

SLCC TRIO & PACE PROGRAMS

BRUIN BRAINS UNDERGRADUATE RESEARCH CONFERENCE

DECEMBER 3, 2021
TAYLORSVILLE REDWOOD CAMPUS
STUDENT CENTER, OAK ROOM
9 AM-3 PM

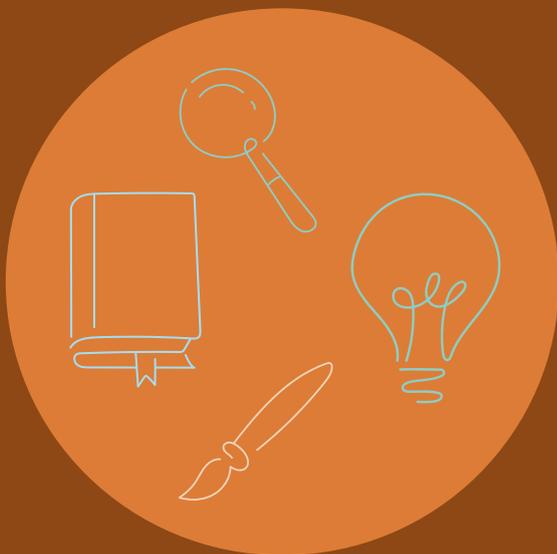
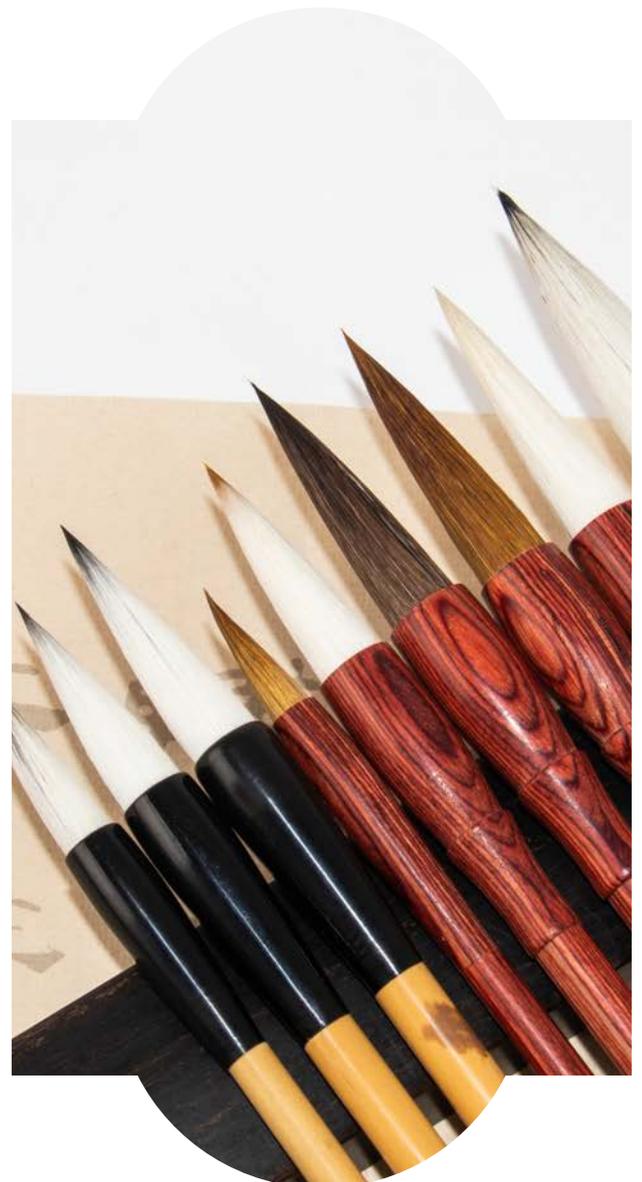


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OUR PURPOSE

TO PROVIDE STUDENTS THE OPPORTUNITY TO ENGAGE IN AND PRESENT RESEARCH AND RECEIVE VALUABLE FEEDBACK IN PREPARATION FOR THE SCIENCE, MATH & ENGINEERING (SME) SYMPOSIUM AND OTHER UNDERGRADUATE RESEARCH OPPORTUNITIES WHILE **ACKNOWLEDGING THE IMPORTANCE OF DIVERSITY AND INCLUSIVITY IN RESEARCH.**



HISTORY

BRUIN BRAINS IS A **STUDENT-DRIVEN** RESEARCH CONFERENCE THAT IS **FOCUSED ON INCLUSION AND DIVERSITY IN RESEARCH**. ORIGINALLY, BRUIN BRAINS CAME OUT OF **TRIO STEM STUDENTS** THAT WERE NERVOUS TO PRESENT AT THE SME SYMPOSIUM AND WANTED AN APPRECIATIVE YET CRITICAL SPACE TO PREPARE THEIR PROJECTS. FACULTY FEEDBACK ON POSTERS/PRESENTATION, AS A CENTRAL COMPONENT TO THIS EVENT, WAS A KEY FEATURE THAT STUDENTS DESIRED AT THIS EVENT.

