



MEET THE POSTDOCTORAL SCHOLARS

2022

UNLV | OFFICE OF
POSTDOCTORAL AFFAIRS

AVERY BAILEY

**Postdoctoral
Scholar, Physics
& Astronomy**

**Faculty Mentor:
Dr. Zhaohuan
Zhu**



Dr. Avery Bailey is a postdoctoral scholar working in the Physics & Astronomy department. His research is concerned with theories of planet formation and explaining the currently observed diversity of planetary systems. To this end, he performs high-resolution 3D radiation-hydrodynamic simulations of planets forming in protoplanetary disks. These simulations are particularly useful for studying accretion processes and the growth of gas giant envelopes within the first million years of solar system formation. These models and subsequent extensions including ever more refined physics will shed light on the conditions surrounding the growth of Jupiter-like planets and help astronomers to distinguish between various formation pathways.

KRISTINE BRAGG

**Postdoctoral
Scholar,
Educational
Psychology**

**Faculty Mentor:
Dr. Gwen
Marchand**



Dr. Kristine Bragg completed her PhD at UNLV in 2018 in Educational Psychology with an emphasis in embodied cognition and nonlinear dynamics of learning. As a postdoc working with the Office of Learning Analytics, she provides evaluation and assessment services for the Nevada Center of Neurodegeneration and Translational Neuroscience. Their methods explore the role of collaboration in team science through social network analysis. They also measure scientific influence and impact with bibliometrics. Other support services include mentoring assessment and measuring engagement of community outreach efforts.

SERGIO VILLA CORTÉS



**Postdoctoral Scholar,
UNLV Nevada Extreme
Conditions Lab**

**Faculty Mentor: Dr.
Keith Lawler**



After earning his Ph.D. degree in sciences at CINVESTAV-IPN (Mexico), Dr. Sergio Villa Cortes received a postdoctoral position at BUAP Physics Institute in Mexico. He joined NEXCL as a postdoctoral scholar in September 2022 under the supervision of Prof. Keith Lawler and Prof. Ashkan Salamat. Dr. Cortes interest is focused on studying superconducting properties, such as the isotope effect and the superconducting critical temperature in metal hydrides. He has also calculated structural, electronic, lattice dynamical, and electron-phonon coupling properties through Density Functional Theory in such materials. Now, Dr. Cortes is interested in studying the Electron- and Hole-doping effects on important superconducting properties of the metal Hydrides, such as the critical temperature and critical fields.

LEENA CYCIL

**Postdoctoral
Scholar,
Geoscience
Department**

**Faculty Mentor:
Dr. Libby
Hausrath**



Dr. Leena Cycil is a microbial ecologist and her research focuses on diversity and functions of a microbial communities in an environment and to understand their adaptations to environmental variations. Leena is particularly focused in understanding the in situ dynamics of microbial communities and their interactions with water, rocks, minerals in extreme (hypersaline, glaciers and dry environments) to understand the biogeochemical cycling at local and global scales that can also be scaled up to allow understanding about life on ancient Earth, and extra-terrestrial environments (e.g., Mars, Europa, exoplanets). Dr. Cycil seeks to answer these questions with a multidisciplinary approach that allows integration of data from traditional culture dependent microbial techniques, next-generation omics techniques in combination with geochemical data and modeling.

GINA DELGADO

**Postdoctoral
Scholar,
Teaching and
Learning**

**Faculty
Mentor: Dr.
Kenny Varner**



Dr. Gina Delgado received her Bachelor's in Painting, Master's in Post Secondary and Higher Education, and my Doctorate of Education in Leadership and Innovation, all at Arizona State University.

Her research is based on creating efficient organizational approaches to culture, processes, and professional development for higher education staff. She is also interested in studying how educators in multiple sectors use unconventional methods to impact education at all levels. Currently her projects focus on the development of identity within higher education as a Latina woman, how privilege shows up in online education, and how academic advisors can contribute to retention amongst teaching programs at universities.

She calls herself an eclectic researcher, because her interests all intersect at how identity comes into play in different areas of education.

In spare time, she is a professional artist, photographer, and videographer. She loves the movie Amelie and aspire to someday visit Europe.

