

Graduate College Mentorship Certification

Congratulations to our incoming
2020-2021 cohort

ALDO BARRITA

Ph.D. student,
Department of
Psychology

Faculty Advisor:
Dr. Gloria Wong-
Padoongpatt



Aldo is a Ph.D. student for the Experimental Psychology Program. He received his B.A. in Psychology at UC Berkeley in 2017. His research includes the impact of racial and gender microaggressions on the well being of individuals from marginalized communities.

Aldo will serve as president for the Experimental Student Committee at UNLV and Grad Rebel Ambassador during 2020-21 and is the current media coordinator for the National Latinx Psychology Association (NLPA). Aldo joins the Mentorship Certificate Program in order to gain and fortify his skills as a mentor as he hopes to become a Psychologist professor in the near future.

ANDREW ORTIZ

PH.D. STUDENT,
NEUROSCIENCE

DEPARTMENT OF
BRAIN HEALTH

FACULTY ADVISOR:
DR. JEFFERSON
KINNEY



Alzheimer's disease is characterized by progressive synaptic and neuronal cell death, learning and memory deficits, and overall cognitive decline. There are several genetic and non-genetic risk factors that substantially increase the likelihood of developing Alzheimer's disease. Type II diabetes is amongst the largest risk factor and can confer up to a 4-fold increase in developing the disease. Additionally, a surprising 80% of Alzheimer's disease patients have Type II diabetes and/or some degree of glucose intolerance.

My research aims to investigate the overlapping mechanisms between these two devastating modalities. Specifically, I am interested on how glial cells and a chronic immune response in the brain play a role in Type II diabetes and Alzheimer's disease.

The Graduate College Mentorship Certification is an amazing opportunity which will help refine my abilities as a mentor; and will give me a platform to learn new perspectives and tactics from other mentors.

ANDROMEDA HIGHTOWER

Ph.D. student,
Department of
Teaching &
Learning

Advisor:
Dr. Peter Wiens



Andromeda's research focus examines how cognitive and cultural biases interact in the process of preparing future educators for the complex, multi-faceted challenges of today's and tomorrow's classrooms. UNLV's emphasis on research and widely-experienced Teaching & Learning faculty were strong factors in the decision to join the UNLV T&L PhD program.

Mentorship plays an important role in the process of training and preparing teachers for the field, as well as continued support provided throughout their educational careers. Teaching is demanding both mechanically (methods of teaching, lesson planning, preparing learning experiences for students) as well as emotionally (building and maintaining relationships, trust, student voice and agency, collaboration with community partners), and mentors can provide benefits across all of these uniquely challenging and rewarding areas.

ANNE VILLACASTIN

Ph.D. Student,
School of Life Sciences

Advisor: Jeffery Shen



My study involves developing biotechnological tools that improve the cultivation of rice – a globally important crop that feeds 70% of our world's population. I do this by identifying important genes in rice that would allow production of higher yielding varieties despite pressures from environmental stress. The end goal of this project is to contribute to global efforts against food insecurity.

I understand that a career in biological sciences is rooted in mentorship and these relationships are especially vital for success in the research setting. The GCMC offers an excellent opportunity for us graduate students to improve our mentoring abilities by working closely with mentors and mentees. I hope to gain valuable lessons, skills and experiences in effective mentoring that would help me become a more relevant scientist.

BRIAN HOLLANDER

M.F.A. student,
Department of Theatre
Arts

Faculty Advisor: Judith
Ryerson



This creative project will be to research and design period and cultural appropriate costumes for a theatre stage show. This consists of implementing a creative, unique, and cohesive design that tells a story for all the characters within the show. During this process we will also be collaborating with faculty, staff, and a design team to ensure all the design elements work together and functions as a cohesive unit.

Specific responsibilities for both myself and the undergraduate student mentee will be to research the historic period, create and construct costumes which consists of purchasing, altering, resizing and revamping existing costume pieces. During this design process we will also develop costume, hair, and makeup plots; conduct fittings; and create patterns to fit design specifications. We will also be developing a PowerPoint design presentation and the show will also be produced on stage here at UNLV with the Nevada Conservatory Theatre.