SINCE THEN, IT'S EXPANDED TO **INCLUDE NON-STEM STUDENT RESEARCH** AND ITS MISSION IS NO LONGER TO SOLELY DRIVE STUDENTS TO THE SME SYMPOSIUM. BRUIN BRAINS NOW ALSO SERVES AS A STANDALONE UNDERGRADUATE RESEARCH OPPORTUNITY FOR ALL STUDENTS TO PARTICIPATE IN, AT NO COST TO THEM. BRUIN BRAINS RESEARCH CONFERENCE IS CONSIDERED AN **INTERDISCIPLINARY RESEARCH CONFERENCE** WITH AN **EMPHASIS ON DIVERSITY AND INCLUSION**. BRUIN BRAINS IS LARGELY FUNDED BY THE SCHOOL OF SCIENCE, MATHEMATICS & ENGINEERING (SME) AND ACE DONATIONS THAT NOW ALLOW US TO **INCLUDE NON-TRIO PARTICIPANTS, AND ALL SLCC STUDENTS IN THE EVENT.**

PROGRAM AGENDA

9:00 AM - 9:45 AM
OAK ROOM
CHECK-IN & LIGHT BREAKFAST

9:45 AM - 10:00 AM
HOUSEKEEPING & OPENING REMARKS

10:00 AM - 10:45 AM
OAK ROOM
**MORNING GUEST SPEAKER,
JAMES NEGUS**

11:00 AM - 12:30 PM
STUDENT POSTER SESSION
DEMONSTRATION, ROOM:207/213
ORAL PRESENTATION, ROOM:223/221
RESOURCE TABLING, CARNAHAN LOUNGE

12:30 PM - 1:30 PM
OAK ROOM
NETWORKING LUNCHEON

1:30 PM - 2:15 PM
OAK ROOM
**AFTERNOON GUEST SPEAKER,
ALAN PELAEZ LOPEZ**

2:30 PM - 2:45 PM
CLOSING REMARKS

KEY NOTE SPEAKERS

JAMES NEGUS

10AM-10:45AM (OAK ROOM)



JAMES NEGUS IS CURRENTLY PURSUING HIS PH.D. IN ASTROPHYSICS AT THE UNIVERSITY OF COLORADO BOULDER. HE EARNED HIS B.A. IN PHYSICS, WITH A SPECIALIZATION IN ASTROPHYSICS, FROM THE UNIVERSITY OF CHICAGO IN 2013.

AT CU BOULDER, HE COLLABORATES WITH DR. JULIE COMERFORD AND DR. FRANCISCO MÜLLER SÁNCHEZ TO STUDY THE PROPERTIES OF SUPERMASSIVE BLACK HOLES.

SPECIFICALLY, HE ANALYZES ACTIVE GALACTIC NUCLEI UTILIZING THE SLOAN DIGITAL SKY SURVEY, A MAJOR MULTI-SPECTRAL IMAGING AND SPECTROSCOPIC REDSHIFT SURVEY COMPILED USING A DEDICATED 2.5-METER WIDE-ANGLE OPTICAL TELESCOPE AT APACHE POINT OBSERVATORY IN NEW MEXICO.

JAMES ENJOYS STARGAZING WITH HIS 8" DOBSONIAN TELESCOPE IN THE ROCKIES AND HOSTING OUTREACH EVENTS AT THE FISKE PLANETARIUM AND THE SOMMERS BAUSCH OBSERVATORY IN BOULDER, CO. HE HAS ALSO AUTHORED TWO BOOKS WITH ENSLOW PUBLISHING (MYSTERIES OF SPACE: BLACK HOLES EXPLAINED AND MYSTERIES OF SPACE: SUPERNOVAS EXPLAINED).

ALAN PELAEZ LOPEZ

1:30AM-2:15PM (OAK ROOM)



CRG RESEARCH SCHOLAR, ALAN PELAEZ LOPEZ IS AN ADORNMENT ARTIST AND A WRITER FROM THE SOUTHERN COAST OF OAXACA, MÉXICO.

