

Internships Welcome

Do you work in an organization that could serve as a learning environment for an undergraduate biology major?

You receive extra help plus the enthusiastic energy of a student eager to learn while the student learns practical application of the concepts they are learning in class.

A definite win-win!

Contact our Academic Support Team by calling the main office to learn more!

How to reach us:

970-491-7011



To donate:



Welcome from the Chair:



Mike Antolin photo-bombed by Dean Nerger.

Dear Friends,

We're having a busy year! Our students are back for another semester and our Ph.D. and M.S. students continue their great research projects. The biology faculty continue to gain more and more awards for their research at the frontiers of the life sciences, teach great courses (Dr. Chris Funk teaches a field course for

our students in Ecuador!) or take sabbatical leave in far-flung places (Dr. Dhruva Naug in Sydney, Australia). In other words, many things are as they have been and will continue to be! But some things are changing.

For one, the Department of Biology is now the home for a new Professional Science Masters degree in Zoo, Aquarium and Animal Shelter Management. In this program, students take courses that range from animal behavior and tourist management to finance (in the School of Business). They use this knowledge to work on independent internship projects at various zoos and other animal facilities in Colorado and nationwide. The goal is to develop their passion and innate love for animals. We teach them how to share that deep interest to educate the general public about animals, the ways that animals live, and the beauty of conservation of biodiversity.

But perhaps our biggest challenge this year is the design of the new Biology Building, which has been approved for funding by the University. Funding comes partly through a student facilities fee increase, partly from the budget, and partly from our generous donors. This state-of-the-art facility will help keep our programs at the forefront, be a place where our students can work with our talented faculty, stand with them shoulder-to-shoulder in research labs, meet in small seminar groups for discussions of the matters of the day, learn hands-on in six new teaching labs, or find a corner with a view of the Rockies to sip coffee

Continued page 2

For up-to-the-minute late-breaking news in the Department of Biology, visit:

<http://www.biology.colostate.edu/news/>

WELCOME FROM THE CHAIR CONTINUED

and quietly study between classes. We have not yet broken ground, but we are busily working on designs and floor layouts with CSNA Architects of Colorado Springs. Signs of new life have sprung up in the parking lots due east of Anatomy/Zoology and the Stock Pavilion, where the building will be built. During the holiday break between semesters an engineering consultant was seen drilling 40-foot deep holes for geological testing of the site. We are on our way, with expected completion in Fall 2017.

We ask for you to join us with your generous donations to complete our building . All of us on the design team keep in mind the four goals that guide us while we plan construction: *efficiency, functionality, flexibility, and collaboration*. And we know the reality of budgets and the necessity of living within our means. Your donations will help us meet these challenges, and help secure CSU's future as a leader in life sciences research, training, education and outreach, in Colorado, in the U.S. and worldwide. We are the State of the Life Sciences!

To donate toward the Biology Building Enhancement fund, please visit:

https://advancing.colostate.edu/BIOLOGY_BUILDING_ENHANCEMENT

As always, please let us know how you are doing, about your careers and your families, and please come visit us when you are in Fort Collins! Before you know it, we'll have a nice rooftop balcony for you to enjoy the views of Fort Collins and the Rocky Mountains!

STEVE STACK TOMATO RESEARCH HONORED

Prof. Steve Stack and his research group received the prestigious 2014 US Department of Agriculture (USDA) Secretary's Honor Award for Increasing Global Food Supply.

The winners were formally recognized at a ceremony in Washington, D.C. on Thursday, Nov. 6, 2014. The Secretary's Honor Awards are the most prestigious awards presented by the USDA recognizing noteworthy accomplishments that significantly contribute to the advancement of the USDA's strategic goals, mission objectives, and overall management excellence.

Dr. Stack's research group is part of the **Tomato Genomics and Fruit Biology Group** and they were recognized "*for tomato genome sequencing and its pioneering use for biological insights applicable toward fruit ripening, quality, shelf-life, and associated food security in tomato and other crops.*"

Please join us in congratulating Dr. Stack and his dedicated team of researchers!



