

# Welcome to the BRC

We are excited to share a video with you that highlights deeply impactful and developing research that is happening right here on our campus through the Biomolecular Research Center.

## What is the BRC?

The BRC prides ourselves in being an emerging, collaborative, and multidisciplinary research presence.

The focus of the BRC is the study of biomolecules with emphasis on proteins and protein interactions. The BRC represents a comprehensive collection of instrumentation and facilities ideal for the characterization of biomolecules and their role in a variety of biomedical and environmental processes.

Partnerships exist between the Center and Idaho-BRIN/INBRE, UI, ISU, the Boise VA Medical Center, The College of Idaho, and Northwest Nazarene University. To support current and future collaborative science, the BRC provides seminars, training workshops, and other networking opportunities.

The BRC is supported by funding from: National Health Institutes, National Science Foundation, Murdock Charitable Trust, Lori and Duane Stueckle, and the Idaho State Board of Education. Some grants include programs that support student researchers. An example of this is INBRE, which is a paid research experience that provides hands-on experience in the field. Here's some more information:

Every day, on eleven campuses across our state, questions are asked, research is shared, and answers found. Led by the University of Idaho, INBRE forms a unique network allowing some of Idaho's best minds to work in our finest facilities, tackling some of our nation's hardest medical questions. We are Idaho INBRE: the IDeA Network of Biomedical Research Excellence.

## An Interdisciplinary Approach

The mission of the center is to facilitate multidisciplinary research and research training programs. Our goal is to increase the level of biomolecular research achieved at Boise State University, with opportunities for students and faculty members alike.

The BRC offers instrumentation compatible with many types of research, ranging from: molecular biology and tissue culture, histology, biomolecular characterization, imaging, and mass spectrometry.

A few examples of instrumentation in the lab include: CO<sub>2</sub> incubators, which provide an ideal environment for cells to grow; the biosafety hood provides a sterile environment to keep cells free from microorganism contamination, which is critical in cell culture experiments; confocal microscopy is a powerful instrument that creates sharp images of cells and tissues; Micro CT scans and generates high resolution images on 3-D structure of a variety of samples such as bone, teeth, cartilage, and lungs; and mass spectrometers are used to identify molecules based on their size and measure their quantity in samples.

Biomedical research is a growing field with opportunities to improve human health. As a Bronco, students and faculty have amazing resources to make a difference. If you are curious about learning more on all things biomedical, please reach out to us!