



2023-24
Seed Funding
Opportunity for Mobilities
to Mexico

Presented by

University of California - Alianza MX

For more information visit: alianzamx.universityofcalifornia.edu

TABLE OF CONTENTS

I. ABOUT	
<u>UC Alianza MX 2023 Seed Funding Opportunity for Mobilities to Mexico</u>	3
II. ACADEMIC MOBILITIES	
• <u>Advanced Training in Molecular Techniques</u> - UC Merced	4
• <u>Archival Work Mexico City</u> - UC San Diego	4
• <u>Conociendo Nuestra Cultura</u> - UC Berkeley	5
• <u>Convivial Praxis Workshop for Community-Based Researchers Summer Ateneo 2023: A Binational Multi-Organizational Partnership</u> - UC Santa Barbara	5
• <u>Detecting and Improving College Student Mental Health Across Mexico and the U.S.</u> - UC Irvine	6
• <u>Encapsulation of Probiotics in Grasshopper Protein Hydrolysate Obtained by Subcritical Water Hydrolysis for the Development of an Antihypertensive Supplement</u> - UC Davis	6
• <u>ENLANCE Graduate Mentor Research Mobility</u> - UC San Diego	7
• <u>Environmental Assessment of Rancho Encinalito Conservation Reserve</u> - UC Santa Barbara	8
• <u>Field Excursion from Mexico City to States of Morelos, Puebla, and Oaxaca</u> - UC Riverside	8
• <u>Guadalajara en un Llano</u> - UC Santa Barbara	9
• <u>Humanizando la Deportación</u> - UC Davis	9
• <u>Mesoamerican Immersion Program</u> - UC Los Angeles	10
• <u>The Mexican Health System: Understanding Access and Use to Services from a Diverse Set of Perspectives</u> - UC Berkeley	10
• <u>Mexico Development Lab</u> - UC Berkeley	11
• <u>MGREP Graduate Student Summer Internship</u> - UC Irvine	11
• <u>Research Institute on African-Descended People in Mexico</u> - UC Merced	12
• <u>(Re)Writing Migration Stories</u> - UC Irvine	12
• <u>Summer Field Study Abroad: Guanajuato, Mexico</u> - UC Irvine	13
• <u>UC-UABC Collaborative Kelp Forest Restoration Studies</u> - UC Santa Cruz	13
III. SATISFACTION SURVEYS	
• <u>Satisfaction Survey Results</u>	14
• <u>Participant Reflections</u>	15

About

UC Alianza MX

2023 Seed Funding Opportunity for Mobilities to Mexico

As a UC system-wide initiative, UC Alianza MX fosters collaboration with Mexico by providing funding, logistical support, and opportunities for research, academic mobility, and dialogue through proposals, events, and meetings.

In response to the *Bicentennial Challenge*, launched by Ambassador Ken Salazar to mark the U.S.-Mexico bicentennial anniversary of the U.S.-Mexico Diplomatic Relations, UC Alianza MX reserved a seed fund of up to USD \$50,000 per UC campus to foster UC student mobility to Mexico.

In 2023, UC Alianza MX launched the first Call for the Seed Funding Opportunity for Mobilities to Mexico and received 24 proposals from nine UC campuses. An evaluation committee awarded **19 projects**, enabling nearly **200 UC undergraduate students** from diverse fields to engage in faculty-led programs, field research stays, training, volunteer work, and internships across Mexico.

Advanced Training in Molecular Techniques

UC Merced

The program provided **two UCM students**, Dr. Christina Georges, a recent graduate, and Dr. Jenifer Hernandez Garcia, a 4th-year undergraduate, with an international research experience under Dr. Maria Castañeda-Bueno, Principal Investigator at the National Institute of Medical Sciences and Nutrition Salvador Zubirán. Both students focused on the study of renal sodium channel dysregulation in hypertension, learning molecular techniques such as cell culture, immunofluorescent staining, and Western blot analyses.

Outcomes

One of the most significant outcome was the enhanced training and academic preparation of the students, which strengthened their skills, broadened their knowledge, and made them more competitive applicants for graduate programs.



