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ACADEMIC SUPPORT CENTER ON FACEBOOK!

See announcements about advising, policy changes, registration and more!

Like us on Facebook by searching “Colorado State Biology Academic Support Center”
Do you have a quick (5-10 minute) question about your fall schedule? Come to walk-ins during the entire first week of classes.

Special Walk-Ins August 22nd-26th
(First week of classes)
- Monday - Friday
- 9:00 am - 11:00 am
- 1:00 pm - 3:00 pm

Regular Walk-Ins (August 29-December 16)
- Tuesday, Wednesday & Thursday 1-3pm

Tuesday—Lilly Dethier
Wednesday—Kalyn Stroik
Thursday—Liz Hysen

Regular hours posted online
www.biology.colostate.edu

ATTENTION FALL 2016 GRADUATES:

- Please come by the Biology Department Office in A/Z E 106 before September 2nd to sign your graduation contract
- If you would like to speak with an advisor about your contract, please come during walk-in hours (above)
Presentation Schedule

- **SEPT 7**
  - Creating a Strong Resume
  - 4-5PM
  - Career Center LSC Rm 120

- **SEPT 12**
  - Excelling at the Career Fair
  - 4-5PM
  - Career Center LSC Rm 120

- **SEPT 15**
  - CPT/OPT Presentation
  - 12-1PM
  - Laurel Hall Common Room (S101)

- **OCT 3**
  - Job Searching
  - 4-5PM
  - Career Center LSC Rm 120

- **OCT 17**
  - Building Contacts & Networking
  - 4-5PM
  - Career Center LSC Rm 120

- **OCT 21**
  - International Student Career Day
  - 10-4PM
  - Lory Student Center

- **NOV 7**
  - OPT/HIB Presentation
  - 4-5:15PM
  - Laurel Hall Common Room (S101)

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**ALL-CAMPUS CAREER FAIR**

**SEPT. 20-21**

10:30 AM - 3:30 PM

LSC GRAND BALLROOM

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**RESUME RUSH**

September 14-16, & 19

10 a.m. - 3 p.m.

LSC 120
**ARE YOU A NEW BIOLOGY OR ZOOLOGY MAJOR?**

You are required to attend a Curriculum and Four-Year Plan Workshop (they begin the second week of classes). At a Curriculum Workshop, you will learn about the required courses, how to make a four-year plan, and which courses you should sign up for this spring. You will receive an email asking you to register online for one of these workshops.

**Following the Curriculum Workshop, you must schedule an advising appointment with an Academic Success Coordinator to receive your advising code.**

**BE SURE TO CHECK YOUR EMAIL REGULARLY!**

To make an appointment with an ASC, please visit:

http://www.biology.colostate.edu/undergraduates/advising/

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**ATTENTION STUDENTS ON ACADEMIC PROBATION:**

If you are on academic probation, you will need to get your advising code from an Academic Success Coordinator this fall semester!

The Biology department requires all Biology and Zoology majors who are on academic probation to work closely with an Academic Success Coordinator. Everyone on Probation I or Probation II will receive an email outlining departmental expectations.

- **If you are on Probation I,** you will need to view an online video and complete an academic self-assessment. You are then required to schedule an advising appointment to meet with an ASC and to get your advising code.

- **If you are on Probation II,** you’ll need to make an appointment this fall with an Academic Success Coordinator to discuss your status and get your advising code.

Probation I Students: To view the required video, please visit:

http://www.youtube.com/watch?v=opocBPKBezY
Rebecca Askin: REU (Research Experience for Undergraduates) - California Academy of Sciences

1. What were your responsibilities?
Me and my mentor came up with a project for the summer and I had chosen a mentor that specialized in echinoderms. I decided to look at a specific genus of heart urchins called metalia and do molecular and morphological work to create a phylogenetic tree to better understand the biodiversity of sea urchins. I was trained in a CCG lab to do DNA extraction and analysis to create a tree.

2. What did you enjoy most about the internship?
I really enjoyed the field trips. We went to Mount Tamalpais for a hiking field trip, we went tide pooling, and to a nice end of the summer dinner. I also really liked working in the lab.

3. Do you have any tips for students applying for internships?
My biggest advice for applying is to just do it and to be yourself. I honestly didn't think I would get it cause I was coming from a community college and I had zero experience. My mentor saw how enthusiastic I was to learn and to do this type of work and chose me.