AT BERKELEY, ALAN IS PURSUING A PH.D. IN COMPARATIVE ETHNIC STUDIES, WHERE THEY EXAMINE THE WAYS IN WHICH UNDOCUMENTED BLACK IMMIGRANTS CREATE ART SPACES AS A FORM OF POLITICAL PROTEST THAT RESIST NOTIONS OF BLACK CITIZENSHIP AND ILLEGALITY.

ALAN'S POETRY AND NON-FICTION ESSAYS ARE INFLUENCED BY GROWING UP UNDOCUMENTED IN THE HOODS OF BOSTON AND NEW YORK CITY. THEIR WORK CAN BE FOUND IN EVERYDAY FEMINISM; TELESUR; THE FEMINIST WIRE; BLACK GIRL DANGEROUS; FUSION MAGAZINE; A QUIET COURAGE, AND MORE. ALAN COORDINATES THE CRG ARTS & HUMANITIES INITIATIVE.

STUDENT ABSTRACTS

BABI ABDALLA

The Power of Notetaking

Notetaking has been a staple activity of academic life, particularly in lecture courses, for decades. Despite its widespread use, notetaking has been taken for granted by both instructors and students.

However, in the past few years, changes in the landscape of higher education, such as the proliferation of commercial notetaking services, have led instructors to ask questions about the efficacy of notetaking in promoting learning and their own role in the process. These questions reflect instructor concerns not only about notetaking services, but also the clear decrease in student notetaking abilities, the introduction of active modes of learning within lectures, and the ease with which instructors can post their lecture notes online for campus-based courses or distance learning. The purpose of this is to review the impact of notetaking and how the review of notes affects student learning. The also explores the role that instructors can play, suggesting several specific strategies to support students.

KENNY BUSTAMANTE MILLONES

Whose Hosting? The Rising Costs of Thanksgiving

The COVID-19 pandemic has created an economic catastrophe. Although the United States economy is back in motion, markets are suffering from supply chain restraints, with prices of goods rising drastically. To observe the difference of how the market has affected consumers during the first year of the COVID-19 pandemic to today, this research project will focus on the Thanksgiving holiday. Through qualitative data and news articles, this research will examine decisions consumers make when holiday shopping for Thanksgiving meals and how hosts budget costs for this year in comparison to last year. As the COVID-19 pandemic continues, this study will also focus on how businesses have reacted to the current market and supply chain issues.

JAWAHER FADHEL

Are Volunteers Affective in Refugee Resettlement Services?

This research project will be examining how volunteerism affects services for refugees in resettlement agencies. The methods used in this project are made up of field work to observe different settings volunteers experience as well as an interview with an agency professional. The field work experiences include settings at Catholic Community Services office and share house as well helping refugee clients with transportation to medical appointments in hospitals and clinics. The purpose of this study is to examine how volunteers can positively affect services for clients through cultural and personal connections, especially those who reflect the populations they're serving. As well as argue the challenges that volunteers face and how non-profit and non-government agencies can exploit volunteerism.

STUDENT ABSTRACTS

TANYA-LYNN FAUPULA

Ua Lehulehu A Manomano Kā 'Ikena A Ka Hawai'i

Ua lehulehu a manomano kā 'ikena a ka Hawai'i is a Native Hawaiian saying that means "great and numerous is the knowledge of the people of Hawai'i" (Kānaka Maoli). The Kānaka Maoli (also called Kānaka 'Ōiwi, 'Ōiwi Maoli, or Hawai'i Maoli) suffered through attempted cultural genocide at the hands of U.S. businessmen and their government. Due to this, many of Hawai'i's people were stripped of their 'ike (knowledge) but their mana (spiritual energy, power, strength) and their kuleana (responsibility) to their mo'omeheu (culture) could not be taken. Mo'omeheu Hawai'i (Hawaiian culture) has gone through a resurgence thanks to the 'ike that was passed down from kūpuna (ancestors, elders) who held tight to those traditions and beliefs despite the 'eha (pain) they had to endure. Through three art pieces, this project portrays aspects of mo'omeheu Hawai'i and the effects of colonization to explain the importance of cultural preservation.

