



Rebel Research and Mentorship Program (RAMP)

Congratulations to our incoming 2021-2022 Cohort

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**MONICA HERNANDEZ-
JOHNSON**



**Ph.D. student,
Educational
Psychology**

**Advisor: Dr. Lisa
Bendixen**

**Undergraduate
Student Mentee:
Ivannia Cabrera**



This study takes a deductive objective approach to examine the purpose, motive, and results of the use of mixed methods research (MMR) as a mode of inquiry or research methodology. In addition, this project seeks to understand whether there is a connection to the use of MMR and critical inquiry. Critical Mixed Methods Research (CMMR) requires a paradigm shift, it is not a linear process but an iterative and interconnected one driven by the needs of the study to bring forth a more accurate portrayal and fuller picture, especially when conducting research with underrepresented and marginalized groups. The likely role of the mentee will be to engage in the discussions of what is Critical Mixed Methodology, data preparation, coding, and cleaning. Mentee will be invited to participate in the presentation of research in local and out-of-state conferences, as well as any publications that result from this project.

IVANNIA CABRERA

**Junior, Working towards
my B.A. in Anthropology
and Psychology**

**Faculty Advisor: Lisa
Bendixen**

**Graduate Student
Mentor: Monica Johnson**



Double majoring has allowed me to have a broad idea of what my research interests are, varying from gender variables in sports, drug use in those struggling with mental health, and cultural aspects in Anthropology. I am currently involved in Sports Anthropology and would love to continue, but I was struggling to get into any kind of research in Psychology. Thanks to the RAMP program, I was given the opportunity to further my knowledge of Psychology and gain experience in a program that exudes success. As graduate school becomes more and more competitive, I know I will have the range of topics that will allow me to pursue a career as a researcher and a psychologist.



Howard R. Hughes College of Engineering

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MEENA EJJADA

**Ph.D. student in Civil
and Environmental
Engineering and
Construction**

**Advisor: Dr. Erica J.
Marti**

**Undergraduate
Student Mentee:
Fabianny Anez-Cohen**



Research Area: Water is a scarce commodity and the need for alternative water supplies has increased rapidly. Therefore, reclaimed water and stormwater management play a significant role in meeting our daily demands for water consumption and irrigation. Our current project focuses on managing water reclamation to resolve water scarcity issues and provide safe water for irrigation.

Outcome: The research experience will allow you to gain a better understanding of existing water issues, treatment technologies, and design strategies to address problems in water reclamation. By taking part in this interdisciplinary research, and you will build knowledge in engineering, chemistry and biology. Through exposure to lab work and research, you will be prepared to tackle research as a graduate student.

Roles: (1) Review the literature to understand the proposed study plan, (2) conduct experiments, (3) collect and analyze data, (4) present project results at conferences and (5) draft report and/or journal article.

FABIANNY ANEZ



**Junior, Working towards
my B.S. in Civil
Engineering**

**Faculty Advisor: Dr. Erica
Marti**

**Graduate Student
Mentor: Meena Ejjada**



As a future environmental engineer, I am ready to utilize my love for STEAM fields to improve access to safe drinking water for millions of people in need. Through innovative thinking, technology, and research, I intend to find tangible solutions to various water system challenges. The RAMP program will broaden my understanding of our current water crisis and water treatment technologies. Furthermore, it will allow me to translate my ideas from paper into the real world. The RAMP program will let me take environmental studies into practice and prepare me for future internships and career opportunities. Due to my relentless passion for improving water quality for developing countries, I hope this research could be helpful for my future thesis. Finally, the RAMP program will allow me to collaborate and write my first scientific research journal article.

SHEKHAR SINGH



**Ph.D. student,
Computer Science**

**Advisor: Dr. Fatma
Nasoz**

**Undergraduate
Student Mentee:
Hassan Adam**

Emotions are a powerful tool in communication and one way that humans show their emotions is through their facial expressions. In the field of Artificial Intelligence, Facial Expression Recognition (FER) is an active research area. It is tough to classify images with multiple class labels and more problematic when the size of an image and dataset is small. Our research focusses on analyzing the image dataset using Machine learning and Deep learning techniques and filling a gap between supervised and unsupervised learning by using Generative Adversarial Networks (GANs). GANs have been extensively used in multiple computer vision applications. We believe that GANs will also be helpful in the face dataset like FER2013 to generate synthetic images and will lead us to address the overfitting issue using data augmentation techniques.

To become a successful independent researcher, the mentee has responsibilities as well:

- Doing literature review and discuss findings as a team
- Assisting with analyzing image datasets
- Contributing to the writing of the manuscript
- Co-Presenting research work at the university or national level conferences
- Willing to learn with a positive attitude and not be afraid of failure

HASSAN ADAM



**Senior, Working towards
my B.S.E in Computer
Engineering**

**Faculty Advisor: Fatma
Nasoz**

**Graduate Student
Mentor: Shekhar Singh**

My research interests are in Intelligent systems, Facial Recognition, and usage of ML in Health-Tech. I am drawn to these areas due to their potential in changing the world, such as the benefits of ML in health-related areas, which helps with genome identifications.

