# Research (ID)

## 2023 Winter

### Alyssa Iversen

#### Internship Description

Industry:Healthcare

Company: Rocky Mountain Clinical

Location:  Idaho Falls, Idaho

Semester: 2023 Winter

Paid/unpaid: Unknown

Found: Networking

Summary:

What we do is diabetes clinical research. So we'll do device study or drink studies where subjects will come in.

### Tanner Harline

#### Internship Description

Industry:Healthcare

Company: Cleveland Clinic

Location:  Cleveland, Idaho

Semester: 2023

Paid/unpaid: Unknown

Found: Networking

Summary:

This clinic that is known for their breakthrough of the coronary artery bypass surgery and their first face transplant and known for their premium research. There are many different research opportunities that happen and are all going out once. But I was specifically looking for a new approach and a new way for chemotherapy and to treat it.

### Sim Evans

#### Internship Description

Industry:University

Company: BYUI Bensen Lab

Location:  Rexburg, Idaho

Semester: 2022 Fall

Paid/unpaid: Unpaid

Summary:

What we do in this lab is our goal is to take cells and expose them to hormones and monitor gene activity of these cells. Specifically make cells and the cell is, uterine cells are quite different than most is because mix and hold that fertilization eggs for three to four months. And our goal, and our aim of this is to find the gene and that would match humans so that we can help with infertility. Now, this research here, our instructor designs for us and some of my contributions here that we do, we do cell culture, RNA extraction, gene, a passenger and internalization of cells.

## 2022 Fall

### Ethan Smith

#### Internship Description

Industry:Pharamceutical

Company: Compound Preffered

Location:  Idaho Falls, Idaho

Semester: 2022 Fall

Paid/unpaid: Unknown

Summary:

One of my key tasks involved using air filters that directly pumped air onto agar plates. By observing any growth on these plates, we could identify if there were any harmful substances in the air. I also used contact plates on surfaces, clothes, and hands, checking for any microbial growth. These measures were essential in maintaining a clean environment during the production of medicines, preventing contamination from external sources.

### Jessie Ellis

#### Internship Description

Industry:University

Company: ISU

Location:  Pocatello, Idaho

Semester: 2022 Fall

Paid/unpaid: Unknown

Found: Internship Seminar

Summary:

For my internship, I worked at Iowa State University in the pharmacy department. One of my main contributions was managing the growth of cancer cell lines that the lab worked with. I also worked on a project with a grad student, where we modified gene expression in cells using the CRISPR-Cas9 gene editing system. We conducted tests to ensure the correct expression of the targeted gene and performed drug tests on the cells to evaluate drug resistance at varying levels of gene expression.

### Deven Gopinath

#### Internship Description

Industry:University

Company: ISU

Location:  Pocatello, Idaho

Semester: 2022 Fall

Paid/unpaid: Unknown

Found: Internship Seminar

Summary:

I made several contributions to the project. I was involved in creating cytokine detection methodologies and acquiring the necessary reagents for the project. Additionally, I played a role in standardizing the protocol for RNA isolation, reverse transcriptase PCR, and quantitative PCR. I also assisted in multiple mouse surgeries to obtain tissue samples for the research. Furthermore, I optimized the immunohistochemistry process to visualize microglia in the mouse tissue by staining it with antibodies. I had the opportunity to teach PCR techniques to other graduate students in the department. Moreover, I learned how to operate confocal microscopy to image the stained tissue.

### Alexandra Tyler

#### Internship Description

Industry:Biopharmaceutical

Company: Eurofins

Location:  Idaho Falls, Idaho

Semester: 2022 Fall

Paid/unpaid: Unknown

Summary:

Throughout my internship, I had the chance to work with new products from various clients. One of my main responsibilities was assisting with the reception and registration of client products into our system. Additionally, I was involved in every step of the process, including extensive bacterial detection through enrichment, dilution, and incubation. We relied on PCR machines for bacteria detection and performed plate readings using Petri dishes.

## 2022 Spring

### Tanner Torrescano

#### Internship Description

Industry:Healthcare

Company: Rocky Mountain Clinical Research

Location:  Idaho Falls, Idaho

Semester: 2022 Spring

Paid/unpaid: Unknown

Summary:

During my internship, I acquired valuable skills, such as performing ECGs on patients and engaging in discussions about their medical history and medications. Establishing a connection with the patients was particularly significant to me. Although they are part of our job, it is important to make them feel comfortable and supported, considering the challenges they face due to their condition. I also gained invaluable experience working in a professional healthcare setting and learned the significance of paperwork, especially during research.