ANNA FOTHERINGHAM

Bottom Line - Ultimate Foot Analyzer

Runners often struggle with injuries from overuse and repetitive impact. For the runner, the main area that is affected is their feet, knees, and legs. Most of these are caused by the runner starting up too fast and high mileage, or repeating bad technique that can cause lots of impact strain in your foot, knee, or leg. When researching and experiencing some of these issues a solution that I have to help prevent some of these injuries is to use pressure sensors that will show where the pressure is being distributed throughout the foot. Putting sensors in your shoes allows you to find where the most impact is being placed on your foot. The sensors will be wired on an insole that can be taken in and out of shoes for different people to use. The sensors will collect the data where the pressure is being applied and then the data will be uploaded to a computer program that athletes and coaches can analyze and improve their technique as needed.

DYLAN GARCIA & VICTOR HUIZAR

Why We Won't Work

The 2020 COVID-19 pandemic has heavily affected the economy and labor force in the United States. Because of this, the country is currently recovering from mass unemployment and the closure of businesses. This research will explore why workers between the ages of 18-40, at this specific moment of time (one year since the pandemic started) are quitting their jobs. It will explore the factors that are attributed to workers leaving their jobs, how employers are responding, and what alternatives people have chosen instead of a 9 to 5 job. This will be accomplished by using articles that recount individual experiences and how they made the transition. This research will dive into the challenges workers face including childcare, health concerns, working environments, and income inequalities. This study will also explore how employers are responding to the labor shortage and what changes are being made in recruiting people into the workforce.

STUDENT ABSTRACTS

FRANCIS LOKIRU

Over the last 10 years the Utah department of transportation and the federal highway administration have been looking closely at western Davis and Weber counties, because of the population increase. This population growth requires a solution that addresses upcoming transportation needs while minimizing impact to the community and environment. From February 2011 to July 2017, the west Davis corridor environmental impact study team collected and analyzed information from all over western Davis and Weber County. Part of that effort has included studying wetlands. This report will help explain why wetlands are important, how they have studied them, and how UDOT (Utah Department of Transportation) has helped minimize the impacts to wetlands.

SELENA MORALES MARTINEZ

My project is about providing support to the young Hispanic and Latine/x community. I will provide support to teens and pre-teens while they are going through mental health crises. Through personal experiences I have learned that most Hispanic and Latine/x adults don't understand mental illnesses and their kids have no support from them when it comes to this. I chose this because from personal experience the lack of support really impacts your journey and makes it more difficult. I will make a website so that they feel that they have someone there to work through it together. This way they try harder and try their best to better themselves. This will also provide links to places where they can get help for free or at a low cost. If possible I would like to make a facility where these kids could come to get help. I did this because this is something that I am really passionate about and I would like to help whoever I can with my resources and my knowledge.

KAL-EL THOMAS

As wrestlers we often find it difficult to compare ourselves with others in our same weight class, and to track our progress. We have noticed that lower weight wrestlers are generally more agile than strong, and the opposite is true for heavier weights (Utahwrestling.org). Our goal is to make it easier for coaches and wrestlers to compare themselves and to see how they have improved. We created a website that has a strength, agility, and endurance test, that wrestlers will take. The wrestlers will input their results into the website, <https://wrestlingtest.godaddysites.com/>, and the website will give them a score that is based on the average wrestler in their weight class. Coaches can use this website to guide their athletes on what athletic element they should work on next.

STUDENT ABSTRACTS

NADIA YAHYAPOUR

Effects of COVID-19 on College vs. University Students

COVID-19 has affected students and their quality of education immensely. The purpose of this research study is to analyze how the daily lives of students has been affected by COVID-19 in areas such as physical health, mental health, sleep quality, academic success, eating habits, and social habits. Two similar surveys were sent out to Salt Lake Community College (SLCC) and University of Utah students to compare the effects of the COVID-19 pandemic on college vs. university students. The SLCC survey had 68 respondents while the University of Utah survey had 43 respondents. Both surveys showed that the majority of the participants were between the ages of 18 to 22. At Salt Lake Community College, female respondents were double in number than the male respondents while at the University of Utah the female to male respondent ratio was almost evenly balanced. In both groups, the majority of students reported that learning was easier for them before the pandemic. Both student groups also reported that their accountability and motivation was most affected by the pandemic. The findings of this research can help us further understand how the pandemic has effected student learning, success, motivation and other aspects of students' daily lives.

GICELA SAPUTO & REGINA JONES

Do You Know the Challenges Previously Incarcerated Students Face Going to College?