Archival Work Mexico City

UC San Diego

Dr. Teresa Díaz de Cossío and Dr. Pablo Dodero, **two UCSD doctoral students in the department of Music**, conducted archival research in Mexico City for their project titled *Pioneering Mexican Musicians of the 20th Century*. They conducted archival research at key institutions such as the **Archivo General de la Nación (AGN)** and the **Centro Nacional de Investigación, Documentación e Información Musical “Carlos Chávez” (CENDIM)**.

Outcomes

The archival research, coupled with the engagement with scholars and musicians in Mexico City, has been profoundly enlightening. It has paved the way for continued exploration of Alida Vázquez's contributions to music therapy and the role of Mexican women in music. The research trip significantly contributed to Pablo Dodero's dissertation and established an invaluable network of information sources.



Photo by Eduardo Contreras.
Pablo Dodero and Teresa Díaz working at CENDIM

Conociendo Nuestra Cultura

UC Berkeley

The Conociendo Nuestra Cultura (CNC) Program focused on Education, Environment, and Entrepreneurship. The CNC Program supported students of Mexican descent who had never visited their families' home country due to factors like financial restrictions, family circumstances, or status. The bi-national trip allowed them to connect with peers, explore Mexico's history and present-day life, and reflect on their identities. The CNC Program fully funded travel expenses, including daily expenses and excursions, for **15 UC undergraduate and 4 graduate students of Mexican descent**.

Outcomes

Participants presented final projects at La Casa de la Universidad California in Mexico City reflecting on their program experiences, lessons on their theme (Environment, Entrepreneurship, or Education), favorite memories, and travel challenges.



Convivial Praxis Workshop for Community-Based Researchers Summer Ateneo 2023: A Binational Multi-Organizational Partnership

UC Santa Barbara

An interdisciplinary workshop brought together grassroots organizers, university students, and faculty to explore community-driven research methods rooted in collaboration, democracy, and local knowledge production. Monthly dialogue sessions helped participants develop facilitation techniques and align their research with an immersive summer experience. The program culminated in a two-week convergence in Oaxaca, where participants partnered with local groups focused on community regeneration. The event involved over 50 people from Mexico and the U.S., including facilitators, students, faculty, and community members from multiple universities and regions.

Outcomes

During Summer Ateneo 2023 in Oaxaca, participants worked with local organizations to explore indigenous knowledge, communal life, and grassroots activism. They developed skills in using art to document social struggles, researched community resistance to systemic violence, and connected local efforts to global movements, with future activities planned through continued collaborative workshops, dialogues, and seminars with scholars and activists from Mexico.



Detecting and Improving College Student Mental Health Across Mexico and the U.S.

UC Los Angeles

The **UCLA Health Equity & Access Research & Treatment Lab (HEART Lab)** team traveled to Puebla, Mexico to collaborate with the Benemérita Universidad Autónoma de Puebla (BUAP) research team to examined different protective factors associated with college student mental health. UC students had the opportunity to engage with BUAP undergraduate students, medical students interested in mental health, and psychiatry residents.

Outcomes

The mobility had three key learning outcomes:

- Cross-cultural research collaboration and clinical training of five early-career students across both sites (UCLA and BUAP).
- Dissemination of research projects through conference presentations and peer-reviewed publications.
- Learning about the Mexican university mental healthcare system and current mental health trends.



Mobility

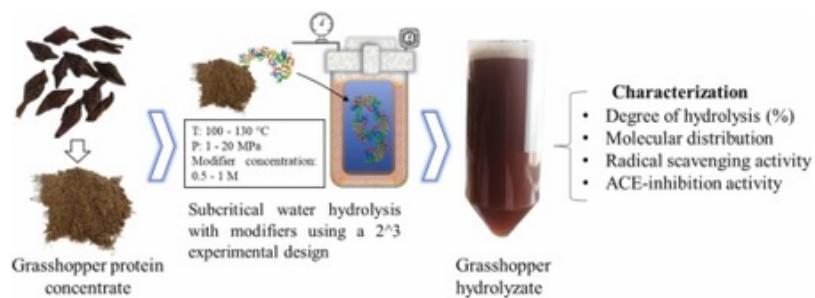
Encapsulation of Probiotics in Grasshopper Protein Hydrolysate Obtained by Subcritical Water Hydrolysis for the Development of an Antihypertensive Supplement

UC Davis

The goal of the proposed mobility was to develop a research project between UC Davis Nitin Nitin and Dr. Amaya and Castaño from Universidad Autónoma de Querétaro (UAQ). The project focused on evaluating grasshopper protein hydrolysate as a delivery system for probiotics to help manage hypertension through dietary means. Its effectiveness was tested in a mouse model, leveraging the hydrolysate's peptides with antihypertensive properties. Collaboration with UAQ and CIATEJ was key due to their expertise in subcritical water hydrolysis of insect protein, enabling process adjustments as needed.