Cara Haines



**Postdoctoral scholar,
Teaching & Learning**

**Faculty Mentor:
Dr. Kari Kokka**

Cara Haines is a former public high school mathematics teacher who now studies issues of equity in mathematics education, including how K-12 mathematics teachers can be supported to develop and enact more equitable instruction. In 2020, Cara earned her Ph.D. in Learning, Teaching, and Curriculum with an emphasis in mathematics education from the University of Missouri in Columbia, Missouri. After graduating, she worked as a postdoc at Vanderbilt University in Nashville, Tennessee for two years. Now, a postdoc at UNLV, Cara works with her faculty mentor, Dr. Kari Kokka, to support mathematics teachers working in Pittsburgh, Pennsylvania to develop and enact mathematics tasks focused on issues of social justice.

ANTHONY HARRINGTON



**Postdoctoral Scholar,
Nevada Institute of
Personalized Medicine**

**Faculty Mentor:
Dr. Edwin Oh**



Dr. Harrington earned his bachelor's (B.A Chemistry) and master's (M.S Biology) at the University of Nevada, Las Vegas prior to completing his Ph.D. (Chemistry) at the University of Nevada, Reno. Dr. Harrington research background involves chemistry (organic and peptide chemistry), microbiology and bioinformatics. Currently, he is investigating SARS-CoV-2 in wastewater using amplicon-based whole genome sequencing, where he monitor the variants circulating in the Las Vegas community. Additionally, Dr. Harrington is working on expanding wastewater surveillance to monitor other threats to public health such as antimicrobial resistance. His plans after his postdoc are to apply to tenure-track faculty positions and start his own research program. Dr. Harrington hobbies include hiking and cooking.

BIRAJ KAYASTHA

**Postdoctoral
Scholar, School
of Life Sciences**

**Faculty Mentor:
Dr. Boo Shan
Tseng**




Dr. Biraj Kayastha is a postdoctoral researcher in Dr. Boo Shan Tseng's lab at UNLV. He graduated with a PhD in Microbiology and Molecular Genetics from Oklahoma State University in 2020.

His undergraduate studies were focused on medical microbiology. During his PhD, he had the opportunity to diversify interests to microbial physiology, and protein biochemistry. Biraj's PhD research involved the determination of two different pathogenic aspects of the human pathogen *Pseudomonas aeruginosa*. He studied the role of carbonic anhydrases and a calcium binding protein of this organism in calcification and virulence.


His postdoctoral research in Dr. Tseng's lab involves determination of molecular mechanisms that drive *P. aeruginosa*-induced corrosion of mild-steel. Ship hulls, composed of mild-steel are deteriorated due to Pseudomonad-induced corrosion. The problem is of national economic importance but has not been widely studied. Biraj's current research aims to identify ways to combat such microbially induced metal corrosion.

NATHAN D. KOERBER



**Postdoctoral Scholar,
Nevada Institute on
Education Preparation,
Retention, & Research
(NIEPRR)
Nevada Educator Preparative
Institute & Collaborative (NV-
EPIC)**

**Faculty Mentor:
Dr. Kenneth Varner**



Dr. Nate Koerber is a Chicago native, but lived in Iowa, Colorado, and Tennessee before coming to Nevada and UNLV. He served as an ESL (English as a Secondary Language) Instructor in Colorado for 5 years before earning his PhD from the University of Tennessee-Knoxville in Educational Leadership & Policy Studies. His dissertation was case study research focused on how schools implement policy towards emergent bilingual students. Additionally, his research interests include educational policy, policy implementation and assessment, culturally competent leadership, and educating and empowering students from diverse language backgrounds.