The purpose of this research study is to acknowledge the challenges that previously incarcerated students face going to college. A mixed research method approach including quantitative and qualitative research designs and data collection strategies are used in our study. Interviews from prison programs will be highlighted in this study. The primary focus will be on the barriers and successful approaches that have affected college enrollment and graduation rates for previously incarcerated students. This study will examine which college majors that most formerly incarcerated students decide to pursue as well as the academic and systemic challenges formerly incarcerated college students face and how it affects graduation and retention at Salt Lake Community College. We will also examine post-degree education statistics on formerly incarcerated students in terms of post-graduation career, life exploration, and the possibility of reoccurrence of recidivism. To conclude there will also be suggestions on how to improve programming and services for formerly incarcerated students at Salt Lake Community College.

STUDENT ABSTRACTS

CHANGYOUNG LIM

Is Hallyu(K-wave) the Next Mainstream Culture of the World?

This research will examine the history of Korean pop culture, also known as "K culture," how it started and spread, and its relation to globalization. When many experts explain how Hallyu spread worldwide, they tend to give credit to the Korean government. Partially it is correct but mostly wrong. The Korean government realized that Steven Spielberg's 1993 epic Jurassic Park raked in more cash for Universal Pictures than the return on a year's worth of Hyundai cars. So, they realized how precious the culture industry could be, and they thought it would be their primary industry to benefit. This thought sparked their support in the cultural sector. Thus, Hallyu, Korea's entertainment industry, was born. But many countries support their cultural industry, but they cannot succeed as much as Korea, so just only the government's support cannot explain the success of Hallyu. This research will historically examine k-dramas like Winter Sonata to Netflix's biggest hit, Squid Game, K-pop groups (such as BTS, Black Pink), and its explosive popularity in the United States.

AMI RAPP

Why are the Arts Underfunded in Schools

The purpose of the research is to understand why the Art programs are underfunded in educational aspects. This research is important because Art can convey information, shape everyday lives, make a statement and be enjoyed for aesthetic and beauty. The studies will be investigated via articles around art education and data around the funding of arts in the United States through different years and education levels. The perceived outcome may be that the arts are underfunded due to the thought that they aren't as important to fund as STEM programs.

YVETTE HUIZAR

This research is about why people love certain characters in stories. This goes for characters in books, shows, video games, movies, etc. The topic is fun and interesting to study how people get attached to characters. This is something that hasn't been looked into that much, but this research will delve deeper into the topic. Many people have a favorite character from a media of entertainment and it's been the question why they like a certain character more than others. The research will look into why the general audience leans towards certain characters. A major reason that's been found is that most people lean towards certain characters because they relate to them. These results are interesting and could help writers and producers with understanding how to make their characters more enjoyable.

STUDENT ABSTRACTS

BROCK EPPERSON & XIN ZHAO, PH.D.

Expanding psychological perspectives-student-centered interview project

Current psychological introductory content is produced and provided by a slim demographic, older white men, despite the psychology student demographic differing, leading to a lackluster diversity of perspectives and an incomplete understanding of the field. Under the direction of and in collaboration with Dr. Xin Zhao, Assistant Professor in Psychology, we will attempt to mediate that difference, increase access to psychological content, provide a more in-depth understanding of specific concepts, and encourage higher rates of student engagement and interest. To achieve this aim, we are actively seeking out professionals from underrepresented demographics in the psychology field, both instructors and researchers, to interview them on their perspectives regarding specific concepts in psychology. We will be creating a video library entailing the diverse perspectives pertaining to content in OpenStax' Psychology 2nd edition introductory psychology textbook. I am also documenting my involvement to share with other students who might also be interested to participate in similar processes in the future.

INGRID MEDINA & ASHMITA KARKI

Hyperpigmentation is something we have only seen in people of our culture which are Hispanic and Nepali. We are curious why it does not appear in other cultures/ethnicities as often. The purpose of this study is to find what population is affected by hyperpigmentation the most? And why is this at a higher risk of having hyperpigmentation? Also, we want to find out if this has correlation to age and if so, what age?

KIAVETT GAVINO

There has been a debate in the veterinary field that Level 4 dental disease will cause dogs and cats to become diabetic. My hypothesis is that dogs and cats that have really bad periodontal disease are going to have higher glucose levels due to the bacteria that runs into the blood system vs when dogs and cats have healthier teeth their glucose will be in the normal range. Due to this issue this could lead dogs and cats to become diabetic. My method of collecting this data is to swab dogs and cats mouth to see what type and how much bacteria is inside their mouths and compare their glucose level only when the dogs and cats have had a blood screening. During this moment the data is pending. The implications of these results would rule out how important it is to have routine dental cleanings within dogs and cats.