The Stack research team (L to R): Lindsay Shearer, Dr. Lorinda Anderson, Suzanne Royer and Dr. Steve Stack.

NEW BIOLOGY HOME

The design of the new Biology Building is coming into focus. We're building a signature destination, at five stories and ~132,000 square feet, with a current budget of \$81M.

The building design includes state-of-the-art laboratories that will increase our capacity for cutting-edge research in critical areas like global ecological change, infectious diseases, conservation biology, molecular evolution, and plant biotechnology, to name just a few. And, because the majority of funding will be from student facilities fees, the building is meant to serve as home base for students as well.

We are providing a space that promotes connections that will serve students for the rest of their careers, and that enables students to discover their passions. In science, students learn by doing science, and an elemental goal of the new facility is to increase opportunities for students to gain hands-on work experiences.

We see the building as a workshop and home for our student apprentices, where they can forge a future in the life sciences where our challenges are met.

Features of the building include:

- LEED Gold certified design for energy efficiency, with plenty of glass for natural light
- Research labs for emerging technologies in the life sciences
- An Academic Support Center for student consultation and planning
- Many collaborative study spaces for informal learning
- Six new pedagogically modern teaching labs with a focus on specialized courses for juniors and seniors
- Computer laboratories for expanding capacity for computational biology and the bioinformatics that supports modern genome science
- Enriched opportunities for undergraduate research

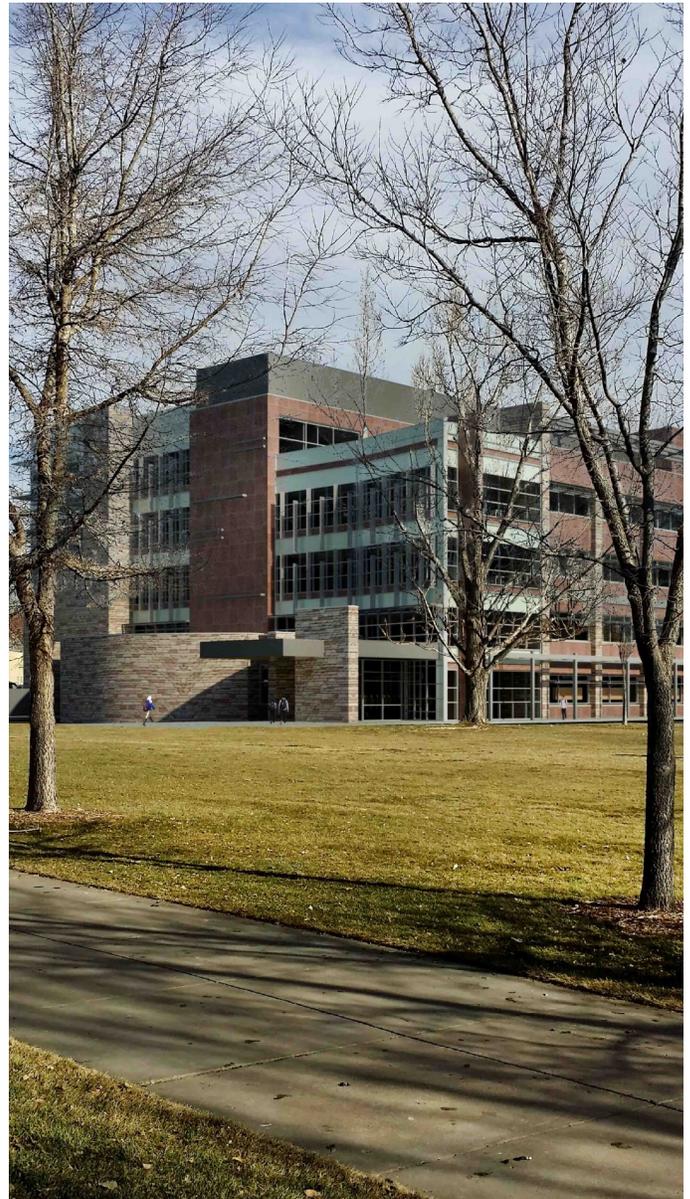
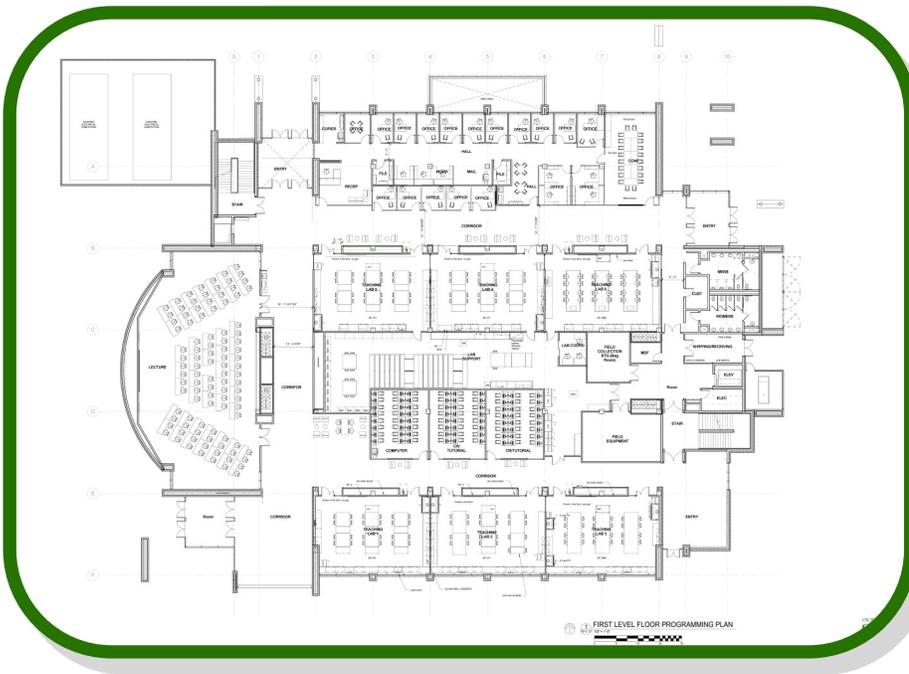