BRIDGET LONGORIA

**Doctoral candidate,
Sociology**

**Advisor: Simon
Gottschalk, PhD**



I am a doctoral candidate in the sociology department working on my ethnographic study of a nonprofit social service agency looking at the interplay between cultural discourses, organizational framing, and interaction. This study focuses on the interaction between and amongst providers and recipients while considering how macro and meso level forces influence the implicit (and sometimes explicit) interpersonal negotiations that occur between actors in the setting. I am interested in how these negotiations influence both clients' abilities to access needed services and providers' efficiency in providing them.

I am a staunch believer that mentorship is key to success. My interest in this program stems from my desire to make sure that I am the best mentor to my students and other scholars that I can be.

CHANDLER HASSAN

Ph.D. student,
Department of
Chemistry &
Biochemistry

Advisor: Dr. Ernesto
Abel-Santos



My research project, "Effects of Spore Calcium and Dipicolinic Acid on *Bacillus anthracis* Virulence," seeks to examine which factors contribute to the lethality of anthrax infections. The goal of the project is to elucidate new understanding of the mechanisms used by *B. anthracis* to thwart our immune systems and cause disease.

As a beneficiary of mentors, I understand how important effective communication skills are for a successful mentor-mentee relationship. I joined the GCMC program to further develop these skills and to acquire new knowledge to better serve my undergraduate mentee.

CELENE FULLER



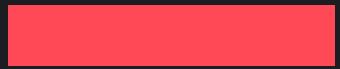
**Ph.D. student,
Sociology**

Barbara Brents



We will be working with non-profit NARAL Nevada to examine barriers to abortion access in the state. I will conduct in-depth interviews with staff and providers at abortion clinics in Nevada. This primary interview data will be combined with secondary data including abortion rates, access to healthcare in the state, socioeconomic status of abortion patients, and other local trends over time relative to the national average. The mentee and I will work with connected reproductive rights non-profit organizations to compile and present a report to the Nevada state legislature in order to influence local reproductive policies. I want to be in the GCMC because I have focused my entire teaching career on impassioning the next generation of leaders. I have learned and grown with my students and want to provide them with the same kind of supportive environment I have been lucky to experience as a student.

CHARLI AGUILAR



**I.H.S. Ph.D. Candidate
School of
Integrated Health
Sciences**

**Advisor: Dr. Graham R.
McGinnis**



I am entering my third year in the Interdisciplinary Health Sciences Doctoral program. During my first two years of the program I focused on my course work and developing my lab skills while identifying the topic of my dissertation. My background is in exercise physiology, but I prefer to think of myself as a human physiologist. My PhD research will focus on circadian rhythms and the influence of time-of-day on the achievement of exercise benefits and improvement of cardiovascular health.

I am excited to be in the Graduate College Mentorship Certification program this year because I desire to improve my professional skills as a leader and advisor for my future career in academia. I hope to positively influence my mentee to identify his/her strengths and utilize them to reach their academic/career goals. I have been very fortunate to have mentors guide me in my journey as a student and I wish to extend that favor to the next generations of.

DALTON MCCAFFREY

Ph.D. student,
Department of
Geosciences

Dr. Simon Jowitt



U-Pb Dating of Rare Metal Granitic Pegmatites in the Virgin Mountains, NV

Granitic pegmatites, magmatic rocks with the unique ability to grow meter-scale crystals, are important resources for many rare-metals (e.g., Nb, Be) used in modern (e.g., computers), green (e.g., wind turbines), and military (e.g., jet engines) technologies. However, the processes that lead to the genesis of these mineral deposits are poorly understood. This study uses a combination of geologic mapping, geochemistry, and geochronology, specifically U-Pb dating of zircon, to constrain the timing of intrusion of these magmas and investigate potential sources for the pegmatites in the Virgin Mountains of Nevada. Understanding this would provide insight into the processes responsible for generating rare-metal deposits and guide exploration for these rocks.