STUDENT ABSTRACTS

JACKSON MERRIAM

Most people believe that dogs and cats have fewer oral bacteria than humans but is that true? The diversity and number of oral bacteria in human & feline/canine subjects was examined in this experiment. It was hypothesized that oral bacteria in humans would be more plentiful and diverse than those of the other organisms tested, due to the difference in digestive systems. Oral bacteria were collected from each group of organisms and grown on petri dishes for a week. The results weren't significantly different between humans & cats/dogs, with both having subjects that had either gram-negative or positive bacteria. As well as all groups of organisms having similar colonies of oral bacteria and shapes/numbers. The results proved that humans didn't have more complex or plentiful bacteria in their oral cavities, rather all organisms tested had similar results. Meaning that further research will need to be done on this topic.

ANDREA ZUAZO

This research consists of collecting various dog urine samples and dog saliva samples to look at and compare them to see what kinds of bacteria we see, as well as how much bacteria is present. By collecting samples, putting them on agar dishes, and letting them grow. Knowing that dogs are a household pet, usually loved and adored by many families, I felt it would be a great experiment to test and see how much bacteria is in both their urine and saliva. Especially because many people love to kiss their dogs or let them lick their face, we can see how much bacteria these families are allowing on their faces.

BRINLEY WINBERG

Collisions with windows present a major source of mortality for birds. Most studies for collisions have been conducted within eastern North America, leaving western North America uncharted. Bird-window collisions are a large source for mortality, but are fairly understudied. I assisted Correy Riding with his research on bird-window collisions on SLCC campus. My hypothesis is that migratory birds are the most impacted by collisions as they are less familiar with urban surroundings, making them the most likely to fly into glass. To test this theory, I surveyed 5 of the 8 buildings on campus throughout the semester. When a carcass was found, the time, date, and location was recorded, as well as a brief description of the carcass. Pictures of the location and the carcass were taken to identify the species of the bird. 22-29 of the 40 carcasses found in the fall were migratory birds, supporting my hypothesis.

STUDENT ABSTRACTS

MCKENNA ROBERTSON & JAISON FOSTER

To understand how organisms differ in Utah ponds and waters based on varying degrees of human interaction. We examined water samples from four different ponds to understand what types of organisms exist in the waters around Utah, as well as gaged the frequencies of the organisms we found. When we set out to test this hypothesis, we checked private ponds, fisheries, duckponds and a hot spring. Our reasoning for picking these sites is that; the Private Pond would have little to no human interaction, the Duck Pond had foot traffic around the pond and a bench to sit at, the Fishing Pond had people standing at the shore casting their lines in throughout the day, and the Hot Spring had people swimming through it constantly. We did not find any litter or trash around any of the locations we got our water samples. We analyzed our samples under microscopes to see what we found. The results were interesting; the fishing pond, duck pond, and private pond we found rotifers, amoebas, and green algae, all of which had a different rate of discovery. In the Hot Spring samples, we found cyanobacteria and green algae. The Fishing pond has significantly less diversity than did the Private Pond.

JENIKA WILSON, CLAUDIA TEIXEIRA-GOMES,

KAVLYN KAIN, NICKOLLE MALCA BARRUETO

Don't let the future die; keep the water clean

This research project examines the effects of pollution on pH levels and biodiversity in aquatic ecosystems. Samples were taken from two recreational lakes in Utah, Jordanelle Lake in Heber and Utah Lake in Lehi. Utah Lake was chosen due to the fact that it is one of the most polluted lakes in northern Utah due to pollution from local run-off sites. Jordanelle Lake was chosen for its cleaner water. Two water samples were collected from each lake. pH levels were also measured and compared. The aquatic biodiversity of both lakes was compared to observe the effects of pollution on aquatic organisms. The results showed significant differences in biodiversity with both types of organisms and the number of organisms found within each lake. As predicted, there was a greater amount of biodiversity in Utah Lake due to pollution. Results from the samples confirmed our hypothesis that pollution does have an impact on pH levels and biodiversity.

STUDENT ABSTRACTS

CHELSEA OLSEN

Radishes: A better way to a brighter bulb?

The purpose of this project was to investigate if radish growth in different conditions. I hypothesized that the radishes would have enhanced rate of growth when exposed increased fixed nitrogen due to the mutualistic relationship between peas and rhizobium bacteria (a nitrogen-fixing bacteria that lives in the root nodules of legumes). To test this, I had three planters containing cherry belle radishes: planted alone, co planted with sugar snap pea plants, and co planted with inoculated sugar snap pea plants. Plant survival, days to sprout, last two weeks of plant height, and last two weeks of number of leaves were recorded for both peas and radishes. So far, it appears that the healthiest pea plants and radishes belong to the planter that contains non-inoculated sugar snap peas. While certainly not definitive, this could be useful with further research to produce healthier yields of vegetables and reduced use of nitrogen-enriched fertilizers.