4. How do you think this internship experience will prepare you for your career?
This internship actually helped solidify what I wanted to do as a career. I went into it knowing I wanted to do something in science and this program showed me that this is the type of career I want to strive for. I was able to meet amazing people, scientist and to network and make major connections.

5. What have you learned from your internship?
I had learned how to work in a lab doing DNA sequencing and molecular work. I had also learned all about systematic because I went in not really understanding it. Learning about evolution and the processes a lineage could take and how important it was for understanding the importance of biodiversity and evolutionary pathways was a large part of it as well. And most of all I learned that I want nothing else than to become a scientist.

America Elias: Pre-Health Internship at Anschutz Medical Campus

This summer I had the opportunity to do a second year of the Undergraduate Pre-Health Program internship through Kaiser Permanente and the Anschutz Medical Campus. This year I worked alongside my preceptor in the department of Urgent Care and Regional Acute Diagnostic and Referral (RADAR).

During the internship I had an extended project of doing chart audits. The chart audits were used to collect data on how Registered Nurses Triage a patient in urgent care. This data was also used to see if their documentation has gotten better. This project is a tool that is being used to improve patient care, communication, economics, and time.

I not only did a project that would help improve the department but I also was exposed to many different areas in the medical field. With this internship, the interns are given the opportunity to shadow as much as possible. I have been able to shadow physicians, physician assistants, surgeons, registered nurses, LPNs, MAs, nurse practitioners, pharmacists, community specialist and even staff on the administration side of health care. The departments I was able to work in have ranged from orthopedic surgery to internal medicine. I have shadowed in the trauma department, in family medicine, OB/GYN, allergy, urgent care, and RADAR.

This internship has been so amazing because I have been exposed to so many different opportunities. Not everyone is given the opportunity to shadow almost every day, nor the opportunity to broaden their network system. I have benefited from this program because it has opened up so many avenues of healthcare that I was not aware of. I have also solidified that I want to pursue a career in the medical field. I have experienced so much and have acknowledged what it takes to be an excellent physician.
Megan Sass: Surgery Intern at Massachusetts General Hospital

This summer I had the privilege of interning in the Department of Surgery Research Lab at Massachusetts General Hospital (MGH). I assisted the anesthesia team on large animal research projects being conducted at MGH and in addition learned how the research process works, from grant application to the institutional protocol review process (Institutional Animal Care and Use Committee - IACUC).

The hands on experience I gained was unique. Anesthesia is a complicated field that requires an understanding of what the patient vitals mean and how to react accordingly depending on what is happening during surgery. Besides understanding the basics of anesthesia, I practiced how to place vascular catheters as well as intubate on both pigs and non-human primates. My anatomy knowledge increased substantially along with my understanding of dosage and drug usage. Another part of my internship was understanding how an operating room functioned. I saw the importance of teamwork and communication between both the surgeons and the anesthesia team.

Because I wasn’t attached to a specific research project, every week was something new. On a daily basis, I was exposed to research projects in fields ranging from lung transplants to liver transplants and many more topics in between. I was able to talk with the primary investigators about their projects and the importance of that day’s surgery for their research. I always walked out of the OR having learned something new after every surgery.

My career goal is to become a veterinarian. This internship gave me a background in two different aspects of vet medicine: surgery and research. Having previously little experience in both, my time at MGH opened me up to more options for my future and motivated me to continue striving for my current goal.

Francis Commercon: Avian Field Technician in China

I spent this past summer in Man’E Village in Southwestern China as an avian field technician for a restoration ecology experiment and a personal project of my own design. I lived with a local ethnically Dai homestay family and spent considerable time learning the Dai language and culture, as well as raising a wild baby Collared Scops Owl.

Man’E is located in Xishuangbanna Prefecture of Yunnan Province. The lowland seasonal rainforests here boast the highest concentrations of biodiversity in China, but they are shrinking rapidly as smallholder farmers convert the land into monoculture plantations of cash crops, especially natural latex. Because of regular herbicide application, these plantations lack understory and thus support a very poor faunal community. Yet this land use occupies over a fifth of the prefecture.

In June, I completed baseline bird monitoring for Green Rubber, a World Agroforestry Center experiment that will determine how economic and environmental variables respond to various levels of experimental intercropping on smallholders’ rubber plots. Green Rubber is based on the concept that interplanting other economic crops in plantation understories will increase agricultural complexity and thereby improve income security, soil conditions, and, hopefully, faunal diversity. Because I live in the village, I also played a role in helping the researchers in charge of Green Rubber organize meetings and discuss the experimental contract with the participating farmers.