SPENCER KRAUSS

**Postdoctoral Scholar,
Great Works
Academic Certificate
Program**

**Faculty Mentor:
Professor David
Fott**

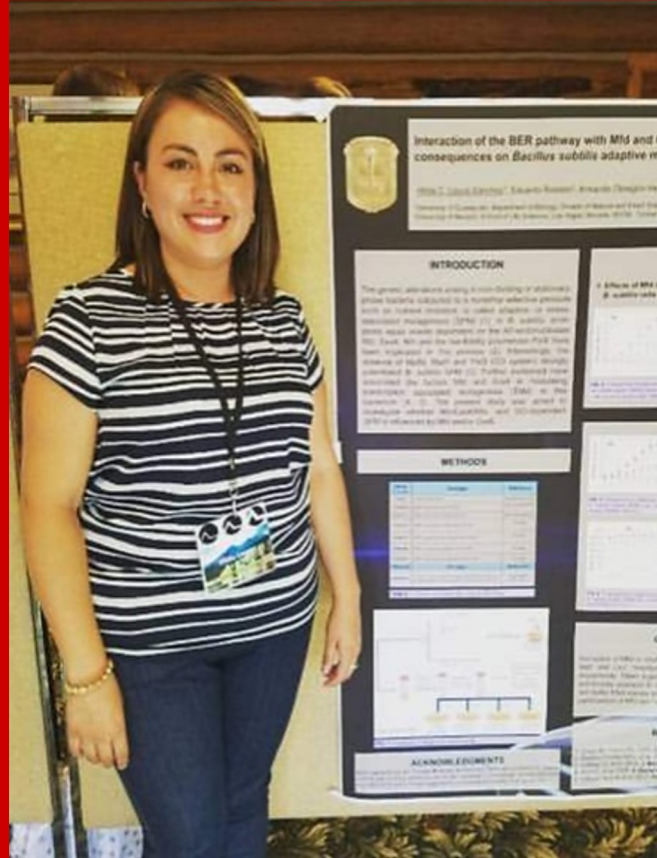


Spencer Krauss joined UNLV as a Postdoctoral Scholar in the fall of 2022. He holds a Ph.D. in political science from Baylor University, an M.F.A. in creative writing from the University of Oregon at Eugene, and a B.A. in English from San Diego State University. His research interests are in classical and modern political thought, politics and literature, and politics and religion. He is currently revising his dissertation—a new interpretation of Homer’s *Iliad*—for publication.

HILDA CECILIA LEYVA SANCHEZ

**Postdoctoral
Scholar, Life
Sciences**

**Faculty Mentor:
Dr. Eduardo
Robledo**



Dr. Sanchez is from Durango, Mexico. She received her Doctorate of Science (Biology) from the University of Guanajuato. Her favorite activity is traveling and getting to know different places and cultures.

The project that she is developing aims at understanding the molecular mechanisms by which the Mutation Frequency Decline Factor (Mfd) regulates gene expression at damaged DNA sites. Mfd was characterized as a factor that couples gene expression with the repair of DNA lesions. However, recent reports indicate that Mfd influences other cellular functions besides DNA repair, including microbial pathogenesis, transcriptional regulation, escape from stress and cell differentiation.

CARLA B. MADELAIRE



**Postdoctoral
scholar,
Integrative
Biology**

**Faculty Mentor:
Dr. Allyson
Hindle**



Dr. Madelaire is an integrative Biologist interested in how animals deal with environmental challenges at different levels of organization. Her current research at UNLV aims to investigate the physiological and genetically encoded resilience mechanisms in cells from diverse mammals to help us understand how and why some species can survive and thrive, while others might perish in the face of environmental challenge (e.g., high temperature and glucose, low oxygen). For this project they are using dermal fibroblasts as the model. They can be easily grown out of small skin biopsies, which allow us to study endangered species, enabling critical conservation research.

SOLENA MEDNICOFF

**Postdoctoral
Scholar,
Psychology**

**Faculty Mentors:
Dr. Erin Hannon
Dr. Joel Snyder
Dr. Stephen
Benning**



Dr. Solena Mednicoff (she/her) is a post doctoral researcher working with Drs. Erin Hannon, Joel Snyder, and Stephen Benning to study Misophonia. Her research interests include the neuroscience behind why we enjoy music and how the brain interprets and responds to music. Growing up in Las Vegas, Solena trained as a semi professional pianist and graduated from the Las Vegas Academy of the Performing Arts. After high school, Solena discovered her passion for science at University of Nevada, Reno where she earned a B.S. in Neuroscience and minor in piano performance. Solena went on to earn her Ph.D. in Cognitive Sciences, with an emphasis in Cognitive Neuroscience, at UC Irvine where her dissertation examined the cognitive and neural mechanisms of major/minor musical mode processing.

KRISHNAKUMAR DIVAKAR NANGEELIL

**Postdoctoral
Scholar, Health
Physics and
Diagnostic
Sciences**

**Faculty Mentor:
Dr. Zaijing Sun**



Education:

MSc Physics

MTech Advanced Information Technology

PhD Physics (Radiation Dosimetry)

Doctoral research focused on the development and applications of cutting edge optically and thermally stimulated luminescence materials in radiation dosimetry.