I applied to the RAMP program to help me advance to my postgraduate degree and help me navigate my future. The professor and Ph.D. mentor, whom I am currently working with under RAMP, possess expertise in my areas of interest. So a decade from now, I would like to see myself working in a career in one of these areas.

**SURAJ VENKAT
POCHAMPALLY**

**Ph.D. Student,
Mechanical Engineering**

**Advisor:
Dr. Jaeyun Moon**

**Undergraduate Student
Mentee: Maaike
Parajes**



PROJECT DESCRIPTION:

We will study the surface interaction between carbon-based porous materials and toxic pollutants soluble in water, resulting in the development of new efficient remediation processes and materials for groundwater recovery, especially at the Department of Energy (DOE) nuclear sites. In this project, we will produce biochar (carbon-based porous matter) from biomass feedstocks, subsequently to modify the biochars to enhance their sorption capability, and finally to use it for effective purification of groundwater from toxic pollutants. My undergraduate mentee, Maaike Parajes, will be helping with the material characterization on Scanning Electron Microscopy (SEM) and performing some tests like the contact angle measurement test. She will also do a literature review on new materials and methods which support the project.

MAAIKE PARAJES



**Senior, Working
towards my B.S. in
Mechanical
Engineering**

**Faculty Advisor: Dr.
Jaeyun Moon**

**Graduate Student
Mentor: Suraj Venkat
Pochampally**



As a mechanical engineering student, I aim to develop critical research skills that will build the foundation of my career. In the future, I envision myself as a biomedical engineer, having my own research lab, creating artificial organs, and studying the properties of materials that greatly improve the quality of health for those who need it.

Currently, I am working as an undergraduate research assistant that studies the adsorbent properties and characterization of biochar using SEM analysis. Our goal is finding alternative and creative ways to purify groundwater systems.

Through the RAMP program, I will learn valuable and relevant experience that will further grasp my knowledge of the field.



College of Fine Arts

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CATHERINE M. PRATT



**M.F.A. Student,
Department of Theatre
Arts**

**Advisor: Brackley
Frayer**

**Undergraduate
Student Mentee:
Arielle Brown**



Creating the mood, atmosphere, and environment while bringing out themes and ideas are just part of a lighting designer's work on a theatrical production. Collaboration, creativity, and working with other designers and the director are important aspects of the work done on a production. As the lighting designer for the musical *Little Shop of Horrors* being produced through the Nevada Conservatory Theatre, my research project involves researching, creating, implementing, and documenting the lighting design.

The undergraduate mentee will be able to experience both the artistic side and technical side of lighting design for a production. The mentee will be involved in time period research, paperwork documentation, assisting with planning and leading load in, and be a part of the lighting design team during technical rehearsals.

ARIELLE BROWN



**Junior, Working towards
my B.F.A. in Dance
Production and
Management**

**Faculty Advisor: Michael
Jarett**

**Graduate Student
Mentor: Catherine Pratt**



Through this mentorship opportunity, I will explore my interest in lighting design and how it subconsciously affects the audience's perception of the performance. This opportunity to work with Catherine Pratt will give me the chance to explore my interests, and the skills required to excel in my career path.

My post-graduation goal is to become an assistant lighting designer for various types of performances. Since I am also interested in performing and choreography as a professional dancer, I would like to utilize my knowledge of lighting design to shape how my work is perceived. Ultimately, I would like to become a professional lighting designer, bringing light to concerts and theatrical works around the globe.

RYAN BOND

**Master of Music
Degree,
DMA candidate
UNLV School of Music**

**Advisor: Dr. Timothy
Jones**

**Undergraduate
Student Mentee:
Connor Thorson & Ciya
Clyde**



A few topics I would like to tackle would include, *Music and Social Justice*, *Learning an Instrument and its effects on scholastic success*, and *Drumming: its effects on physical and mental health*. While each of these topics would tackle different sides of music, I understand that we will only have enough time to work on one. I feel it would be beneficial to allow my mentee to have a say in choosing one of these topics.

Specific responsibilities would include academic research, outreach to our community, collaboration with music majors and non-music majors, creating surveys and gathering data. These responsibilities will be divided up according to the Mentor and Mentee's strengths in organizing how each will be delivered. The collective information and final product will be delivered in two mediums, an article and poster/PowerPoint method. This will be presented side by side with mentor and mentee in a collaborative/team method.

CIYA CLYDE

**Junior, Working towards
a B.M. in Applied Music
with Concentration in
Violin as well as a B.S. in
Kinesiology**

**Faculty Advisor: Rochelle
Walker and Dr. Jeremy
Meronuck**

**Graduate Student
Mentor: Ryan Bond**



Some research has suggested that well over 80% of musicians have experienced some level of pain during their careers. This goes to show that there is a fundamental problem in practice methods that are currently taught.

