**Research Opportunities at CU Boulder:**

1) Bachtell Laboratory: (**Neuroscience**)

Our primary mission is to study the neurobiology of drug addiction. Drug addiction is a serious mental illness that involves significant motivational disturbances resulting in a loss of behavioral control leading to destruction of the afflicted individual as well as their surrounding social networks. This disease affects millions of people and generates enormous social and economic costs to society. The focus of our research is to understand the mechanisms involved in drug craving and relapse. Our work involves the study of molecular, cellular and systems level analyses of the mesocorticolimbic dopamine system and how these different levels of study work together to contribute to drug relapse. As a corollary to this work, we are also interested in how other brain systems influence the mesocorticolimbic system to regulate relapse behavior. This work involves the study of body’s stress systems, memory and learning systems and information processing systems. Dysregulation of these systems by drugs of abuse leads to a compulsive drive to take and seek drugs of abuse. The goal of our research is to better understand the biological basis of the disease and to identify major biological targets for potential therapeutic intervention to promote abstinence.

[BURST: Bioscience Undergraduate Research Skills and Training Program](http://www.colorado.edu/Outreach/BSI/undergrad/burst.html)

[NIH/HHMI Scholars Program for Diversity in the Biosciences](http://www.colorado.edu/MCDB/diversity/NIHScholars)

[UROP: Undergraduate Research Opportunities Program](http://enrichment.colorado.edu/urop/)

Contact: [Ryan.Bachtell@Colorado.edu](mailto:Ryan.Bachtell@Colorado.edu)

Website: <http://psych.colorado.edu/~bachtell/Home.html>

2) Campeau Laboratory: (**Physiology**)

The Laboratory provides a great undergraduate research opportunity.

-Many different types of expertise are offered

-Several mechanisms exist which provide financial assistance to students.

-These include:

Undergraduate Research Opportunity Program (UROP)

Undergraduate Research Assistant Program (BURST)

Work Study programs

Summer research Experience

Contact: serge.campeau@colorado.edu

Website: <http://psych.colorado.edu/~campeaus>

3) Leinwand Laboratory: (**Molecular Cellular Developmental Biology**)

Genetic manipulation of cardiac and skeletal muscle development and function in mice; gene therapy; cardiac genetic disease.

Contact: [**Leslie.Leinwand@Colorado.EDU**](mailto:Leslie.Leinwand@Colorado.EDU)

Website: **http://mcdb.colorado.edu/directory/leinwand\_l.html**

4) Breed Laboratory: (**Environmental Biology**)

Ant behavior, Collective intelligence (Summer program offered for undergraduate students)

Contact: [Helen.Mccreery@colorado.edu](mailto:Helen.Mccreery@colorado.edu)

Website: <https://ebio.colorado.edu/index.php/undergraduate-researchopportunities>