I applied to RAMP because I was fortunate enough to experience a similar program during my undergraduate career, which has guided me to where I am today. I would like the ability to provide this opportunity and experience to another undergraduate student.

DANIEL PEREZ



**Ph.D. candidate,
Anthropology**

**Adviser: Karen G.
Harry, Ph.D.**



My research interests include archaeology, prehistory of the North American Southwest, ceramic analysis, prehistoric group identity and migration, archaeological ethics, and Geographic Information Systems (GIS). More specifically, my doctoral dissertation research focuses on understanding the relationship between expressions of prehistoric group identity, individual agency, and migration patterns in the archaeological record—as depicted on painted pottery vessels over time—between the Virgin and Kayenta Branch Puebloan cultural groups of the northern American Southwest. Through participation in the Graduate College Mentorship Certification program, I look to establish and develop effective mentorship strategies and practices as I work towards mentoring students in higher education settings, within the context of anthropological and archaeological education and research, upon completion of my doctoral program at UNLV.

ELIZABETH JOHNSON



**Ph.D. student,
Anthropology**

Peter Gray

As a second-year Anthropology Ph.D. student, my primary interests are in anthrozoology (or human-animal interaction). My background promotes my knowledge and interest in the changing material cultural aspects of pet-keeping and animal welfare.

As a pilot Ph.D. project, I am currently testing to determine whether women's salivary oxytocin levels increase more when interacting with a pet cat. While there is a volume of literature on the role of the hormone oxytocin in nonhuman and human social behavior, there is little research on cat interactions. The methodology of this project and the subject matter makes it the first of its kind, making it a fantastic opportunity for a mentee.

Mentoring and working with an undergraduate from different fields will be productive for everyone involved, as we can both utilize each other's knowledge and experience within various disciplines and have the opportunity to gain first-hand experience.

ELIZABETH MONROE

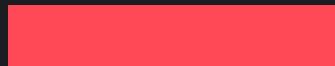
Ph.D. Student,
Department of
Chemistry

Advisor: Dr. Cory
Rusinek



I am originally from El Paso, TX and moved to Las Vegas in 2007. I received my BS in Chemistry from UNLV in 2012. I then worked in the nutraceutical industry, developing methods and testing vitamins. It was interesting work that led me to the realization that I was ready to attend graduate school. My time in industrial labs allowed me to grow my professional expertise as well as my interest in teaching and guiding others. I thoroughly enjoyed my time as a lead chemist, leading those new to the lab to become comfortable with their surroundings, to implement the things they learned in school, and to continue learning along the way. Thus, being a part of the GCMC was something that I knew I had to do. My research project will focus on developing a tool for the assessment of oxidative stress, namely the detection of hydrogen peroxide (H_2O_2) and peroxynitrite ($ONOO^-$). Finding a practical and efficient way to study oxidative stress would grant us a deeper understanding of several neurodegenerative diseases as well as age-related cancers.

GEORGE WILLIAM KAJJUMBA



**Ph.D. student,
Civil and
Environmental
Engineering &
Construction**

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



Much of the world's population feed on grains (wheat, rice, and corn). Corn is as sensitive as it is productive. This thirsty, fast-growing plant goes into thermal shock in drought.

In 2014, California lost over \$2.2 billion in crop production due to drought. The Horn of Africa (in 2011) and Sahel (in 2012) faced humanitarian disasters due to food and water scarcity (FWS).

The higher frequency of droughts and erratic nature of rain, combined with underlying economic and social vulnerabilities, has meant that FWS is here to stay.

To combat water scarcity and improve food security, water reclamation and reuse is a logical option. We treat water with lanthanides an emerging class of coagulants and reuse the water to irrigate corns.

As a beneficiary of mentorship programs, GCMC gives an opportunity to pass on this valuable experience to other similarly students like myself.