Outcomes

The project outcomes included gaining insights into antihypertensive properties, evaluating grasshopper protein for encapsulation, fostering future collaborations, and promoting functional food products using alternative protein sources like insects.



Research

This mobility program supported **four UC San Diego doctoral students**, who were able to participate in research and expand collaborations with the **Centro de Nanociencias y Nanotecnología of the Universidad Nacional Autónoma de México** (CNyN-UNAM) in Ensenada, Baja California.

Project 1

Development of Luminescent Materials

Student: Dr. Fabián Martínez-Pallares

This student's research focused on hydroxyapatite (HAp) and its use in bone tissue engineering due to its biocompatibility. Martínez-Pallares became interested in enhancing HAp's luminescent properties through doping with rare-earth elements. He mentioned "the modification was crucial for developing non-invasive imaging techniques that enable real-time monitoring of behavior and integration of scaffolds within the body."

Outcomes

Through the usage of paramagnetic resonance measurements and density functional theory (DFT) calculations, he could demonstrate that vacancy defects correspond to singly ionized barium vacancies. DFT calculated thermodynamic transitions and electronic structure calculations revealed deep energy levels within the compound's energy band gap.

Project 2

Enhanced Catalytic Stability of Laccase Immobilized on Copper Oxide Nanoparticles

Students: Dr. Javier Suárez and Dr. Sergio Ojeda

Their research focuses on the immobilization of laccase on copper oxide nanoparticles and the study of its effects on the enzyme's catalytic properties.

They observed that "laccase can oxidize a wide variety of organic compounds, such as toxic organic dyes, which are harmful to the environment." This ability holds potential for water bioremediation applications, but laccase lacks stability in real industrial environments.

Project 3

Electrical properties characterization of BiFeO₃ Student: Dr. Jenna Metera

Jenna's research began with an in-depth exploration of the peer-reviewed scientific literature on oxide-based ceramic materials with cubic morphology. She explained that she "was drawn to the morphology's influence on electronic, optical, and magnetic properties" with a specific focus on controlling electronic properties through synthesis methods.

Outcomes

The research conducted has advanced the understanding of BiFeO₃'s electrical properties by comparing morphology-controlled and non-morphology-controlled samples, revealing the potential of cubic-shaped BiFeO₃ powders.



Environmental Assessment of Rancho Encinalito Conservation Reserve

UC Santa Barbara

The *Rancho Encinalito* project in **Baja California Sur**, led by the UC Natural Reserve System in collaboration with Mexican NGOs, aimed to conserve a 900-acre montane property for environmental education and protection. From October 6-18, 2023, **eight UC Santa Barbara graduate students**, accompanied by project directors Dr. Tom Dudley and Dr. Sula Vanderplank, conducted an environmental assessment at Rancho Encinalito. The team was joined by 30 Mexican scientists and outreach personnel.

Outcomes

The project has collected enthusiasm and support from local stakeholders, leading to the formation of **Unión de Conservación Agua de la Sierra (UCAS)**, a non-profit organization focused on sustainable development and environmental protection. Formalizing the group strengthens ties that support families' livelihoods and promote regional awareness through education outreach.



Field Excursion from Mexico City to States of Morelos, Puebla, and Oaxaca

UC Riverside

The mobility program brought graduate students from UCR (and other UC campuses) to Southern Mexico, starting in the active Transmexican Volcanic Belt of the State of Morelos and heading to the crystalline basement of the states of Puebla and Oaxaca. The traveled area was considered one of the safest in Mexico and was regularly visited on geological field trips by Mexican institutions and international visitors alike. The field trip exposed students to geological records that extended in age over 1.5 Ga.

Outcomes

The mobility program gave UC graduate students firsthand exposure to the unique geology of southern Mexico, which they had previously only studied through literature. They focused on exploring the Paleozoic Acatlán and Precambrian Oaxacan complexes, key regions shaped by significant tectonic activity.