I plan on furthering my education in physical therapy so that I can be of aid to the music community and help reshape the disarrayed practicing methods that leave many musicians permanently impaired. Researching different pedagogical methods, specific instrumental techniques in relation to the human anatomy, and how mental imaging and perception of one's body affect a person's performance are all things I would like to explore in my career.

RAMP will allow me to start this process of seeing how music affects one's body and mind in the drums category with Mr. Bond. This opportunity will not only further my experience in conducting the research itself, but will also help me navigate the specifics of the direction of where I can go in future research upon completion of this program.



William F. Harrah College of Hospitality

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NASIM BINESH

**Ph.D. student,
Hospitality
Administration**

**Advisor: Dr. Amanda
Belarmino & Dr.
Robert Rippee**

**Undergraduate
Student Mentee: Joo
Yeun Kim**



Title: **Artificial intelligence use
in hospitality:**

Machine/human interface.

We are looking for an enthusiast undergrad that is willing to be part of this study in form of **either research assistant or a software engineering** student. As a research assistant, the undergrad student will oversee the data collection, cleaning data, data analysis, and help with writing the report and present the findings in conference(s). As a software engineering student, undergrad student will oversee programming our robot and will gain an opportunity to work on a service robot.

JOO YEUN KIM



**Junior, Working towards
my B.S. in Hospitality
Management, minoring
in Japanese**

**Faculty Advisor:
Dr. Amanda Belarmino &
Dr. Robert Rippee**

**Graduate Student
Mentor: Nasim Binesh**



Why are you interested in working with the chosen graduate student(s)?

The research title seems interesting to me. It's a study of Artificial Intelligence use in hospitality. I think hospitality and service is something that cannot be replaced by machine because it is deeply connected to human feelings. However, I believe that it can be better if people apply advanced technology. That is why I want to find out and help research the AI use in hospitality.

How will participating in the RAMP help you reach your goals?

It will help me in various ways. First, I am not familiar with AI use in hospitality so I can learn a new concept. Participating in a research project is a great opportunity to broaden my perspective and ability.



School of Integrated Health Sciences

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CHRISTIAN ISON


**Ph.D. student,
Department of
Kinesiology and
Nutrition Sciences**

**Advisor: Dr. Janet S.
Dufek & Dr. Mohamed
B. Trabia**

**Undergraduate
Student Mentee:
Samara Miller**



Impaired postural control and stability are observed in people diagnosed with diabetic peripheral neuropathy (DPN), a worsening progression of diabetes mellitus (DM). However, the degree to which these balance impairments develops is not clearly understood.

Therefore, to better understand how the changes in dynamic postural control and stability inform us about the progression of DM and DPN, the purpose of this research is to (a) assess dynamic postural control and stability in pre-diabetic, diabetic without neuropathy, and diabetic with neuropathy patients and (b) investigate how changes in postural control and stability inform us about disease progression of DM and DPN.

The undergraduate student will likely be responsible for 1) Surveying and summarizing literature, 2) Assisting the graduate student with subject recruitment and scheduling, 3) Data collection, 4) Pre-processing data and descriptive analysis and, 5) Assisting the graduate student in the preparation of abstract and poster for the conference (s).

SAMARA MILLER


**Junior, Working
towards my B.S. in
Kinesiology**

**Faculty Advisor: Janet
Dufek**

**Graduate Student
Mentor: Christian Ison**



My career goal is to be a physical therapist while incorporating my interest in biomechanics. Participating in the RAMP program will help me reach my career and academic goals by introducing me to all the intricacies and processes of producing research while also gaining knowledge in my interests in biomechanics. I am interested in the human body and how it is capable of recovery also kinetics and kinematics. Those two concepts opened my mind to the biomechanic aspect of kinesiology. I think it's additionally important to know how critical movement is for preventing injuries as well as to improve one's quality of life.

KIT YEE LEUNG

**I.H.S Ph.D. student,
Department of Health
Physics and Diagnostic
Sciences**

**Faculty Advisor:
Dr. Yu Kuang**

**Undergraduate
Student Mentee:
KayLee Fritas**



Hepatocellular Carcinoma Detection (HCC) is the third leading cause of cancer death worldwide. Detecting HCC at earlier stages could reduce mortality rates 10- to 50- fold. Unfortunately, current strategies for early detection of HCC, including routine CT imaging and alpha-fetoprotein biomarker, are suboptimal. These strategies underestimate disease burden and extent and expose patients to unnecessary morbidity, risks, and expense. This project aims to change the paradigm for early detection of HCC by developing a convenient, clinically translatable multiplexing lipid species biomarker test using patients' plasma.