HEATHER THOMPSON



Ph.D. student

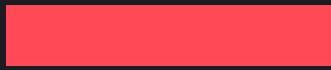
**Department of
Counselor Education,
School Psychology,
and Human Services**

**Advisor: Dr. Samuel
Song**



My research interest involves restorative justice (RJ) practices which can be described as a way to support accountability for student behavior with a focus on repairing harm rather than using zero-tolerance discipline policies that have shown to be ineffective. Zero-tolerance discipline policies are one factor related to the disproportionality in discipline that ultimately contribute to the school-to-prison pipeline. RJ needs to be critically examined as an intervention to understand its effectiveness in the school setting. My research team, advised by Dr. Samuel Song, partners with CCSD to evaluate the effectiveness of RJ practices in schools. My project will focus on the implementation science of RJ, specifically related to teacher, administration, and school personnel attitudes regarding RJ and how that relates to effective implementation. I am interested in the Graduate College Mentorship Certification because it provides an opportunity for training and practical experience providing guidance and mentoring a student. My future goals include being in academia in which I will be teaching courses, completing research, and mentoring graduate and undergraduate students. This opportunity allows me to enhance my training to be more prepared to reach my goals and support others in reaching theirs.

JAMES LARSEN



**Ph. D.
Student
Hospitality Admin.**

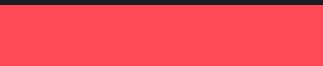
**Advisor: Dr. Amanda
Belarmino**



I've been uncommonly fortunate to have been surrounded by many, many talented people throughout my personal and professional lives. From a professional perspective, the team at The Yale Club of New York City taught me that hospitality is about people; the students and faculty at Cornell's Hotel School taught me about the business of hospitality; the team at the Waldorf-Astoria taught me about legendary service; the team at Caesars taught me to be intensely analytical; and my colleagues at UNLV have taught me the value of creative collaboration. None of these lessons would have been possible to learn without the guidance and support from top-notch mentors.

My research is focused on emotional engagement between casino hosts and their guests. We live in the greatest city in the world for this line of inquiry—there's a literal living laboratory blocks away from UNLV, and it's where I've spent the past six years of my hospitality career. The potential for continuous improvement and constant hypothesis-testing is limitless. I look forward to further entrenching myself within the UNLV community and nurturing the symbiotic relationship between a world-class university and a world-class casino-hotel industry.

JOHN FALCON



**Dual JD/MBA
candidate**

Advisor: *unsure



John Falcon is a third year JD/MBA student at the William S. Boyd School of Law and Lee School of Business. John previously worked in Las Vegas as a human resource executive, social service case manager, and most recently as a tennis instructor. With the Graduate College Mentorship Certification, John hopes to become an additional resource to foster future students' academic and professional goals amidst the unprecedented COVID-19 crisis.

John's research focuses on gaming law policy. He is working with various stakeholders to explore changes in gaming legislation for the State of Nevada. John intends to pursue the Gaming Law LLM in Spring 2021 and hopes to practice various civil law matters after graduation.

KARLI NAVE

**PhD Student,
Department of
Psychology**

**Faculty Advisors: Dr.
Erin Hannon, Dr. Joel
Snyder**



As an aspiring research psychologist, Karli values not only her research, but also the opportunity to serve as a mentor to undergraduates and share her passion for research with them. It is for this reason that she has joined the Graduate College Mentorship Certification program.

Karli's research integrates child development and auditory neuroscience to investigate how children's perception of auditory rhythm develops. Specifically, she uses a technique called electroencephalography, or EEG, to better understand the underlying neural mechanisms crucial for auditory perception. Ultimately, her research aims to explain how the human brain processes rhythm in the sounds we hear, such as music and speech.

Through her experience with the GCMC, Karli seeks to improve her mentorship skills, to meet and learn from other fellow mentors from different departments, and to acquire tools to ensure her mentorship is an effective and rewarding experience for both herself and her mentees.

LAURENCE MYERS REESE

MFA student, Art
Advisor: Wendy Kveck



Laurence Myers Reese works in performance, installation, painting, and video. His research investigates the use of the queer body and queer semiotics to navigate and disrupt cis-normative environments. He is a co-founder of the Vegas Institute of Contemporary Engagement, a research lab for art and experimentation at UNLV.