### Samuel Adams

#### Internship Description

Industry:Biomedical

Company: INBRE

Location:  Pocatello, Idaho

Semester: 2022 Spring

Paid/unpaid: Unknown

Found: Networking

Summary:

During my time in the lab, I worked on various projects ranging from cancer pharmacology to genetic editing. One of my main projects involved genetically modifying osteosarcoma cell lines to remove a specific tumor suppressor gene. We then analyzed the impact of its removal on the aggressiveness and proliferation of these cells. Some images of the cells I worked with are displayed below at different magnifications.

### Cassandra Larsen

#### Internship Description

Industry:Enviromental Science

Company: Kobziar Fire Ecology Lab

Location:  Couer d'Alene, Idaho

Semester: 2022 Spring

Paid/unpaid: Unknown

Summary:

During the internship, I worked on a project that involved studying soil samples that had been exposed to smoke. We conducted controlled fires in the laboratory and introduced smoke to the soil samples. Afterward, I measured CO2 levels, identified microbial respiration rates, conducted biomass measurements, and performed DNA sequencing.

## 2022 Winter

### Lydia Howell

#### Internship Description

Industry: University

Company: Boise State University

Location:  Boise, Idaho

Semester: 2022 Winter

Paid/unpaid: Unknown

Found: Applied to INBREP

Summary:

My research was on the toxin end of that ant, focused on doing bioinformatics research to look for other examples of toxins like cholera toxin, pertussis toxin, and a couple of other toxins in that family. Because it's hypothesized that there probably are toxins of that sort. And Salmonella in fantasy, which is a series of Salmonella that's growing in prevalence and your lens right now and has the potential to cause meningitis, which is the connection to my lab's focus of research.

## 2021 Fall

### Jailton Farias

#### Internship Description

Industry: Univeristy

Company: Boise State University

Location:  Boise, Idaho

Semester: 2021 Fall

Paid/unpaid: Unknown

Found: Professors

Summary:

During my internship, my role involved working with graduate students to develop an effective kinematic measure of stability in patients with osteoarthritis. Our goal was to create non-surgical treatment and prevention strategies since current treatments are expensive, toxic, and minimally effective. To achieve this, we utilized surface electromyography to measure muscle activity and connected reflective markers to a video camera system to analyze movement. Additionally, we used ground force plates to calculate the vector affecting the joints. The data was processed using software like Vicon Nexus, Visual 3D, and MATLAB.

### Grant Sage

#### Internship Description

Industry: University

Company: Brigham Young University-Idaho

Location:  Rexburg, Idaho

Semester: 2021 Fall

Paid/unpaid: Unknown

Found: Brother Ririe

Summary:

During my internship at the Biology Department in the Benson Building at BYUI, I worked on isolating the ILS S gene from Bacillus subtilis, a gram-positive bacteria. I grew the bacteria in broth, designed primers, isolated DNA, ran PCR, and successfully extracted the gene from gel electrophoresis.

## 2021 Summer

### Tanner Hansen

#### Internship Description

Industry:Pharmaceutical

Company: Melaleuca

Location:  Idaho Falls, Idaho

Semester: 2021 Summer

Paid/unpaid: Unknown

Summary:

As the assistant to the director of supplement formulators, you had an important role in developing the products. Your responsibilities included calculating the quantities of raw materials needed, blending them together, and producing capsules or tablets. Additionally, you ran tests to measure thickness, hardness, and dissolution time. It's wonderful to hear that you enjoyed your internship.

## 2021 Spring

### Brayden Child

#### Internship Description

Industry: University

Company: Idaho State University

Location:  Pocatello, Idaho

Semester: 2021 Spring

Paid/unpaid: Unknown

Found: Professors

Summary:

During my internship, I worked in the pharmacy department at Idaho State University, where the main focus was on researching and developing new cancer therapy drugs. My specific project involved finding patient-specific cancer treatment using an AI system. This system allowed me to test 96 different drugs simultaneously. Additionally, I assisted other graduate students with their projects whenever needed.