The undergraduate student mentee will perform data analysis on lipidomics profiles, electronic literature search and data extraction from lipidomics studies. I will write the manuscript while the student mentee will prepare graphs and figures.

The student mentee will learn about research ethics knowledge, electronic literature search, bioinformatic data analysis technique and data visualization.

KAYLEE FREITAS



**Senior, Working towards
my B.S. in
Pre-Professional Biology**

**Faculty Advisor:
Dr. Yu Kuang**

**Graduate Student
Mentor: Kit Yee Leung**



KayLee is a Hawai'i born and Nevada raised first-generation college student. She is interested in pursuing both undergraduate and graduate research in areas such as STEM and medicine before taking on her journey towards medical school to ultimately give back to the community as a physician. Her participation in RAMP as a mentee provides her with invaluable research/professional skills from her graduate mentor to guide her towards success in her future endeavors and one day, become a RAMP mentor as well.



College of Liberal Arts

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ALDO BARRITA

**Ph.D. student,
Department of
Psychology**

**Faculty Advisor: Dr.
Gloria Wong-
Padoongpatt**

**Undergraduate
Student Mentee: Alizia
Valentin**



My research project will study how forms of micro racism— racial microaggressions impact marginalized individuals. Specifically, we are interested in the response to these attacks in the form of stress and the coping mechanisms involved in this process. My mentee will be managing data collection and trained in statistical analysis for this study. Additionally, my mentee will collaborate in poster development and presentation at a national conference, as well as assisting on writing the manuscript for publication.

ALIZIA VALENTIN

**Junior, Working
towards my B.S. in
Psychology.**

**Faculty Advisor: Dr.
Gloria Wong
Padoongpatt**

**Graduate Student
Mentor: Aldo Barrita**



My research interests include emotion and personality, racial injustices and experiences, and substance use/addiction to name a few. I have a passion for social issues and work to inform others of the importance of diversity in our society, highlighting the benefits and how the lack of inclusion and diversity can have in one's personal life.

In the future, I will attend graduate school and pursue a PhD in clinical psychology, where I will be able to open my own practice in Las Vegas. My work will be composed of practices and techniques that utilize a humanistic and biological approach to provide a beneficial treatment for patients.

The RAMP program is a special opportunity to be able to work alongside graduate students and professors in the field that will be able to share their expertise and wisdom that I can learn and apply to my academic career and future endeavors.

DEMI KOURTESI, M.A.



**Ph.D. candidate,
Psychology**

**Advisor: Dr. Stephen
Benning**

**Undergraduate
Student Mentee:
Michal Newhouse-Van
Vlerin**



This study aims to understand whether being placed in extreme isolation such as that of solitary confinement can affect pro-criminal attitudes. If an increase in these attitudes is observed, we can infer that being placed in isolation has harmful consequences for inmates and therefore might increase non-compliance while in prison and perhaps recidivism rates post-release. Ultimately, this research will become a strong premise to the argument of abolishing solitary confinement, and through the joint effort of academic and public opinion, the US legal system may recognize the inhumanity of subjecting people to such extreme punishments. The undergraduate student is expected to conduct a literature review, to collect and analyze the data, and present the results jointly with the graduate student in local and international conferences.

MICHAL E.L. NEWHOUSE



**Senior, working toward
my B.A. in Psychology.**

**Faculty Advisor: Stephen
Benning**

**Graduate Student
Mentor: Dimitra Kourtesi**



My research interests include psychopathology, psychopathy in community populations, personality disorders, risk-taking, and PTSD. My goal is to be accepted into a clinical psychology program so I can one day treat people affected by the justice system and be involved with the hiring process of police officers. Participating in RAMP will help me reach my goals by providing a chance to conduct research I am passionate about at an undergraduate level and help me build strong relationships within the academic community.

JONATHAN ROLDAN


**PH.D. Candidate,
Department of
Anthropology**

**Advisor:
Dr. Alan Farahani &
Dr. Lisa Johnson**

**Undergraduate
Student Mentee: Lydia
Wolfe**



Market exchange carries important implications not only in the economic dimension but also in the social and political dimensions of the society that operated under such system. Previous research in the Maya Lowlands has demonstrated that market exchange was operating as early as 450-700 CE. This research project aims to propose a marketplace location at the ancient city of *Lakamha'*, Mexico (250-900 CE) using the configurational approach.