Guadalajara en un Llano

UC Santa Barbara

Guadalajara en un Llano, organized by Dr. Rubén Ortiz-Torres, enabled **three UCSD graduate students** to exhibit their artwork at a gallery in **Guadalajara, Mexico**. This project fostered a collaboration with Juan Bastardo, visual artist, graphic designer, musician and teacher, from the Arts and Humanities Division at Universidad de Guadalajara (UDG). In partnership with the **Visual Arts School of UDG, ITESO**, and local galleries, the students organized workshops, talks, and art exhibitions that had a significant impact on local art students and the community.

Outcomes

Guadalajara en un Llano fostered long-term exchanges, including a residency in **Taller F** (art space), and strengthened UCSD-UDG ties through the collaborative project “*From South to West-ern: Alta California*”.

Faculty-Led Program



Humanizando la Deportación

UC Davis

Led by Dr. Robert McKee Irwin, the Humanizando la Deportación project allowed four UC Davis graduate students to conduct fieldwork in **Tijuana, Mexico**. Two UC Davis students were invited to present at a symposium in collaboration with El Colegio de la Frontera Norte (COLEF), joining COLEF students and faculty, and other keynote speakers.

Outcomes

Dr. Carla Portillo Delgado, Dr. Ricardo Aguilar, Dr. Jesús Galán Díaz, and Dr. Lucas Ruppel created 21 digital stories and recorded four oral histories, while Dr. María José Gutiérrez and Dr. Sandra Pulido supported audiovisual production remotely. Dr. Brooke Kipling presented her dissertation results at a COLEF symposium, and the project aims to complete 25 digital stories by the end of September, with 8 finished and 19 still in progress.

-Research



Mesoamerican Immersion Program

UC Los Angeles

The Mesoamerican Immersion Program brought seven UCLA undergraduates to Mexico City and Oaxaca to explore migration, communal governance, and sustainable agriculture, building on their coursework in U.S.-Mexico relations. Students engaged with local communities, visited historical sites, and lived with host families to better understand Oaxaca's social and cultural landscape. Collaborating with the **Universidad Autónoma Comunal de Oaxaca (UACO)**, they presented research on medicinal herbs and learned about sustainable farming at Tierra del Sol, strengthening binational ties and inspiring local application of these practices.

Outcomes

Through the mobility program, UCLA's range of educational institutional partners expanded, including a communal university with campuses in 16 different locations throughout Oaxaca.



The Mexican Health System: Understanding Access and Use to Services from a Diverse Set of Perspectives

UC Berkeley

The mobility program promoted sustainable research exchanges between UC Berkeley's School of Public Health and Mexican institutions, enabling **two doctoral students** to lead health-focused fieldwork in Mexico. Its goals included organizing exchanges, creating impactful research, conducting fieldwork, and strengthening Mexico's health research efforts. Dr. Jorge Morales conducted 25 informal interviews with physicians and clinic staff across Mexico City, Oaxaca, and Jaltenango. Dr. Silvana Larrea carried out 33 interviews with researchers, service providers, and policymakers to explore the intersection of migration and health policies.

Outcomes

Their work focused on advancing Mexico's health research agenda in two areas: policies to enhance PAC healthcare quality and migrant women's health.



Mexico Development Lab

UC Berkeley

With the focus on mobility and transportation, urban development, clean energy, and digital transformation, the project aimed to enhance students' understanding of implementing sustainability policies and strengthen U.S.-Mexico collaboration. **Eighteen graduate students** from UC Berkeley's Goldman School of Public Policy organized conferences and interactive panels with key Mexican decision-makers. Students from El Colegio de México's Political Science and International Relations program actively participated in these events. The project was led by UCB students Giselle Mendoza, Héctor González, and Alejandro Carrillo.

Outcomes

Following their visit to Mexico City, participating students convened a follow-up session in Berkeley, California with urban development experts, in collaboration with World Resources Institute and MIT SPUR Fellows. Facilitated by former Deputy Ministry of Urban Development Karina Arvizu, the discussion addressed urban policy implementation, energy transition, and regional sustainability strategies.