### Bryan Sanders

#### Internship Description

Industry: Healthcare Innovation

Company: IVREF

Location: Boise, Idaho

Semester: 2021 Spring

Found: School Society

Paid/unpaid: Unknown

Summary:

Within this internship, I'm specifically focused on a project aiming to enhance the solubility, stability, and concentration of a novel therapeutic antibody. This antibody holds great potential in combating severe flesh-eating infections, which often result in amputations. It's incredibly exciting to contribute to the development of a new solution for such devastating conditions.

## 2021 Winter

### Carlton Jensen

#### Internship Description

Industry:Conservation/ National resource managment

Company: Forest Service, United States Department of Agriculture

Location:  Idaho Falls, Idaho

Semester: 2021

Paid/unpaid: Unknown

Summary:

Carlton Jensen is a senior studying fisheries, range, and wildlife management. He has been working as a Pathway student trainee, range land management specialist for the Caribou-Targhee National Forest, fulfilling his internship requirement. His responsibilities include ensuring habitat, clean water, and sustainable grazing for livestock on Forest Service lands. Carlton has gained experience in livestock permit administration, monitoring, and working with livestock producers. He has also learned range land monitoring techniques and encountered various wildlife. After graduation, he will work as a full-time range land management specialist on the Humboldt-Toiyabe National Forest.

### Kyle Lusk

#### Internship Description

Industry:Chemistry Research/Education

Company: Department of Chemistry, Boise State University

Location:  Boise, Idaho

Semester: 2021 Winter

Paid/unpaid: Unknown

Summary:

I recently completed my internship with Dr. Cornell Slap at Boise State University. The lab focused on creating novel antibiotics, and during my time there, I worked on testing organometallic compounds for antimicrobial activity. We used Kirby-Bauer disk diffusion and microdilution methods to measure effectiveness against bacteria and cancer cells. I found this opportunity through the in-breath fellowship program, which I highly recommend.

### Jorge Manjarrez

#### Internship Description

Industry:Cosmetics/ Nutrition

Company: Melaleuca

Location:  Idaho Falls, Idaho

Semester: 2021 Winter

Paid/unpaid: Unknown

Summary:

Melaleuca's mission is to enhance lives by helping people reach their goals, and they have certainly helped me reach mine. I started in the call center and gradually made my way to the lab. If you want to intern here and are a freshman or sophomore, don't be discouraged by starting elsewhere. I began in the call center but made it clear to my boss that I wanted to move to the labs as soon as possible. In the lab, I contributed to product testing and environmental testing at different manufacturing facilities.

### Ridge Maupin

#### Internship Description

Industry: University

Company: Idaho State University

Location:  Pocatello, Idaho

Semester: 2021 Winter

Paid/unpaid: Unknown

Summary:

Working closely with Stuart Summers, the vice president of Idaho State University's marketing communications department, was a remarkable opportunity for me. Together, we developed a proposal for a summer program aimed at high school students, which resonated with my passion for higher education and youth engagement. The program focuses on providing on-campus experiences to help students develop leadership skills, effective communication, and networking in their respective fields, while also preparing them for college.

### Rachel Poulsen

#### Internship Description

Industry: University

Company: University of Idaho

Location:  Moscow, Idaho

Semester:  Winter 2021

Paid/unpaid: Unknown

Summary:

I completed my internship at the University of Idaho, where I focused on zebrafish research and their DNA transcripts related to retinal regeneration and the effects of thyroid hormones. Throughout the internship, I had the opportunity to learn and apply new techniques like qPCR and in-situ hybridization, as well as contribute to data analysis and lab discussions.

### Pamela Diaz

#### Internship Description

Industry: Education/ Pharmaceuticals

Company: Idaho State University- College of Pharmacy

Location: Pocatello, Idaho

Semester: 2021 Winter

Paid/unpaid: Unknown

Summary:

During my internship at the Cancer Research department in the College of Pharmacy, I gained valuable experience in biomedical research. I learned techniques such as peripheral embedding for bone processing, AOC and amoxicillin staining using a microtome, and obtained certification in the CATI program for animal and human subjects research. My projects included testing the synergistic effects of different drugs on osteosarcoma cell lines, working with a 3D bioprinting team to print osteosarcoma cell organoids, and studying the genomic instability of osteosarcoma through DNA extraction, sequence alignments, and phenotyping.