Photo of the new building superimposed upon the view from the current Anatomy/Zoology Building to show the new building in its natural habitat.

To donate toward the Biology Building Enhancement fund, please visit:
https://advancing.colostate.edu/BIOLOGY_BUILDING_ENHANCEMENT

NEW BIOLOGY HOME CONTINUED



First-floor layout that includes the administrative offices; six teaching labs; three computer labs; a large lecture hall; and plenty of soft space for studying, collaborating and learning.

So, here is a “Buzz-feed” of five surprising things about design of modern science teaching and research facilities:

- “Soft teaching” and interaction spaces are critical. These are places for informal interactions that spur communication and collaboration. The current recommendation is for up to 15% of all assignable space. Our new building is more than just red rocks, mortar, steel and glass; it’s a home for creativity and innovation.
- Glass walls can increase productivity, especially inside the building. This is the idea of “science on display” and visible busy-ness, which, rather than being distracting, stimulates productivity. This may not be so surprising when one thinks of bringing natural light into the deepest interior of a building.
- Modern science laboratories have few walls. Instead, there are flexible benches on wheels that can “plug and play” at various heights and configurations in open laboratories that span about a quarter of each floor. Sharing of core facilities and equipment among compatible research groups is not only more efficient; sharing also leads to more collaboration. The idea of the lone scientist working toward discoveries in isolation is a myth of the past. To meet our current challenges we must engage groups of researchers who know how to collaborate and to get the best ideas to rise to the top.
- Colors, artwork and other design elements help define a building and the mission of the people who live and work in it. Our eyes make us happy, even if we don’t realize it!
- The HVAC (heating, ventilation, air conditioning) system is one of the hardest parts of a building to design, easiest to get wrong, and one of the main reasons these building are so expensive to build. HVAC design makes it clear that a building is also a machine.

As you might imagine, we’ve been on a steep learning curve as we work with architects from CSU and from the CSNA firm. How modern science buildings are designed has changed since the early 70’s when our current home in A/Z was constructed.