Professional Experience:

Scientific Officer in the Health Physics Section of Indira Gandhi Centre for Atomic Research, Dept. of Atomic Energy, India.

Expertise in:

Radiation dosimetry

Radiation detector instrumentation

Gamma spectrometry

Neutron Activation Analysis (NAA)

Optically and thermally stimulated Luminescence materials.

Current Research at UNLV:

NAA of environmental samples (Spanish moss, cotton seeds, water, and sediment) to investigate the negative impact of heavy metals in the environment on human health.

NAA as a precise technique for detecting genuine precious stones from counterfeits.

Development of Remote gamma spectrometry system

MARIKE PALMER

**Postdoctoral
Scholar, School of
Life Sciences**

**Faculty Mentor:
Dr. Brian Hedlund**



Dr. Marike Palmer completed her MSc (2014) and PhD (2018) in microbial systematics at the University of Pretoria, South Africa, under the guidance of Fanus Venter and Emma Steenkamp. Marike's scientific interests and skillset places her research at the transect between systematics and ecology. During her PhD and postdoctoral research, Marike has been part of large collaborative projects, where her expertise in genomics, phylogenomics and genetics, along with microbial taxonomy have contributed to our better understanding of several lineages of organisms. Currently, Marike's research also includes biodiversity exploration of the uncultivated majority of prokaryotes, along with environmental viromics. This research drives our understanding of biological innovation throughout evolutionary history and allows identification of potential biotechnological targets. Marike is also part of the ad hoc committee developing the SeqCode – a new code of nomenclature for prokaryotes described from sequence data and has been an invited speaker at multiple national and international conferences.

SARAH RAMOS

**Postdoctoral
Scholar, UNLV
Practice**

**Faculty
Supervisor: Dr.
Michelle Paul**



Dr. Ramos graduated with her PhD in Counseling Psychology from New Mexico State University (APA Accredited). She completed her pre doctoral internship at Southern Arizona Psychology Internship Consortium La Frontera (APA Accredited) where she specialized in working with children and adolescents. She holds a specialization certificate from New Mexico State University in providing mental health services to Spanish speaking populations. Her clinical passion is in working with the Latinx community from a strengths based perspective and in training other clinicians to provide services from a multicultural and anti oppressive lens.

At UNLV PRACTICE, Dr. Ramos provides trauma informed individual therapy services as well as supervises doctoral and master's level trainees in the Parent Child Youth Program (PCYP). Additionally, she has developed and implemented various child and adolescent psychotherapy groups. She assists with coordinating various community outreach efforts and partnerships to aid in addressing the mental health need in Nevada by increasing access to affordable, quality, and evidence based care. As UNLV PRACTICE continues to grow, Dr. Ramos has further assisted with providing clinical coordination at the new satellite location in the Las Vegas medical corridor.