He earned his BFA in Studio Art and a minor in Art History from the University of Oklahoma, Norman in 2012. He has worked as an independent curator, arts writer, non-profit administrator, factory worker, art instructor, and art gallery director. He recently co-curated *The Other Side of Paradise* at the Barrick Museum of Art, and his writing is regularly published in the quarterly *Art Focus* magazine.

MILAN PANTOVIC

**Ph.D. student,
Integrated Health
Sciences**

Advisor: Brach Poston



My main scientific interest is motor control and learning. Motor control is essential for every movement and activities, ranging from simple to complex motor tasks. Application of non-invasive electrical brain stimulation also known as transcranial direct current stimulation (tDCS) is a viable strategy to improve motor skills in healthy and for mitigation of negative changes in motor control and learning in elderly and clinical population.

Typing skills are highly important in everyday life and the workplace. One possibility for improving typing skills might be the addition of tDCS during typing activities. This technique can change how the brain works and may improve typing skills in healthy and clinical population. However, the effects of this stimulation on typing skills are still unknown.

The RAMP Program will provide an opportunity for an undergraduate student to learn the latest techniques in the fields of human motor control and learning. In addition, obtaining research experience and publishing a paper while an undergraduate will greatly aid the student in obtaining future career goals.

RACHEL ALI RODRIGUEZ



**PhD student,
Neuroscience**

**Faculty Advisor:
Rochelle Hines**



Part of my research interest focuses on epilepsy. One third of people diagnosed with epilepsy live with uncontrolled seizures because available treatments are ineffective. Seizures result from excessive firing of neurons. A key site in the control of neuronal activity patterns is the axon initial segment (AIS). It remains to be determined how the morphology and composition of the AIS is affected in epilepsy.

We will analyze AIS morphology including length, width, tortuosity, and periodicity though development. Our mentee will learn Golgi stain analysis on the confocal microscope, immunohistochemistry, laser scanning microscopy, and data analysis. She will also gain experience from transcardial perfusions, tissue collection, and animal husbandry.

This project will give us understanding of the functional implications of AIS morphology and organization, providing new insight needed to develop therapies to control neuronal signaling.

As a first-generation college student, education is very important to me. Through the Mentorship Certification program, I will learn the skills necessary to become a great mentor to help other students to succeed in academia.

SURAJ VENKAT POCHAMPALLY



**Ph.D. student,
Department of
Mechanical
Engineering**

**Advisor:
Dr. Jaeyun Moon**

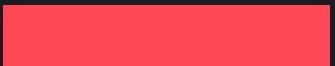


In my research, I study the surface interaction between carbon-based porous materials and toxic pollutants soluble in water. Resulting outcome is used in the development of new efficient remediation processes and materials for groundwater recovery, especially at the Department of Energy (DOE) nuclear sites. In this project, I work on the production of biochar (carbon-based porous matter) from biomass feedstocks to modify the biochars in order to enhance their sorption capability and use them for purification of groundwater from toxic pollutants.

I have reached this stage in my life with the help of several mentors and well-wishers. They have helped me grow and stay motivated, on my path to achieve my goals. I would love to be able to pay it forward by acquiring the skill-set to guide those who seek mentorship.

I believe the Graduate College Mentorship program will be the first step in my journey as a mentor.

YASAMAN SAEDI



**Ph.D. student,
Department of Civil
and Environmental
Engineering**

**Faculty Advisor:
Dr. Jacimaria Batista**



Perchlorate (ClO_4^-) has been detected in groundwater and soil systems throughout the United States for the last two decades. This contaminant is known to block iodine uptake by the thyroid gland. Perchlorate biodegradation has been successfully observed in low saline areas. While the feasibility of biodegradation in high saline area using natural occurring bacteria has not been documented well.

The purpose of my research is to isolate, identify, and characterize perchlorate reducing bacteria in high saline area to degrade perchlorate.

The main two reasons that I would like to be a mentor to an undergraduate student in this program is to build my leadership skills and learn new perspectives. As a PhD student who is seeking to become a professor or a leader of industrial projects in future, I require to improve my abilities to have effective communication with people who are less experienced.