We identified core principles in design – **flexibility, functionality, efficiency, collaboration** – and have been surprised by how the design meets the goals. We’ve truly come to appreciate the artistry of our architectural design team as they put our principles into action.

HEART RESEARCH: FOCUSED ON GENETICS



Dr. Deborah Garrity

As an up-and-coming researcher, Dr. Debbie Garrity's work will impact cardiac development research for years to come. As with many scientists, the interest was sparked early on.

In her high school biology class, she became interested in genetics. She explains, "The puzzle intrigued me: How could a gene, DNA, actually influence how an organism looked?" She wanted to major in genetics in college, but at the time there were not a lot of options. Her choice was to attend CSU and double major in biology and biochemistry.

It was in an honors section of LIFE 102 where she was inspired. Murray Nabors encouraged students interested in research careers to apply to work as an undergraduate researcher to firsthand learn how science is done. She jumped at the opportunity and spent four years in his lab, plus another year as a research associate to work on the Tissue Culture for Crops Project.

As an undergrad attending class, Developmental Biology from Steve Stack was also inspiring. She decided to pursue a Ph.D. at Cornell University that focused on genetics and developmental biology. That program required all grad students to present a seminar on their work every year where all attended. She said, "I learned a lot about other fields of study and got a lot of practice presenting my own work."

She continued as a postdoctoral fellow for five years at Massachusetts General Hospital/Harvard Medical School, then returned to CSU as an assistant professor in 2003.

Her research is focused on studying early heart function in the zebrafish. In this species, the embryos are transparent so you are able to see the heart beating. Plus, it is a vertebrate and the genome sequence is known. Her group is looking for genes that explain the earliest functions in the heart to create a fundamental understanding of how the cardiac organ is built. This research will help us understand the genetic basis for congenital heart defects.

But the intricacies of heart development is not the only thing that captivates Prof. Garrity. Her interests extend to culture, history, art, music, and exploring areas beyond Colorado. As an undergraduate, she saved her work-study money to fund her junior year in Germany at the University of Regensburg. She said, "It was one of the best years of my life. Not just about studying science abroad, it was about traveling in Germany, the culture, the exploration."

As a past member of the Larimer Chorale, she added her voice to local concerts; she also studies organ and creates artwork through paints and fabrics. She adds, "I still love puzzles. Exploring different activities gives me a chance to be well rounded and a lifelong learner."



Dr. Garrity in the fish lab.

PROFESSIONAL SCIENCES MASTERS PROGRAM: SUCCESS STORY

We're pleased to announce that the College of Natural Science's Professional Science Master's degree in Zoo, Aquarium, and Animal Shelter Management is now fully housed in the Department of Biology. You'll be hearing more about this exciting new program in future issues.

The two-year program equips students who already have a science background with the business and managerial skills they need to be leaders in the fields of zoo, aquarium and animal shelter management. We want to empower our graduates to fill industry needs, serve organizations all over the country and the



Kate Gillis, summer PSM intern at the Pueblo Zoo.

world, and lead professional lives of fulfillment and contribution.

This is a project-based learning experience; a strong component of the curriculum requires our PSM students to design and complete an internship for credit. The internship normally takes place the summer between the first and second year and can also carry over into the academic year.



Chalkboard caterpillar for kid-friendly fun.

Through a partnership with the Pueblo Zoo, <http://www.pueblozoo.org/>, Kate Gillis, a student primarily interested in zoo education, used her internship to design easy, affordable additions to enhance a guest's experience.

Changes included a chalkboard caterpillar that children can write or draw on, a watering station in the ranch garden, a scavenger hunt that included fun facts about ranch animals, a 'make your own spider web' station, a recycled materials birdfeeder-making station, and a place to put together a farm puzzle inside the old blacksmith shop.

The education department and zoo staff are very happy about the progress that Kate made in the three short months she was there. They say, "She magnificently represented her master's program and we cannot wait for next summer when we hope to have at least one more intern joining us again!"

If you are interested in creating an internship in your zoo, aquarium or animal shelter, or if your student is interested in pursuing this program, please contact our office. Contact details are on page one.



Guests playing inside the cabin.