The undergraduate mentee will:

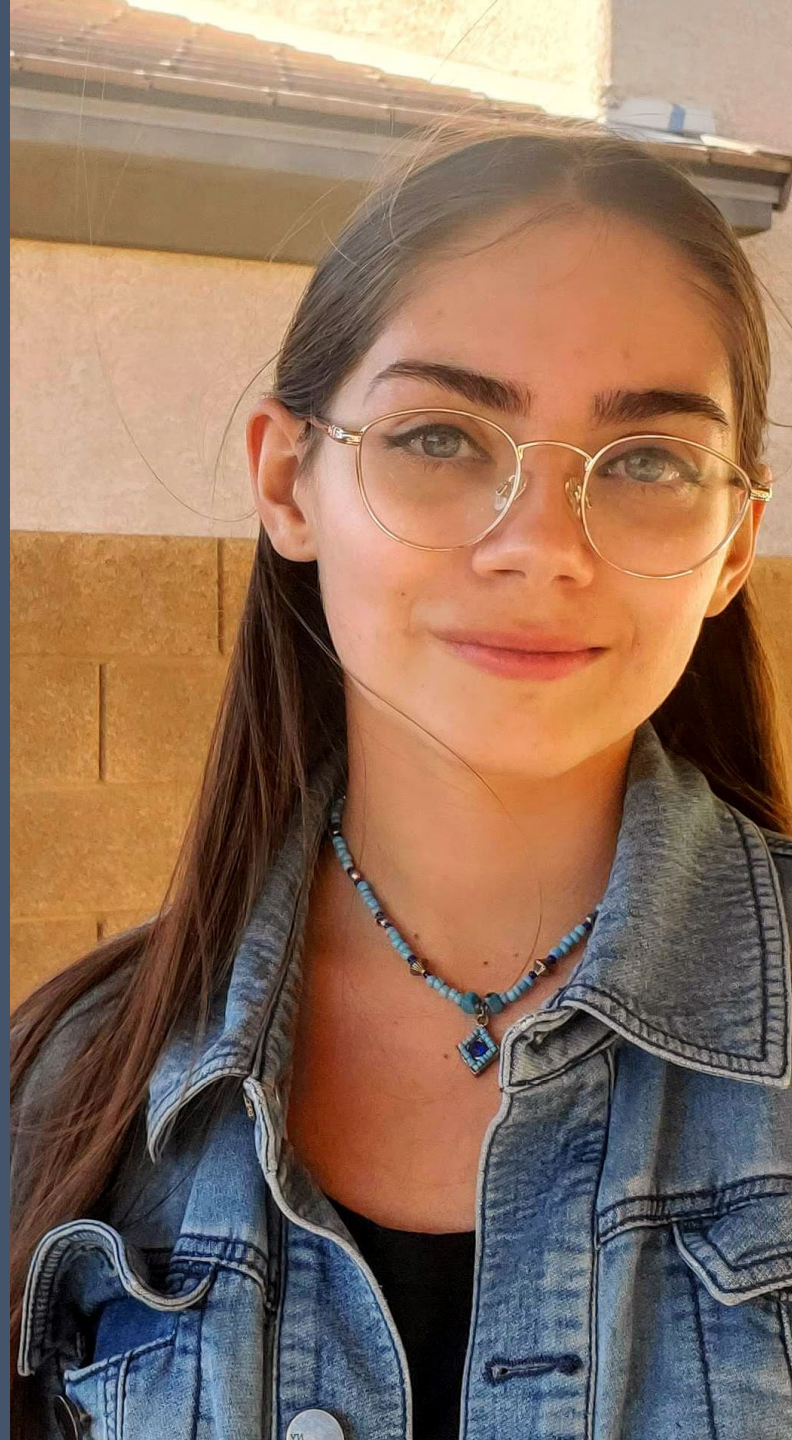
- Learn how to use Arcgis Pro
- Collect geographical information on *Lakamha'* (and other sites)
- Perform basic data analysis on architecture function
- Prepare and present results at a conference
- Develop other professional skills

LYDIA WOLFE

**Senior, Working toward
my B.S in Anthropology
with a focus on Native
American Studies**

**Faculty Advisor: Lisa
Johnson**

**Graduate Student
Mentor: Jonathan Roldan**



As a senior in anthropology minoring in American Indian and Indigenous studies, I wanted to do something that involved looking at the geography of a region in Central America or North America, especially after reading several peer reviewed articles discussing the use of the Geographical Information System (GIS). I am passionate about being able to conduct research in a manner that will provoke new ideas, reintroduce what has been done, and bring about something that is beneficial to all in the end. Since I am interested in the studies of Indigenous Peoples, I figured that working with my mentor Jonathan Roldan would bring about a better understanding to how the Maya lived and understand how marketplaces could have been placed in specific areas of the region of Lakamha, Mexico.

KRISTIN VIERRA



**Ph.D. Student,
Psychology**

**Advisor: Dr. Rachael
Robnett**

**Undergraduate
Student Mentee:
Janelle Ferraris**



For my RAMP project, my mentee and I will perform a content analysis of teen media. The purpose of this project is to capture the frequency of marginalized groups presented in popular teen entertainment and examine the extent to which issues of discrimination are discussed and the degree to which stereotypical behavior is portrayed. My mentee and I will work together to generate a codebook, code the selected television shows, analyze the data, and write-up a journal manuscript.