KARA CLIFTON & DR. HARDY

Soil Microorganism

Does the biodiversity of microorganisms vary depending on the location of the soil sample? What microorganisms are present in each sample of soil? Does the environment around the soil have a large impact on the microorganisms that are present? Also, does the pH and the presence of Nitrogen, Phosphorus and Potassium lead to a different variety of organisms? I thought this would be an interesting topic to research because I have learned little on the topic of soil, microorganisms, and how environments impact the composure of the soil's diversity. I dived into the topic and found that there are some nutrients that are ideal for plants, like N, P, and K, so I decided to see if this could make an impact on microbial diversity as well as influence on plant growth. There is an entire field on soil science that looks into this topic, but I decided to get a variety of soil samples from places such as a chemical plant, garden, farm, park, and the mountains. Microbial diversity is very important for soil health, and it can be helpful to learn more about the risks in local environments, as well as consider what impacts the differing environments can have. I believe that my soil sampling will demonstrate the importance of N, K, and P, pH levels, and how the differing surrounding environments make an impact on our soil health. My methodology was the use of personally collected samples, testing soil temperature at collection, pH, Nitrogen, Potassium, and Phosphorous levels, as well as observing the samples under a microscope with three drops from a micropipette for ease of viewing. I also made sure to identify and take images of the microorganisms that were present in each sample and keep them well organized to put my data together. Later on I used the stereo microscope to look for anything significant. Gram-Staining was also incorporated to help classify bacteria. My results show the possible impact that the environment can have on our soil health.

STUDENT ABSTRACTS

KASEY HESER

My research project was on whether or not antibacterial shampoo for dogs would reduce the amount of bacterial growth. After buying the shampoo I tested a total of 15 dogs. The method that I used to test my hypothesis was swabbing their paws before and after using the antibacterial shampoo. I spread each swab on a petri dish. I gave them 2 weeks to grow so that I could see how much bacteria was growing after a significant amount of time. The results after putting everything into a graph shows that the shampoo doesn't really work. We can see this in the findings because there was more bacteria growing in the after results than in the before results. The results of my experiment imply that the (BRAND) antibacterial shampoo does not in fact reduce bacterial growth. This is important because everyone likes to take care of their pets. They are like family, and people should know if these expensive products are doing what they say they're supposed to do.

DILLON REYNOLDS

Birds are a major part of the biodiversity in Utah and making sure we maintain the balance of this biodiversity is key to protecting the habitats of Utah. Knowing the current levels of diversity of the birds in Utah would allow us to have data to compare to in the future to verify that we are continuing to protect our environment. This study aims to determine the difference in diversity of birds in rural areas compared to urban areas to show how the human population affects the bird's ecosystem. This study was completed by counting and identifying the birds in both South Jordan and Erda Utah. These counts were done in similar weather and time-of-day. Analysis of this data demonstrated that the diversity and the number of birds was larger in the rural area of Erda compared to the urban area of South Jordan. These findings bring this study to the conclusions that the diversity of birds in the rural areas of Utah were larger than the diversity of birds in the urban areas of Utah. This also shows that the ecosystem of birds is thriving at a higher rate in rural areas when compared to urban areas inside of Utah.

CHERISE PETERSON

I will be presenting on the scientific reasons behind why weight loss surgery patients stall in the first 18-24 months as well as past 24-months post-weight loss surgery. I have found that with current clients and in the weight loss community on Facebook that the patients are not informed of the different situations that could potentially cause stalls/plateaus. I want to be able to show weight loss surgery patients both pre-operative and post-operative the reasons that they stall so they have a better understanding of what they are going into post-weight loss surgery. I'm also including some quick scientific ways that you can break those stalls, as well. Research done behind this was done through searching for quality articles from studies as well as weight loss surgeons that have been worked with weight loss surgery patients. It also includes a small amount of my own personal research done via anonymous questionnaire. Through my research I am finding that a lot of patients do not actually know why stalls happen and how they happen especially after that 24-month period. They don't know how to recognize what is actually a stall/plateau compared to what may be while their scale is not moving they can still be losing inches due to fat loss.

STUDENT ABSTRACTS

SALVADOR REYNAGA AND KEVIN AGUILERA

Nano Drifters

We wanted a drift car, but we couldn't afford it. So we decided to make our own drift car. We took the concept of a drift car RC and scaled it down so that it could fit a Hot Wheel. This makes it affordable for kids/teens that want to learn about cars and engineering.