SCHOLARSHIP LUNCHEON

We are so proud of our students and grateful for our alumni who give back. For 2014-15, collectively, our scholarship donors awarded over \$30,000 to support our students! Every year the College of Natural Sciences sponsors a lunch to thank our alumni for their donations and willingness to help further educational goals. Here are a few recipients together with their scholarship sponsors at the College of Natural Sciences annual Scholarship Luncheon.



Luke Tembrock with Tom and Vernetta Jirsa and Department Chair Mike Antolin.



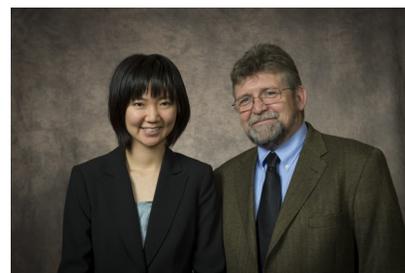
Zane Moore with Marilyn and Ron Tuttle and Department Chair Mike Antolin.



Karen Holcomb received the R. Lee and Rebecca Seward Scholarship from the College of Natural Sciences.



Adrienne Prueitt received the Robert R. Cooper Scholarship.



Jiameng Wang received research and travel funds from the Stavros Family Fund.

DEPT. SCHOLARSHIP RECIPIENTS FOR 2014-2015

Bruno Klinger Memorial Scholarship : Zane Moore

Dr. Arne K. Peitersen Memorial Scholarship: Kathryn Cleary

Edward & Phyllis Reed Fellowship: Sarah Fitzpatrick

Harold David Harrington Graduate Fellowship: Luke Tembrock

Robert R. Cooper Scholarship: Adrienne Prueitt

Sharon E. and Davie E. Kabes Scholarship: Ava Marie Hoffman

Stavros Family Fund: Ava Hoffman and Jiameng Wang

Marilyn and Ron Tuttle Undergraduate Research Scholarship: Zane Moore

If you are curious about leaving a similar legacy to assist students in their education, please contact us!

GRAD STUDENT NATALIE PITTS DIVES IN

Talking with Natalie Pitts, you would never imagine that this bright, articulate scientist would jump out of a perfectly good airplane. Yet, she is a member of a group of 63 women who hold the world record for women's vertical formation skydiving, and in a different event, her team placed second in four-person vertical formation skydiving at the national competition this past September. Yes, she jumps, she competes, and she dives headfirst.

"I have a big passion for skydiving and will continue to compete as long as I can, but it is secondary to my pursuit of a career in science," she says. Competing headfirst is also her approach to scientific discovery and her career as a scientist.



A Colorado native, Natalie became interested in science in 4th grade when she entered a science fair, won, advanced to state finals, won there, and then advanced to national finals, where she placed third. She took advanced science classes all through middle school and high school. When it was time to choose a college, she knew if she planned to compete later, it was important to have research experience right off the bat.

She began studying human physiology at CU in the lab of Prof. Doug Searls. Working on a weight-loss study in that lab for two years, her big takeaway was that it's frustrating to run experiments on humans because it's so difficult to control for outside variables (i.e. free will). A semester abroad in Australia during her junior year was a more enjoyable experience. She researched the neurophysiology of visual systems, how the brain processes visual stimuli and the animals' response to that stimulus.

After graduation, saddled with student debt as so many are, she worked a few years as a chemical technician for an oil company. She knew debt could hold her back, and that was not acceptable for a competitor. Although the income was satisfying, she knew she wanted more schooling, and she realized that the nature of industrial research meant that she would never have a chance to do a lot of problem-solving or innovative thinking at the level of her position. She knew she wanted to study neuroscience, but was still not clear of her specialty.

That's when she discovered Colorado State and was accepted into a multidisciplinary course of study through MCIN (Molecular, Cellular and Integrative Neuroscience). She says, "Since I was not sure of what area of neuroscience I wanted to study, this program was appealing because it allowed me to rotate (a kind of short-term internship) in three labs." The program has faculty in many diverse departments including biology, biochemistry, mathematics, computer science, music, pathology, and others.