JANELLE FERRARIS



**Junior, Working on my
B.A in Psychology**

**Faculty Advisor:
Dr. Rachael Robnett**

**Graduate Student
Mentor:
Kristin Vierra**



One of my main research interests is racial microaggressions. Working in the GAME Lab has allowed me to study marginalized groups of people and their mental health and past experiences with discrimination. As a member of a minority group, I can attest to receiving microaggressions occasionally. My other research interests include mental disorders, anxiety, adolescent/adult mental health and counseling.

Participating in RAMP will help me reach my goals because I want to be more involved in my research, with the research community on campus, and to expose myself to other resources. RAMP will also help me further prepare me for applying to graduate school and focus on a career path that best suits me by having easy access to consult my graduate student mentor and my advisor. With the research and work I am anticipating to put in, I will present my research at our university research symposium.

KINDY INSOUVANH



**Ph.D. student,
Department of
Psychology**

**Advisor: Dr. Jennifer
Rennels**


**Undergraduate
Student Mentee:
Rachel DeWald**



This research project will examine how the expertise and appearance of women or men affect whether children trust statements made by an adult, learn what the adult knows, and make decisions about the adult's attributes. In this study we aim to replicate and extend previous findings that showed young children rely more on attractiveness than accuracy to determine which adult to trust and endorse. In addition to children's performance on the tasks we will collect eye tracking and heart rate data to better understand how visual and sustained attention guide decision making.

For this project, my mentee will assist with data collection, participant recruitment, and data analysis. Additionally, we plan on submitting this study as a pre-registered report, therefore my mentee will gain experience with the collaborative process of writing and submitting a registered scientific report. Finally, my mentee and I will work on creating a poster or presentation of the study's preliminary findings.

RACHEL DEWALD



**Senior, Working towards
my B.A. in Psychology
with a minor in
Neurology**

**Faculty Advisor: Dr.
Jennifer Rennels**

**Graduate Student
Mentor: Kindy Insouvanh**



When you think of autism, you are likely to consider the social deficits often associated with an autistic person. Studies have often pointed to the ways socially in which an autistic person is lacking or deficient compared to a typically developing person. However, recent discoveries are showing that there is more to the story than a delay in social development, but it is more likely a social incongruence that leads to miscommunication between an autistic person and a non-autistic person.

In my research I hope to continue the neurological research being conducted to map an autistic brain to discover the neuronal intricacies involved in the social interactions that we experience from day to day. I hope to shed light on the differences in social communication to enhance interactions for all.

I am so grateful to be have been chosen for the RAMP program as it will allow me to work hands on with research development under the guidance of a mentor. My long-term goals include attending graduate school to obtain my Ph.D. and ultimately developing research of my own in the future. RAMP will not only set me up for success here at UNLV but will also offer me an experience that I will carry forward into my career.

TAYLOR FLAHERTY

**Ph.D. Student,
Department of
Anthropology**

**Advisor: Dr. Jennifer
Byrnes**

**Undergraduate
Student Mentee:
Adrienne Dizon**



Stigmas placed on the transgender (trans) community make these individuals highly susceptible to systemic and interpersonal violence around the world. Their bodies and identities may also experience postmortem (i.e., after death) violence in forensic cases as trans individuals are often misgendered, given inadequate care, or have their cases run cold. Unfortunately, trans identities are often excluded from forensic anthropological research; my study aims to rectify this by analyzing the intersectionality of violence experienced by trans decedents. Using the Transgender Day of Remembrance database, we will analyze global data on the types of violence experienced by trans decedents during life, fluctuations in lethal violence over time and location, language used to discuss victims, and whether cases remain unsolved.

The mentee for this project will collaborate with us to explore relevant literature, build the research design, mine through and codify data, perform statistical analysis, and co-author presentations and publications. This is also a great opportunity for an undergraduate to experience research at the graduate level, expand their academic network, and participate in a novel study that aids a vulnerable population.

ADRIANNE DIZON



**Year: Senior, Working
towards my B.S. in
Biological Sciences**

**Faculty Advisor: Dr.
Jennifer Byrnes**

**Graduate Student
Mentor: Taylor Flaherty**



My research interests include gender/sexuality studies, family studies, and human development. These areas piqued my interest after taking Couples and Family Therapy (CFT) and other social science courses. I am intrigued to learn more about the LGBT community in an anthropological perspective and shed light on their lived experiences. After the RAMP program, I plan to attend graduate school related to these research interests.

The RAMP program will provide me with a valuable mentorship and research opportunity. I will learn interpersonal skills, data analysis, and develop teamwork under the guidance of my graduate student mentor and faculty advisor. This year-long experience will encourage and empower me to be a successful leader and future graduate student.