Our goal is to produce a product that makes RC drift cars available/affordable to kids/teens while teaching them STEM concepts of electronics, engineering and problem-solving. We are planning on making the project a hands-on kit for kids/teens to make a drifting rc car.

AYDEN BASCOM

Hearing Device that Decreases Volume for Sound Sensitive People

Our goal is to create a device that will be able to take sound from a certain decibel and minimize it for people who are sensitive to loud noise. This will help sound sensitive individuals engage in activities they weren't able to engage in before. We will prove that our device works through test subjects saying there is a difference in the loud noises we will play for them.

SLCC STUDENT RESOURCES & SERVICES

TABLING INFORMATION RESOURCES SESSION

Carnahan Lounge

Faculty and staff are excited to support students and their efforts. Faculty and staff can also act as research mentors and advisors to SLCC students as students prepare to present at any conference! Faculty can help students organize their thoughts, help coming up with a research question/topic, and resource referrals (e.g. journal articles and poster formatting).

STEM LEARNING RESOURCES

STEM Learning Resources provides free tutoring services and textbook checkout to students enrolled in various courses offered by the School of Science, Math, and Engineering. Tutoring is provided as a drop-in service only, except in certain circumstances.

INNOVABIO LAB

InnovaBio® is a biotechnology contract research organization. We offer a low risk environment for students to develop productive lab skills while working on projects for real companies. The challenging research completed by our interns creates a valuable talent pool for Utah biotechnology companies.

SLCC STUDENT RESOURCES & SERVICES

STUDENT WRITING & READING CENTER

The SLCC Student Writing & Reading Center helps you to succeed as a student by helping you to improve as a writer and a reader. We offer free, in-person and online consultations for all SLCC students enrolled in any class. We also have a variety of literacy resources for students and teachers.

HONORS PROGRAM & INTERDISCIPLINARY STUDIES

SLCC's Honors program is a personalized, engaging, and transformative experience open to all AA/AS students. Students in the Honors Program will sharpen their academic and scholarly skills through several rigorous Honors Courses that fulfill 9 credits of General Education: 3 in Social Sciences (SS), 3 in Humanities (HU), and 3 in the second half of Composition (EN).

EPORTFOLIO

Salt Lake Community College's ePortfolio initiative is a great way for students to make sense of General Education and share their learning experiences with friends, family, and scholarship committees. Faculty are also going to want to see your ePortfolio before they write a letter of recommendation for you.

It is a requirement in all General Education courses for students to create an ePortfolio that contains their significant assignments and reflections about those assignments. The ePortfolio also allows students to document their goals and extra-curricular activities.

RESEARCH MENTORSHIP

FACULTY COMMITMENT

TRIO would like to be able to refer students to faculty for mentorship and guidance on their research projects. Realizing this is an extra commitment that faculty would take on, we'd need faculty to self-identify themselves as willing to provide support for Bruin Brains projects. Support for these projects usually looks like helping students organize their thoughts, support in developing a research question/topic, and resource referrals (e.g. journal articles and poster formatting). Ideally, TRIO would like to create a referral catalog similar to the SME research catalog that includes faculty from different schools and disciplines campus-wide.

Learn more by visiting our Bruin Brains website and completing our Involvement Intake Assessment at: www.slcc.edu/trio/bruin-brains.aspx



GET INVOLVED

How can SLCC Faculty & Staff Get Involved with Bruin Brains?

Students will look to a reservoir of Faculty that can guide them towards:

1. Knowledge of research formats and norms specific to your field.
2. Awareness of current literature that informs your field, to help strengthen the foundations of their projects.
3. Take part in growing academic identity & competency beliefs surrounding research

Faculty or staff interested in taking on a mentor role would self-identify themselves to be included in a reference catalog, similar to the SME Symposium Research Catalog (example here: <http://www.slcc.edu/stem/projects-and-research.aspx>) that we would like to mimic and recreate but will be inclusive to all disciplines, majors and programs both STEM/SME and non-STEM/humanities, social sciences etc. concentrated topics.

Visit our Bruin Brains landing page through our TRIO & PACE Programs website to learn more and get involved with Bruin Brains: www.slcc.edu/trio/bruin-brains.aspx

Bruin Brains happens annually during Fall semester, typically the last week of November or first week of December.

To get involved either as a student or a faculty/staff mentor role, contact the SLCC TRIO Programs department.

notes:
