CU Science Discovery Anschutz Campus 2019

CU Science Discovery Anschutz Campus Instructors
Summer Camp instructors teach one or more camps during June, depending on their interests and availability. Instructors deliver camps that have already been developed or may work with Science Discovery to test a new camp. Instructors attend one day of mandatory training and are required to have current CPR/First Aid certification (provided on the training day if needed), a current background check with the University of Colorado, be checked against the National Sex Offenders Registry, and sign a code of conduct. Instructors are paid $20 per hour. High school camps run from 9am-4pm M-F (instructor hours start 15 minutes before camp and end 15 minutes after camp). Middle school camps run from 9-12 and 1-4, M-F (instructor hours start 15 minutes before camp and end 15 minutes after camp). Instructors who teach a full day for middle school will be also be paid for the 12-1pm lunch hour. All camps have up to 20 students each and are focused on biomedical and life science topics.

Science Discovery Instructors:

- Love science and enjoy making it fun for others!
- Have fun engaging with high school or middle school students.
- Have experience teaching or leading K-12 students.
- Are in a STEM related graduate degree program or health professional program or are fellows or faculty in STEM areas (please see additional qualifications in camp descriptions).
- Have University of Colorado badge access to the Anschutz Campus.
- Are flexible and enjoy working with diverse teams.

CU Science Discovery Anschutz Campus Teaching Assistants
Science Discovery hires Teaching Assistants to work on the Anschutz Campus during June. TAs support camp instructors by checking students in and out, helping to deliver curriculum, supervising the lunch hour, monitoring student presence and behavior, and managing any student medical needs (training). TAs participate in one day of mandatory training and are required to have current CPR/First Aid certification (provided on the training day if needed), a current background check with the University of Colorado, be checked against the National Sex Offenders Registry, and sign a code of conduct. TAs are paid $10 per hour and work from 8:30am-4:30pm, M-F. TAs must work at least one full week. Camps have up to 20 high school or middle school students each and are focused on biomedical and life science topics.

Science Discovery Teaching Assistants:

- Love science and enjoy making it fun for others!
- Are enthusiastic and outgoing when engaging with high school and middle school students.
- Are junior or senior level in a STEM undergraduate degree program, STEM graduate students or postdoctoral fellows, or students in a health profession program.
- Are familiar with the Anschutz Campus and preferably have a University of Colorado badge.
- Are dependable, flexible and enjoy working with diverse teams.

To apply, please send a cover letter describing your interest in outreach/education, experience with K-12 education, recreation, or outreach and which camps you are interested in working, your resume, and 3 references to Meredith.tennis@ucdenver.edu. Please contact Meredith with any questions. Applications will be reviewed as they are received.
Camp Schedule

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<th>M-F 9am-4pm</th>
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<tr>
<td>Grades 10-12</td>
<td>Medical Student Experience 1</td>
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<tr>
<td>Grades 7-9 (AM/PM)</td>
<td>STEM Camp 1 (AnatoME/ABCs of DNA)</td>
<td>STEM Camp 2 (Animal Science Adventures/ Poisons &amp; Potions)</td>
<td>STEM Camp 3 (ABCs of DNA/ The Invisible World of Microbes)</td>
<td>STEM Camp 4 (AnatoME/Poisons &amp; Potions)</td>
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20 students/camp

**High School Camps**

**Biomedical Research Bootcamp**
Description: Do you have what it takes to be a biomedical scientist? Find out what it’s really like during this research-focused week at the University of Colorado Denver Anschutz Campus, the hub of all biomedical research in the Rocky Mountain Region. The course will include hands on experiments, meeting scientists, visiting facilities that use cutting edge technologies, exploring the ethics of biomedical research, learning about research careers, and finally, developing your own scientific research proposal. If you are ready to learn about how science solves health problems in a high-intensity, one-week workout for your brain, then this course is for you!

Qualifications: Instructor should be a graduate student, fellow, or faculty with biomedical research experience. TA should be an undergraduate or graduate student or fellow in a life science or related STEM program.

**Medical Student Experience**
Description: Try this week-long course to get a small taste of the medical world. Activities will include practicing physical exams, clinical research presentations, seeing how health professionals learn with medical simulations, visiting anatomy labs, practicing suturing and injections, and more. This week is full of hands on activities and interactions with medical students and health professionals, giving you a fun look at the science and practice of medicine.

Qualifications: Instructor should be an accepted or current medical student. TA should be an undergraduate or graduate student or fellow in a health professions or life science program.

**Biomedical Laboratory Techniques**
Description: Biomedical scientists depend on a core set of laboratory techniques to understand and experiment with DNA, RNA, and proteins. Get a head start on your future coursework, internship, or research career with this introduction to biomedical laboratory techniques. This camp focuses on hands on lab activities and is taught by Anschutz Campus scientists who use these techniques every day to answer questions about human health. Prior knowledge of cells, DNA, RNA, and protein is helpful, but not required. Students will need to follow safety guidelines, read and follow experimental protocols, and record data in lab notebooks. If you love science, want to meet like-minded students, and can't wait to get hands on with biotechnology, this camp is for you!

Qualifications: Instructor should be a graduate student, fellow, staff member, or faculty with significant biomedical lab techniques experience. TA should be an undergraduate or graduate student or fellow in a life science or related STEM program.

**Middle School Camps**

**The Invisible World of Microbes**
Description: Come learn about the wild world of microbes inside and outside of the human body. Whether they are making us sick, keeping us healthy, or producing some of our favorite foods, microbes have a tremendous
impact on our everyday lives. Together we'll investigate bacteria and viruses, how we defend ourselves from them, and try out microbiology laboratory techniques. This camp will give us a glimpse of what's happening in the invisible world of microbes all around us!

Qualifications: Instructor should be a graduate student, fellow, staff member, or faculty with knowledge of microbiology, virology, immunology, or related science. TA should be an undergraduate or graduate student or fellow in a life science or related STEM program.

AnatoME
Are you curious about what’s under your skin or why you get dizzy? The human body is a complex, wonderous machine! Each day of this camp we will focus on a different theme that teaches us about how our bodies work, including bones & muscles, cardiopulmonary function, and sensory systems. Gain hands on experience in body measurements and exercise testing and then finish the week with organ dissection!

Qualifications: Instructor should be a health professions student, graduate student, fellow, staff member, or faculty with knowledge of anatomy. TA should be an undergraduate, medical, or graduate student or fellow in a life science, anatomy, medical, or related STEM program.

ABCs of DNA
We all depend on the letters D-N-A for life, but what is really spelled out by our genetic code? How do cells use DNA and why do scientists study it? During this camp, we will inspect the structure of DNA, investigate its function, and examine variations in its code. Activities will include hands on labs, games, crafts, and interactions with Anschutz Campus scientists. No spelling tests! Join us for an exciting exploration of this fundamental component of all living cells.

Qualifications: Instructor should be a graduate student, fellow, staff member, or faculty with knowledge of DNA science. TA should be an undergraduate or graduate student or fellow in a life science or related STEM program.

Animal Science Adventures
Biomedical scientists answer critical questions about human disease and rely upon animals to advance medicine that helps both humans and animals. This camp cover topics such as animal behavior, genetically engineered animals, ethics of animal research, care of lab animals, and hands on practice of techniques used by researchers. Our group will also learn about the wide variety of careers involving laboratory animals and tour the Anschutz Campus animal facility. Come adventure with our scientists and learn how animals contribute to modern medicine!

Qualifications: Instructor should be a graduate student, fellow, staff member, or faculty with experience conducting animal research. TA should be an undergraduate or graduate student or fellow in a life science or related STEM program.

Poisons & Potions
Which chemicals will help you and which will kill you? When can a toxin become medicine? How do we know how much of a drug to take? Investigate these questions and more as we learn about the science of poisons, substances that can harm us, and “potions”, substances that can help us. The week will include lab experiments using Planaria to test toxicity and practice making your own compounds. We will also be introduced to careers in toxicology and pharmacology, the sciences behind poisons and potions. This is a fun, hands on week that will make you more aware of the chemicals we encounter every day!

Qualifications: Instructor should be a graduate student, fellow, staff member, or faculty with knowledge of toxicology, pharmacology, or related science. TA should be an undergraduate, pharmacy, or graduate student or fellow in a life science or related STEM program.