TREVOR POLLOM



**Ph.D. Student,
Anthropology**

**Advisor:
Dr. Alyssa Crittenden**

**Undergraduate
Student Mentee:
Allyssa Sabelle Chua**



Background: Monitoring the zones adjacent to wildlife conservation areas is important because 1) these “buffer zones” influence the biodiversity within National Parks and, 2) in developing nations, such as Tanzania, individuals living on the edge of conservation areas often belong to marginalized Indigenous groups. Therefore, mapping land-cover changes in these areas helps researchers and policymakers understand the challenges faced by humans and wildlife. The current project plans to use satellite imagery to investigate land-cover change in the Lake Eyasi Basin area of Northern Tanzania; in doing so, we will contextualize the changing lifestyles of Hadza hunter-gatherers and Datoga pastoralists living just south of Serengeti National Park.

Why work on this project? This research is an opportunity to develop skills using geographic information systems (GIS). Further, we will produce land-cover change maps that are important to local peoples, non-profit groups working on the ground, and academics conducting research in the area.

Expectations of the mentee:

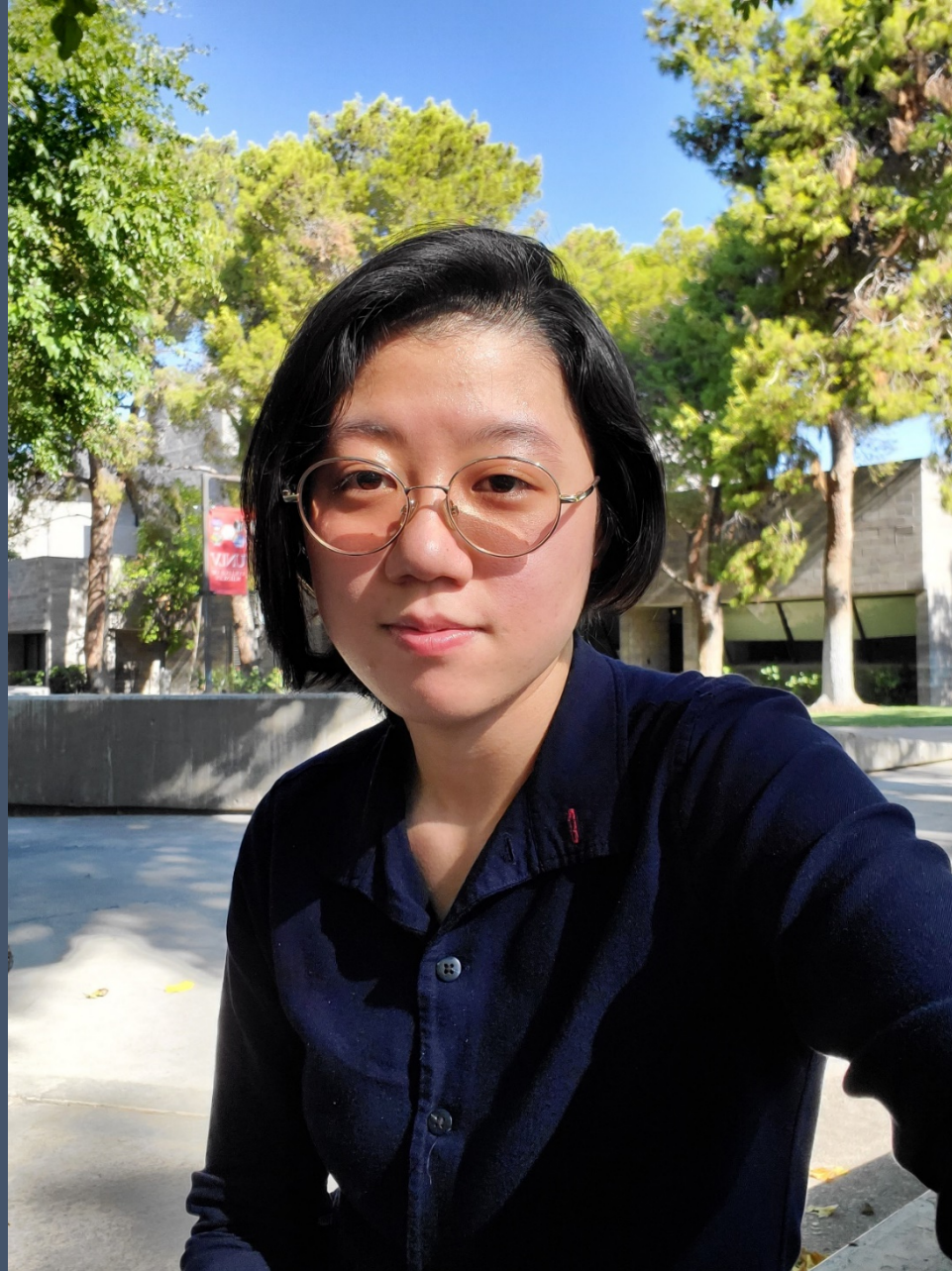
1) Read selected publications relevant to the current project, 2) Learn the basics of using GIS, particularly methods relevant for using remote sensing and satellite imagery, 3) Use qualitative and quantitative techniques to analyze satellite imagery, 4) Write-up findings and results of our study, 5) Prepare and present a poster at a national-level conference.