NOAH ROMERO

**Postdoctoral Scholar,
Education**

**Faculty Mentor: Dr.
Kenneth Fasching-
Varner**

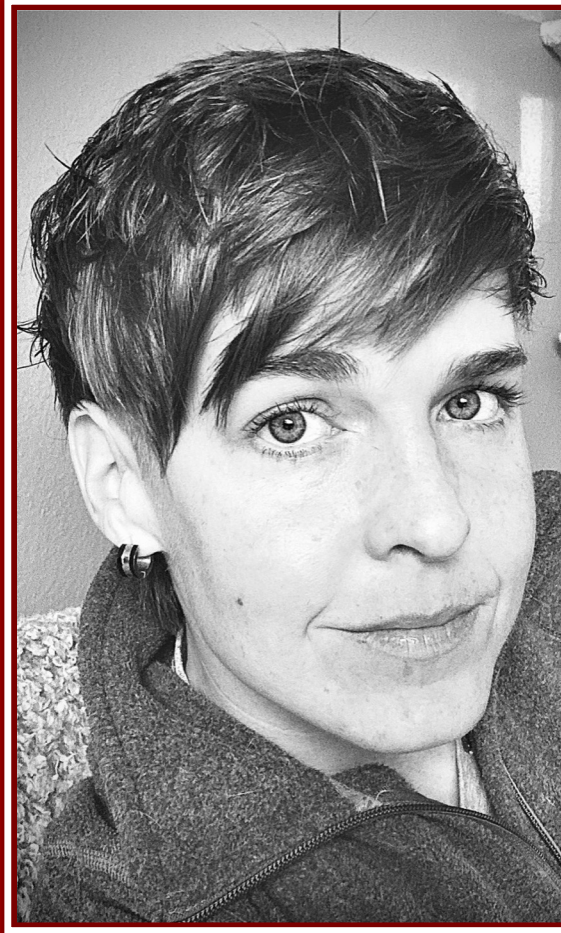


Dr. Noah Romero's research explores how decolonizing education can empower Black, Indigenous, and person-of-color teachers in urban schools. His research at UNLV builds on my scholarship on *decolonial underground pedagogy*, a conceptual framing he developed to theorize the educative strategies minoritized people in a variety of international contexts use to redefine learning and identity in subcultural spaces, such as punk scenes, skate cultures, and alternative education movements. Utilizing mixed methods and Indigenous epistemology, Dr. Romero's research shows how autonomy, responsibility, and relationality are integral to transformative education, both in and out of the classroom. His first book, *Decolonial Underground Pedagogy: Unschooling and Subcultural Learning for Peace and Human Rights* will be published by Bloomsbury in 2023.

DANIELA SANDELIN

**Postdoctoral
Scholar, Group
Psychotherapy**

**Faculty Mentor:
Dr. Michelle Paul**



General Services at The PRACTICE

The PRACTICE is a training clinic that provides Evidence-Based Treatments (EBTs) in the form of Individual Counseling, Group Psychotherapy, and Psychological Testing and Evaluation.

Our current Skills Groups are Dialectical Behavior Therapy (DBT), Cognitive Behavior Therapy (CBT) for ADHD, CBT Hybrid Group, and our Process Oriented Interpersonal Process Group (IPPG).

They offer help for children, teens, and adults struggling with anxiety and mood disorders, ADHD, grief and loss, academic and learning difficulties, self-esteem, stress management, identity, parenting, relationship issues, trauma, just to name a few.

PEDRO ANTONIO SANTOS FLORES

**Postdoctoral Scholar,
Physics & Astronomy**

**Faculty Mentor:
Dr. Qiang Zhu**



Currently a postdoc at UNLV, studying computational physics, with emphasis on condensed matter. Dr. Pedro Antonio Santos Flores received his PhD in Physics from University of Campinas - Brazil in 2020. He also holds a M.S. in Physics from University of Campinas in Brazil and a B.S. in Physics from National University of Colombia. He has experience in atomistic simulations, studying phase transitions and mechanical properties of materials.

His current research focuses on modeling and simulation of new materials using atomic simulations and machine learning interatomic potentials.

RAQUEL SCHINCAGLIA

**Postdoctoral
Scholar,
Environmental
and Occupational
Health**

**Faculty Mentor:
Dr. Gabriela
Buccini**



Dr. Raquel Schincaglia is a trained nutritionist with a master's degree in Nutrition and Health (2015) and a Ph.D. in Health Science (2019). She uses different statistical approaches to prevent chronic diseases as well as understand barriers for infant nutrition, including micronutrients supplements, breastfeeding, complementary feeding in the context of disadvantaged communities.

In 2021, Raquel joined the UNLV School of Public Health as a postdoctoral scholar for an NIH funded implementation science project. The study is conducted in the context of a large scale Brazilian Early Childhood Development (ECD) program targeting the most vulnerable families. The goal of the study is to develop and test scenarios to maximize ECD outcomes by reducing families' vulnerabilities such as household food insecurity.

In her postdoctoral training, she received training in system dynamics and qualitative methods by my primary advisor, Dr. Buccini, at the UNLV School of Public Health, and an interdisciplinary mentoring team across UNLV (School of Social Work and School of Public Policy and Leadership).

The results of this project aims to support Brazilian policy makers to improve the implementation of the ECD program, and ultimately reduce barriers to effectively improve ECD outcomes.

HUMBERTO DA SILVA JR.



**Postdoctoral
Scholar,
Chemistry &
Biochemistry**

**Faculty Mentor:
Dr.
Balakrishnan
Naduvalath**



Mostly interested in the development and implementation of algorithms intended to model either atom-molecule or molecule-molecule inelastic and reactive collisions in a quantum mechanical fashion.

In the group of Dr. Naduvalath, we seek to gain microscopic understanding of chemical reactivity in the extreme limit of low temperatures, close to absolute zero, through high precision quantum chemical calculations. This is motivated in part by the intense experimental efforts that are underway in cooling, trapping and manipulating molecules for a diverse array of applications, e.g. quantum sensing, quantum computing, quantum information processing and quantum control of chemical reactions.