### Aaron Dodge

#### Internship Description

Industry:Life Science

Company: Nucleate Biosciences

Location:  Rexburg, Idaho

Semester: 2021 Winter

Paid/unpaid: Unpaid

Found: Indeed

Summary:I completed an internship with Nucleate Biosciences, a company focused on creating user-friendly bioinformatics analysis tools, particularly for RNA sequencing. As part of the development team, my main contribution was in developing analysis tools, specifically in the area of differential expression analysis. It was a great opportunity to work with real-world tools like Python, AWS, and Docker, gaining practical experience in the field.

## 2020 Fall

### Tyler Green

#### Internship Description

Industry: University

Company: Boise State University

Location: Boise, Idaho

Semester: 2020 Fall

Paid/unpaid: Unknown

Summary:

I  did an internship at  the  embryo  program  at Boise  State  University  with  Dr. Ken  Cornell; doing  research on  novel  antibiotics.

### Amberlyn Nemeth

#### Internship Description

Industry: University

Company: Boise State University

Location: Boise, Idaho

Semester: 2020 Fall

Paid/unpaid: Unknown

Summary:

I  was  in  charge  of is  I  would  grow  the  cells, culture  them,  make  sure  that  they  are  alive. And  then  from  a  different  lab, we  were  given  treatments that  we  would  treat  the  cells  with. And  usually  that  was  around  like  24  cells.

### Catherine Quito

### Internship Description

Industry: Agriculture, Buisness, and Computer Tech.

Company: Research and Buisness Development Center

Location: Rexburg, Idaho

Semester: 2020 Fall

Paid/unpaid:Unknown

Found: Byui Career Center Opportunities

Summary:

I  got  to  work  in  two  teams  where  I performed  primary  and  secondary  research, as  well  as  creating  PowerPoint  presentations and  final  reports. For  the  tap  roots  health  project. I  did  a  lot  of  problem-solving and  critical  thinking  on Excel  as  well  as doing  research  about  advanced  cancers. Where  the  second  project  I  conducted  surveys, polls,  and  analyze  data.

### Colin Dixon

#### Internship Description

Industry: Health Care

Company: Veteran Affairs

Location: Boise, Idaho

Semester: 2020 Fall

Paid/unpaid: Unknown

Summary:

The  mission  of  the  Veteran  Affairs  is  to improve  the  health  of  those  who served  in  the  United  States  military.  So  just  to  give  you  an  idea  of  what  I  did, I  looked  at these  answers  that  have  been  infected with  the  wild  and  mutated  forms  of  the  virus. And  then  harvested  those  lung  tissues and  then  began  to extract  the  things  we  needed  from  it, mainly  mRNA,  which  we  transcribe  the  cDNA.

### David Youngerman

#### Internship Description

Industry: Health care

Company: Idaho State University Lab

Location: Pocatello, ID

Semester: 2020 Fall

Paid/undpaid: Unknown

Summary:

Dr.  Pradhan  currently  has for  graduate  students  in her  lab  working  under  theses and  dissertations. So  my  work  with  them  has  allowed  me  to learn  many  different  lab  skills such  as  homogenization, where  many  cases  I  was working  with,  like  in  this  picture. Gonadal  tissue, also  RNA  extraction  and  cDNA  synthesis, creating  primers  and  running PCR  or  things  like  that.

## 2020 Spring

### Jeff Marsh

#### Internship Description

Industry: University

Company: Byui lab with Dr. Hahn

Location: Rexburg, ID

Semester: 2020 Spring

Paid/unpaid: unpaid

Found: Classmate

Summary:

 I  was  able  to  assist  Dr.  Hahn in  his  research  with  me  get filial  cells  in  the  uterus. And  this  research  included testing  assays  like  cell  metabolism and  measurement  through  glycolysis, a  glycogen  stores  and  glucose  uptake  tests. And  we  would  treat  with several  different  types  of  hormones, estradiol,  insulin, prolactin,  and  progesterone,  as  well  as agonist  and  antagonist  solutions for  the  ester  dial. In. Once  we  were  finished  with  those  treatments, we  would  do  qPCR  to  measure  gene  expression.

Read this online at <https://books.byui.edu/biology_internships/research>