ALLYSSA SABELLE WEBB CHUA



**Junior, Working towards
my B.A. in Political
Science and
Anthropology
Faculty Advisor: Dr.
Alyssa Crittenden**

**Graduate Student
Mentor: Trevor Pollom**



My research interests are about indigenous communities and their interactions with societal actors such as other ethnic groups, government officials, policy makers, and more. Specifically, I am interested in how culture influences their collective decisions in resolving issues such as land encroachment, access to resources, and cooperation with others. It is just as important to understand the effects of rapid changes in society, such as globalization and tourism, to these communities. My goal for the research paper is to foster understanding of these indigenous groups. RAMP provides the opportunity of publication and poster presentation that helps me accomplish this goal. In addition, the program also aids my education through being a part of the research process.



College of Sciences

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DAVID RICE



**Ph.D. candidate,
Department of Physics
& Astronomy**

**Advisor:
Dr. Jason Steffen**

**Undergraduate
Student Mentee:
Tristan Benally &
Rosalie Chaleunsouck**



Building exoplanets and/or crashing them together. My research focuses on the interiors and dynamics of extrasolar planets using computational tools. Discoveries such as Kepler-10b, LHS 1140b, and the seven planets of the TRAPPIST-1 system show that small rocky planets are now within observational limits.

The radii and masses of observed planets allow for a diversity in composition and internal structure. I use a newly developed code using C++ and Python to study possible planetary interiors using the most up-to-date material properties.

I also study the stability times of planetary system by analyzing large ensembles of simulations to gain insight on mechanisms of planet formation.

The mentee will be responsible for incorporating new materials into our planet-building code or analyzing the data of planet simulations. This research will develop the mentee's skills in coding and data analysis and representation. I will provide the mentee opportunities to present their work and to be a part of publications.

TRISTAN BRYANT BENALLY

**2021, Sophomore,
working towards a
Bachelor of Science in
Physics, Bachelor of
Science in
Mathematics Faculty
Advisor: Dr.
Jason Steffen
Graduate Student
Mentor: David Rice**



I am currently interested in expanding our current understanding of the physical concepts that govern our natural world. My career goal is to become a all-rounder in physics such that I can model and solve problems both analytically and non-analytically. RAMP will allow me to not only develop new skills in computational techniques in Exoplanets but, also to have the wonderful opportunity to have guidance in learning and performing research with a mentor. I hope in being a part of this program that I will be able to become a great practitioner such that down the road I can offer the same generosity of knowledge given to me by my mentors in my life. I cannot be ever more grateful for a opportunity like this.



Greenspun College of Urban Affairs

UNLV | GRADUATE
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THE GRAD ACADEMY

SHON REED



**Ph.D. Student,
Department of
Criminal Justice**

**Advisor: Dr. Melissa
Rorie**

**Undergraduate
Student Mentee: Elia
Solano-Patricio**



Research has shown that heterosexual cisgender men, sexual minority men and women, and transgender individuals who experience intimate partner violence (IPV) often face difficulty in obtaining services for their victimization from victim service providers. This is particularly problematic for members of the LGBTQ+ community, as national estimates of IPV prevalence indicate that these populations experience IPV victimization at a rate equal to or greater than that of heterosexual women.

For this study, my mentee and I will be looking at systemic framings of IPV, and their associated discourses, as put forth by victim service providers. With these discourses identified, we will then explore how they impact staff perceptions of IPV and “legitimate victimhood.”

Through their time in RAMP, my mentee will learn more about U.S. framings of IPV, service distribution to victims, and norms associated with Western gender and sexuality. On a methodological level, my mentee will gain experience in qualitative coding, discourse analysis, and constructivist grounded theory approaches. Participating in this project will allow us to present our findings at national, regional, and university conferences.

ELIA DEL CARMEN SOLANO-PATRICIO



**Senior, working towards
my B.S. in Urban Studies,
a minor in Criminal
Justice, and the
Brookings Public Policy
Minor**

**Faculty Advisor:
Terance D. Miethe, Ph.D.
Graduate Student
Mentor: Shon Reed**



As an undergraduate researcher, I try to create synergy between my disciplines. I write about criminal justice topics such as prisons, policing practices, and violent crime. I am also interested in cross-disciplinary topics such as drug policy, transportation, and economic development. The underlying approach to all my research is policy analysis. After graduation, my goal is to earn a doctorate and become a policy scholar. By participating in the RAMP program, I will learn how to put together a dissertation, gain qualitative research skills, and hopefully present at research conferences, all skills which will propel me toward a Ph.D. in Criminology & Criminal Justice.