EMILY SISKA

**Postdoctoral
Scholar, Physics
and Astronomy**

**Faculty Mentor:
Dr. Ashkan
Salamat**



Dr. Emily Siska received her PhD in Physical Chemistry May 2020 and has since joined the Salamat group as a Postdoc. Her research focuses on the exploration of technetium (a high yield fission product with a long half-life) and its compounds at high pressures and temperatures. This includes characterization of Tc metal at high temperatures and pressures, synthesis and stability determination of new phases, and synthesis and characterization of novel compounds. Synthesis is accomplished with laser and resistive heating in a diamond anvil cell (DAC); while characterization is done through in situ XRD, Raman spectroscopy and XANES. This work relies heavily on collaborative efforts with UNLV's radiochemistry program and large - scale facilities such as the Advanced Photon Source (APS) at Argonne National Laboratory.

ARSAL HUDA SYED

**Postdoctoral
Scholar,
Computer Vision**

**Faculty Mentor:
Dr. Brendan
Morris**



Dr. Arsal Huda Syed graduated with PhD in Electrical Engineering from UNLV in Aug 2021. Prior to that he worked at Amazon in Industrial Automation and Controls group. His research focused on developing novel pedestrian trajectory prediction algorithms using Artificial Intelligence (AI) techniques. This work will enable Autonomous Vehicles (AV) to make safe and realistic decisions while having complete understanding of its surroundings. During his PhD, he interned as Applied Scientist at Amazon and as Research Scientist at Hitachi Automotive R&D Lab. In his current Postdoctoral role, he is extending his research to develop an AI enabled prototype using infrastructure cameras which will provide AV's with robust understanding of pedestrians within its close proximity.

YIHAN WANG



**Postdoctoral Fellow
Astronomy**

**Faculty Mentor: Dr.
Bing Zhang**



Dr. Yihan Wang's research interests include tidal disruption events by solar mass black holes, gamma-ray bursts in a dense environment, few-body scattering with applications ranging from supermassive black hole dynamics in galactic centers to production of hypervelocity stars, to binary compact object mergers in AGN disks, to exoplanetary architecture and hot Jupiter formation in dense clusters. He is also an astrophysical software developer devoted to contributing high-performance tools to the community.

TIM WATERS

**Postdoctoral
Scholar, Physics
& Astronomy**

**Faculty Mentor:
Dr. Daniel Proga**



After receiving his undergraduate degree in physics from Occidental College, Dr. Waters attended graduate school at UNLV, earning a MS in Applied Mathematics and a PhD in Physics. He then went on to do a postdoc in the theoretical division at Los Alamos National Laboratory before returning to UNLV as a postdoc to continue pursuing a career in astrophysics. In collaboration with his faculty mentor (and former PhD advisor), he works on topics in radiation magnetohydrodynamics, aimed at understanding the environments of actively accreting black holes. A theorist whose research makes heavy use of high performance computing, he attempts to work mainly on problems that could benefit observational astronomers. For example, he recently led a study demonstrating that the hottest, highest speed winds launched from supermassive black holes can form 'clouds', a finding that explains the puzzling short timescale variability uncovered by the Chandra X ray Observatory, one of NASA's flagship space telescopes.

JUSTIN CONNOR
POSTDOCTORAL SCHOLAR, SCHOOL OF LIFE SCIENCES
Faculty Mentor: Dr. Frank Van Breukelen

CORNELIA FANTER
POSTDOCTORAL SCHOLAR, SCHOOL OF LIFE SCIENCES
Faculty Mentor: Dr. Allyson Hindle

JOSHUA GREENWOOD
POSTDOCTORAL SCHOLAR, SCHOOL OF LIFE SCIENCES
Faculty Mentor: Dr. Lloyd Stark

EHSAN RAHMATIZAD
POSTDOCTORAL SCHOLAR, PHYSICS AND ASTRONOMY
Faculty Mentor: Dr. Qiang Zhu

CHUTIMA RATTANSOPA
POSTDOCTORAL SCHOLAR, CHEMISTRY AND BIOCHEMISTRY
Faculty Mentor: Dr. Gary Kleiger

Postdoctoral
Scholars
Continued.