Her first rotation was in the Don Mykles lab working on neuro-muscular regeneration in decapod crustaceans, and she published a paper on her work there. After a rotation in biochemistry and biomedical sciences, and publishing another paper, she chose the Mykles lab to complete her research. She plans to graduate with a Ph.D. in Summer 2015.

"I am then planning to pursue a career in pharmaceutical or medical device development in private industry." She continues, "I would love to stay in Colorado – there are lots of developing bioscience and biotech companies here on the Front Range."

Want more on grad student research?: <http://www.biology.colostate.edu/graduates/graduate-students/>

ZANE MOORE: REDWOODS GROW ON HIM



Zane Moore in the redwood forest.

It's hard to contain your excitement when undergraduate botany major Zane Moore starts talking about his passion, redwood trees. When he was a junior in high school he read *The Wild Trees: A Story of Passion and Daring* by Richard Preston, and since then, Zane has been on the hunt for those beautiful giants.

In that book he learned about record-size trees, but the locations are completely secret to preserve them from intruders or vandals. Being the explorer he is, he thought "I wonder if I can find them..." So he set out to find Hyperion, the tallest tree in the world.

"It took me 7 days of hiking over 34 miles to find it," he exclaims with a grin, "but I did it!" That was a pivotal moment for Zane because the original discoverer of that tree, Michael Taylor, and Dr. Steve Sillett, both scientists mentioned in *The Wild Trees*, stepped in to encourage his enthusiasm.

In fact, Taylor sent a laser range finder, an instrument that helps measure the height of trees, to Zane saying "If you can find something significant, you get to keep the laser." Even though the instrument still required manual calculations using trigonometry to determine tree height, it was an acknowledgement of his effort and an encouragement that he could make a difference to the redwoods he loves so much. Within four months, he found trees from four different species that broke height records. Not only did he get to keep that laser range finder, he was then loaned another "crazy accurate" laser that does the math for you.

That began a collaborative adventure that sent Zane down his current path. After graduation from high school, he and another researcher, Steve Singer, who researches birds that nest in redwoods, did a full-scale search through the old-growth redwoods in Big Basin State Park in California. Focused on 11 square miles, they found seven new 300' trees. One was 328', the tallest tree in the south half of the redwood range.

As an undergraduate here at CSU, he has already published three papers and saved an extremely rare chimera redwood from being destroyed to make way for a transit line. That story gave him national exposure both on NPR (his interview with Scott Simon is [here](#)) and National Geographic (story [here](#)). The tree was successfully moved 450' across the street this past August, and it's doing well.



Chimera redwoods are extremely rare. Not to be confused with albino trees that have no chlorophyll, chimera redwoods have multiple genotypes within one meristem, or bud. It looks like a variegated tree, blending from green to white, but it isn't.

After graduation in Spring 2016, Zane anticipates continuing to graduate school to pursue his interests. This work could potentially help us understand chlorophyll and chloroplast production and possibly contribute to energy, oxygen and food supplies worldwide.



Relocating the rare chimera redwood.
Photo by Tom Stapleton

HOW I SPENT MY SUMMER VACATION

Biology Undergraduate Students Make a Difference Through Internships

We know that students learn science by *doing* science. An important part of our curriculum is to offer ways our students can interact with the world and learn practical applications of what we teach in class. Please consider creating an internship in your place of business. More info on page 1.

With thanks to our Academic Support Team, here is a small sampling of our students telling how they were engaged with the world last summer:

Kaitlyn Adkins: Rocky Mountain Raptor Program

Rocky Mountain Raptor Program is a non-profit program, so almost all income is from donations.

As the outreach intern, I attended almost all of Rocky Mountain Raptor Program's exhibits over the summer. We attended local exhibits, events, and fairs in order to raise money to save injured raptors and to educate the public about these magnificent birds. I would work with merchandise, talk with onlookers, and even sit with our educational ambassador raptors to tell their histories to the public.

Besides going to these events, a lot of my time was spent preparing and organizing for them. I did a lot of paperwork to stay up-to-date on our 100+ volunteers and created visual presentations to accompany our events.