MGREP Graduate Student Summer Internship

UC Irvine

The mobility project supported **three UCI graduate students**, Dr. Diana Gimena Romero, Electrical Engineering and Computer Science student; Dr. Jonathan Liberzo, Environmental and Civil Engineering student; and Dr. Alex Nguyen, Mechanical and Aerospace student, to conduct research in Mexico have a deeper understanding of the country and its valuable bilateral relation with California.

Outcomes

Guided by Dr. Ponciano Jorge Escamilla-Ambrosio and Dr. Salma Elmaliaki, this project analyzes 14 months of electricity consumption and solar photovoltaic data to model electricity use based on human occupancy and activity.

The findings aim to enhance energy efficiency, optimize smart building operations, and support sustainable urban development.



Research Institute on African-Descended People in Mexico

UC Merced

The Research Institute on African-descended People in Mexico, led by Principal Investigator **Sabrina Smith** from UCM, took place in Casa de la Universidad de Mexico in Mexico City. The project involved **17 students** from the HIST 141/CRES 141: The African Diaspora in Latin America course; a course offered by UC Merced. Enrolled undergraduates learn about the Black experience in Latin America, engaging in discussions about slavery, freedom, race, culture, power, colorism, human rights, and migration.

Outcomes

The project resulted in enhanced understanding of race, ethnicity, blackness in Mexico, the creation of antiracist content on social media, and training in historical and antiracist research methods. It successfully integrated academic learning with real-world experiences, deepening the participating students' understanding of the African diaspora in Latin America.

Faculty Led Program



(Re)Writing Migration Stories

UC Irvine

Led by Dr. Laura E. Enriquez and Dr. Angela Chen, the (Re)writing Migration Stories program enabled UC undocumented students with DACA to travel to Mexico, reconnect with their roots, and research their family migration histories. Through the Building Binational Bridges Convening, participants conducted autoethnographic research across various Mexican states, exploring themes of belonging and identity while visiting relatives. In January, all participants convened in Mexico City with UC staff and local partners to reflect on their experiences, share findings, and discuss how the journey reshaped their sense of self and Latinidad.

Outcomes

- The students analyzed how immigration policy structured the lives of undocumented immigrants and their U.S. citizen family members; how individuals understood and experienced them; and the consequences for U.S. and Mexican society.
- The students assembled evidence to demonstrate how their migration story was shaped by immigration policy.
- Students reflected on how reconnecting with people and places in Mexico reshaped their understanding of the country and their ethnic identity and culture.



Summer Field Study Abroad: Guanajuato, Mexico

UC Irvine

UC Irvine's School of Social Ecology supported **six UCI students** to travel to **Guanajuato, Mexico**, for a three-week *international* program focused on service-learning. In collaboration with Fundación Vamos México, the program aimed to benefit UCI students and local Mexican communities. Students participated in initiatives like "Presidente Por un Día," "ALAS," and "Beyond the Walls" at Centro Fox, engaging in conversation with ex Mexican President Vicente Fox and First Lady Marta Sahagún, helping Mexican youth develop leadership, community-building, and sustainability skills through workshops.

Outcomes

UCI Social Ecology students achieved two key goals. The group co-led activities for 440 Mexican Youth on topics like human rights, sustainability, leadership, and social cooperation, progressing from observers to program leaders. Moreover, they participated in discussions with Centro Fox and Fundación Vamos México to expand youth programs and collected survey data from over 200 Mexican youth participants.



Volunteer Field Study

UC-UABC Collaborative Kelp Forest Restoration Studies

UC Santa Cruz

Led by Dr. Mark Carr from UC Santa Barbara and Dr. Rodrigo Beas-Lunas from the **Universidad Autónoma de Baja California (UABC)**, the collaborative project focused on researching challenges impeding kelp forest restoration. The project engaged a diverse team, including UCSC faculty (Drs. Mark Carr and Pete Raimondi), UABCs (Drs. Rodrigo Beas and Luis Malpica), and a cohort of students and researchers. The project aimed to test hypotheses related to invertebrate grazers and the regional loss of kelp affecting recruitment dynamics.

Outcomes

Important engagement with organizations like the **Secretaría de Pesca y Acuacultura (SEPESCA)** and local cooperatives underscored the project's relevance and potential impact on coastal sustainability. The project, supported by local fishing communities and authorities, contributed to discussions on kelp forest restoration and management strategies.



Field Research