really passionate about biology, it will be tough but you should stick with it. You’ll appreciate all that you’ve learned when you finish the program. The material will come at you fast, but just stick with it. On the other hand, make sure you’re really interested in biology because you are going to get a lot of it. Don’t just major in biology because you think you “should.”

What challenges have you had as a biology major? I found my fellow biology majors to be more competitive than I am used to. I had to adjust to everyone trying to get a better grade than the next student.

What has been your favorite biology class? Genetics! I took it with Dr. Wiseman during the summer. He’s up there among the top three teachers I’ve ever had in my entire life. Period. He took time to sit down and talk to every student after class. He’d take us to a coffee shop or somewhere to just chat with us. He made the class a very personal experience for each of us. I still email him sometimes and he emails me back! He’s an all-around good guy. He loves teaching and being around students- and you can tell. He’s not an easy professor, by any means- we had to memorize so much detailed information! But I really appreciate that he made us work hard.

What’s been your most difficult biology class? Physics- it was so challenging for me! I’m happy to be done with it!

What has been your experience as a transfer student? What advice would you give other transfer students? Transfering was fairly difficult for me actually. When I was working on my A.A., I was working 50 hours per week on the graveyard shifts and taking a full load in school. I didn’t have much time for anything outside of school and work. When I came here, I walk outside my door and there’s a party going on! Also, I’ve found the students in the biology department to be really competitive. There are so many pre-med and pre-vet students, and students that want to go onto graduate school- it took a little bit of getting used to.

What are your plans for the future? I’m shooting for medical school and PA school is a backup. If those don’t work out, I might get a Master’s in Biochemistry.

We would like to thank Jonathan and Pasha and wish them both the best of luck in the future!
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!

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, online 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.

• Job and Internship Roundup - Summer is almost here! If you are a student who has not landed a summer internship or job after graduation, this event is for you! The Job & Internship Roundup will be held on Wednesday April 6 in the Lory Student Center. Register on line and see which employers are attending at The Career Center homepage http://www.career.colostate.edu

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](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/](http://hp.casa.colostate.edu/).

Upcoming Opportunities for Health Professions Students:

➤ On April 9 from 12-2:00 PM the Pre PT, Pre OT and Pre Pharmacy Clubs will host the 13th Annual Easter Egg Hunt for Individuals with Disabilities. The event is on the Oval and people of all ages with a disability are welcome to attend, as are their family members.

➤ All of the HP clubs will be participating in CSUnity on April 16, and students should contact their specific club for information on signing up to participate.

➤ The Pre PT Club is organizing a team for Relay for Life which will be held on campus April 30 and May 1 at the Student Rec Center.

➤ Have you considered a career in the Army Medical Specialist Corps after graduation? Do you have a lot of student loans? Pursue a successful career in your chosen field while leading a comfortable and rewarding lifestyle with a career in the Army Medical Specialist Corps after graduation. The Army Health Care Team is one of the largest comprehensive systems of health care in the country. Please come to an informational presentation and meet CPT Marji A. Burniston, MOTR/L, 6th Medical Recruiting Battalion SP Corps Recruiter.
   
   When: Thursday, April 28, 2011  
   Time: 4:00 p.m. to 5:00 p.m.  
   Where: Occupational Therapy Building Room 103  
   Who is invited: Any student interested in the Army Medical Specialist Corps (social work, pre-OT, OT students)  
   Dinner will be provided so please RSVP at dmichna@cahs.colostate.edu or 970-491-6254

➤ Pets Forever is looking for motivated, mature volunteers to help those less fortunate and their companion animals in our community. Pets Forever volunteer expectations: Complete a background check (no charge); Attend weekly group meetings/class; Provide a minimum of 5 hours/week service (including group meeting); Come open minded, ready to learn, to experience new things and have fun! For more information, contact Dr. Lori Kogan at (970) 491-7984 or Lori.Kogan@colostate.edu [http://csuvets.colostate.edu/petsforever.html](http://csuvets.colostate.edu/petsforever.html)

➤ 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.

➤ Applying to a professional program for Fall 2012? The following health professions workshops are available to you and open to all students! It is not necessary to register ahead of time.
   
   • **Personal Statement Information Sessions (same program offered at 2 different times)**  
     Friday, April 8th - Noon-1:00 pm - Animal Sciences Room 205  
     OR  
     Thursday, April 14th – 5:00-6:00 pm – Tilt 221
   
   • **Medical School (Physician) Application Workshop**  
     Sunday, April 10th – 1:00-5:00 pm – Tilt 221