Over the month of June, I completed six survey replicates for each of the twenty treatment plots. I also established twenty control plots in non-intercropped plantations far from the treatment sites so that evaluation of the treatments could be made within any given year of the experiment. Learning hundreds of new bird songs and calls and establishing quality control plots proved major challenges—learning experiences in both field ornithology and study design. I am optimistic that perhaps my work this summer, combined with surveys after the experiment is planted, will prove the feasibility of using intercropping techniques to improve ecological conditions for birds within these agricultural landscapes across SE Asia!

My second project looked at villagers’ wildlife exploitation. Man’E lies near a portion of the Xishuangbanna Nature Reserve, which protects natural forest from conversion to rubber plantation. However, enforcing the reserve’s ban on hunting has proven more difficult. Young men still frequently go into the reserve to net bats and birds as a recreational activity, despite improved incomes and availability of domestic meat in town. I interviewed hunters to better understand their bird and bat catching practices, their motivations, and their attitudes on conservation. My study also dipped into fishing practices and a fascinating commercial trade in living butterflies and lightning bugs. I discovered that a recent increase in fines and jail time for hunting, combined with the rumor of hidden cameras in the forest may have halted bird and bat catching at least temporarily. However, the new regulations have not been yet survived a winter hunting season, and I worry about the long-term sustainability of this approach on its own. Punishments can be harsh, but without a change in hunters’ attitudes and personal values, the nets will go up again as soon as enforcement relaxes. I want to see a conservation education program by the local reserve patrol office and the local ecological research institute. I attempted to make my study useful for informing the design of such an outreach effort in the near future.

Megan Sass: Surgery Intern at Massachusetts General Hospital

Francis Commercon: Avian Field Technician in China
A Field Course in
Dolphin Behavior and Physiology

Want to travel to Roatan, Honduras, and learn about animal physiology and behavior?

Ring in the New Year with DCP’s Dr. Kathleen Dudzinski, along with Dr. Shane Kanatous of Colorado State University, for an 8-day field program to Roatan, Honduras.

When: December 31, 2016 - January 7, 2017

Course Description:
This field program offers an 8–day research experience to Roatan, Honduras, where students will study animal behavior, animal physiology and conservation methods at RIMS. Classroom lectures and discussions provide the framework to develop an understanding of the subject matter. Fieldwork allows students to develop the skills necessary to conduct preliminary research.

Details
Total Cost: $1,500 (USD), fee based on 12 students confirmed for field study.
- Includes: 7 night accommodations at Anthony’s Key Resort in Roatan, Honduras, 3 meals/day, lectures & instructions by Drs. Kathleen Dudzinski and Shane Kanatous, 1 dolphin swim/encounter, gratuities & additional activities.
- Does not include: Airfare

For more information email Dr. Kanatous at kanatous@colostate.edu

Additional Notes:
Participants must be at least 18 years old.
Must have swimming experience.
Must have valid Passport – more than 6 months from expiration.

For further information and application, visit www.dolphincommunicationproject.org (Education tab > College Course > Animal Behavior) and contact DCP at info@dcpmail.org
Undergraduate Research Position — Crab Lab

The Crab Lab has an opening for an undergraduate lab assistant (unpaid) to study the hormonal control of molting. You must have a 3.5 GPA and be able to commit at least 10 hrs/wk to research. Please contact Dr. Mykles: don.mykles@colostate.edu if you are interested.

Undergraduate Research Position - Biofuels

The Peers lab is looking for an undergraduate assistant to help with our research into cyanobacteria derived biofuels. The assistant will get experience with standard microbiological techniques, physiology measurements and with some molecular biology techniques.

Students do not need research lab experience to apply, but experience associated with chemistry and/or microbiology courses is a plus.

This is a volunteer position for one term with research credit available. The scheduling of experiments is flexible, but will require sampling on the weekends.

For more information or to submit an application (include a resume and a statement of research interests) please email Annah Holmberg (Riannah.Holmberg@colostate.edu). A minimum GPA of 3.5 is required.
Dude, mitosis starts in five minutes... I can't believe you're not condensed yet.

fig 1.
Jugular Vein

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