I want to have a career working with endangered species, so I knew I wanted an internship with wildlife. However, when I saw that this internship was more administrative, I was curious as to what I could learn from that perspective.

Had I just been a volunteer with Rocky Mountain Raptor Program, I still would've had a fulfilling summer handling raptors; but I wouldn't have learned as much as I did working with the administration.

Sara Morson: Alka Hospital in Kathmandu, Nepal



I spent my time shadowing various doctors and surgeons in multiple specialties. I was able to help move patients, take vitals, learn to analyze blood and urine tests and radio-graphs (x-rays). By the end of my fourth week, I was able to walk through full diagnoses with patients of all ages.

The thing I enjoyed most, besides literally being "at the table" in the OR twice a day, was meeting other people from all over the world who were either doing the medical internship, or were in other placements such as in a school teaching English, the orphanage, physical therapy, and various other programs.

If I do go into the medical field, I will have advanced knowledge in various situations that most people will never have.

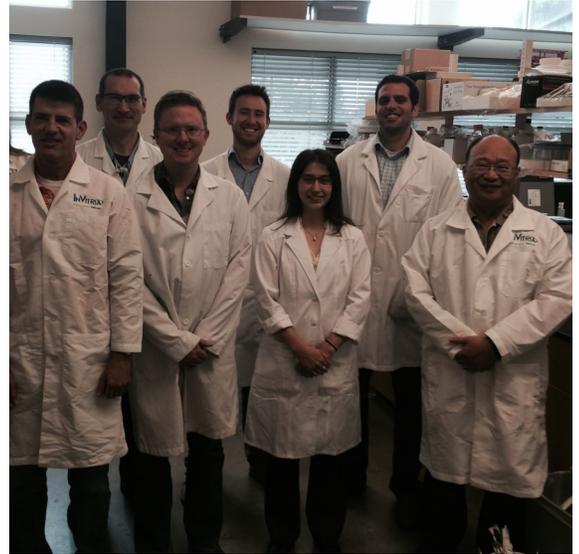
UNDERGRADUATE STUDENT INTERNSHIPS, CONT.

Luke Beckett: Ventria Bioscience

Ventria Bioscience's scientific platform uses transgenic rice to express pharmaceutical proteins of interest. My primary job duty was qualitative and quantitative screening of phase 1 and 2 clinical trial pharmaceutical proteins. The screening method utilized multiple bioassays such as Western/Southern/Dot blot, chemiluminescent/colorimetric immunoassays, Polymerase Chain Reaction, and SDS-PAGE.

For the first time in my life, I felt as if my work was contributing to the benefit of mankind. The pharmaceuticals being developed at Ventria Bioscience have the potential to save thousands of lives.

I have learned how incredible it is to actually work in the bioscience industry. The potential of the industry to grow and change the world is astounding. To students in biological sciences or a similar major, DO NOT GIVE UP! There are so many opportunities in Colorado alone for you to contribute your knowledge.



Luke Beckett at Ventria Bioscience working as a Research Associate (back row, center).

Gus Waneka: Hawaii Island Hawksbill Turtle Recovery

My main job duty was camping on the beach and staying up for most of the night to watch for nesting Hawksbill mamas. Most of the beaches we monitored were pretty remote, so we would either backpack in or take long, private, four-wheel-drive roads. If a nesting mama came up we would take some measurements and mark the nest location.



The coolest part of the internship was just living in Hawaii for the summer. As a Colorado kid I have never experienced all the craziness of the ocean and a tropical environment. I did all kinds of swimming, snorkeling, turtle-ing, volcano watching and coconut eating. It was sweet!

I feel like it's probably a good idea to experience a lot of different job scenarios before you go pursue one as a career. This internship showed me how much I enjoyed working on a project that protects endangered species.



UNDERGRADUATE STUDENT INTERNSHIPS, CONT.

Elise Koszarek: Feline Intern at the Denver Zoo



As an intern, I did do a lot of cleaning and diet preparation, but I also got the opportunity to watch and assist with carnivore training sessions and shifting, create and distribute enrichment for the animals, and create my own scientific behavioral project with the maned wolves.

Hands down, the thing I enjoyed the most was the animals. We cared for around 40 animals comprising over 10 different species, including tigers, leopards, wolves, hyenas, mongooses, foxes, pandas, etc. Getting to work with so many different animals and unique personalities was the most rewarding part. We also had a couple of animal babies born while I was there, which is always fun and rewarding.

I've learned that a lot of hard work goes into caring for these animals. Zookeepers work long hours with very few holidays and follow strict procedures when working with many of these dangerous animals, yet after working on the feline team all summer, it was clear they truly loved what they were doing. Being able to see the bonds formed between the animals and their keepers was very rewarding, and I hope to one day create similar relationships in the field.

Erin Toteve: Reach Out Volunteers in Siem Reap, Cambodia

For one week of the trip, I volunteered in a local village where I was placed into a family. For the entire week, I worked with that same family assisting in various duties, such as gardening or teaching English. I also helped build a vocational center for the village with my fellow volunteers.

For the other two weeks of my trip, I worked on an elephant sanctuary, where I planted food, built a water cache for a nearby school, and fed and rehabilitated two wonderful elephants, Kamlin and Arun Ria.

My volunteer work gave me a new perspective on the world. I grew up learning in school what life is like in a developing country, but I don't think I ever knew what that really meant until I saw it first-hand. It is very eye-opening to see how little people survive on every day and then compare it to what we are spoiled with in the U.S.



If my work taught me anything, it is to get out into the world and do more volunteering. I hope one day I can return to Cambodia to visit the amazing friends I made in the local communities and to do more to improve their everyday lives. If anyone deserves a better life than what they have, it would definitely be the Khmer people of Cambodia.

UNDERGRADUATE STUDENT INTERNSHIPS, CONT.

Karen Holcomb: Volunteer Field Assistant with CSU and CO Parks and Wildlife Dry Creek State Wildlife Area



I assisted a grad student from CSU to set up her research plots for a study on super-absorbent polymers in restoration and climate change. I worked with 2-15 other people to trench around 52 plots and install flashing, build 15 rain-exclusion shelters, and install 20 soil moisture probes.

I really enjoyed the variety of work and learning how to set up ecological research plots.

During my internship, I learned practical skills like handling of machinery and carpentry. Through CO Parks and Wildlife, I also learned about disease and about interesting ecological-related careers.

I am hoping to obtain a career modeling and researching infectious diseases. My internship experience exposed me to the logistics of setting up research projects; they always take longer than you plan. Working with a team of people from different jobs and backgrounds prepared me for my career because working with infectious disease requires cooperation across departments and countries.

Kelly Walker: Alaska Zoo

My job duties mostly involved general husbandry, where I would follow and assist my assigned zookeeper with cleaning, feeding, and otherwise caring for the animals at the zoo. Interns also had the opportunity to lead tours around the zoo, attend the petting zoo, and train one of the zoo animals.

Preparing and administering enrichment was also a large part of the internship. Enriching the animals was definitely one of the most fun parts of the job. This internship was full of close interactions with the animals, which was amazing. The bond I formed with the animal that I trained, our adult moose, was especially rewarding. The Alaska Zoo is also a transfer station for many orphaned and injured wildlife from Alaska that are on their way to other zoos, so many baby animals pass through that need close, hands-on care (very exciting!).

This internship was a fantastic experience that greatly shaped my outlook on my career, while also providing invaluable and unique experience. Seeing how this small zoo actually works from the inside out helped me to better understand zoos as an industry, an educational tool, and an integral part of conservation work. I hadn't fully realized my passion for exotic animal care until I experienced it first-hand."



10TH ANNUAL BIOLOGY BASH

After 10 years, it's a tradition, right? Started by Dr. Dan Bush, our previous department chair, the annual Biology Bash is a welcome-back-to-a-new-school-year party in Department Chair Dr. Antolin's back yard.

With BBQ and Slovenian sausage accompanied by potluck contributions from faculty, staff, research personnel and students, this year was no exception. Here are a few photos of the merriment on a cool (<50°F), cloudy fall afternoon.



You can always count on good food and lots of friendly conversation at any biology function.