

COLOMBIA AND UC DAVIS: FINDING SOLUTIONS TO GLOBAL ISSUES



UC DAVIS AND COLOMBIA

UC Davis has established a long-term global partnership with Colombia. UC Davis researchers have collaborated with Colombian institutions and scholars to find solutions to global issues in public health, medicine and supply chain management.

Since 2013, UC Davis researchers have co-authored over 64 scholarly publications with colleagues in Colombia and currently, approximately 20 faculty and staff maintain connections in Colombia. Over the years, UC Davis has hosted more than 30 Colombian scholars and fellows.

As our university expands its presence in the region, we look forward to continuing our work with partners in order to collaborate on critical research, exchange ideas and positively impact society in Colombia and worldwide.

COLOMBIAN STUDENTS AND SCHOLARS AT UC DAVIS



Relationship data is dynamic; information contained herein may be incomplete. Last updated 5/3/2019.

THE COLOMBIA PROJECT OF HOPE

UC DAVIS MIND INSTITUTE'S FRAGILE X SYNDROME RESEARCH IN RICAURTE, COLOMBIA

Since 2013, the UC Davis MIND Institute, the world's leading center for autism research, has collaborated with local scientists in Colombia to investigate the unusually high occurrence of fragile X syndrome, the most common known single-gene mutation leading to autism spectrum disorders. Through this study, UC Davis aims to advance fragile X research to benefit individuals with this syndrome or related neurodevelopmental conditions.

Led by Randi Hagerman, medical director of the MIND Institute, UC Davis researchers collaborated with Colombian scientists to study the small town of Ricaurte. They found a very high incidence of fragile X related mutations among the community. The discovery of this fragile X hotspot could offer additional clues to the development of fragile X and its incidence in other populations around the world.

This research led to the establishment of "The Colombia Project of Hope," which aims to collect and analyze genetic screening data for people with fragile X syndrome in Ricaurte, initiate outreach programs for family members and educate healthcare professionals on treatment.

UCDAVIS 2

INVESTIGATING CANCER RISK IN LATIN AMERICA

Luís Carvajal-Carmona, an assistant professor in the UC Davis Department of Biochemistry and Molecular Medicine, is dedicated to preventing cancer and improving treatment to reduce cancer disparities worldwide. Originally from Colombia, Professor Carvajal-Carmona works with remote, isolated populations in the Andes to identify inherited genetic mutations that can signal a higher risk for cancer or other diseases. Cancer rates in Latin America have been increasing and few resources are devoted to treatment, resulting in higher death rates than those in Europe and the U.S.

Professor Carvajal-Carmona's research group is conducting some of the world's largest colorectal and breast cancer genetics studies that use a majority of Hispanic-origin samples. Working with the UC Davis Genome Center, Professor Carvajal-Carmona uses a variety of genetic analysis techniques to screen for genetic differences between individuals. His research aims to help physicians to identify high-risk genes that could potentially lead to cancer. In particular, his studies have already helped affected family members and Andean villagers understand the need for and importance of regular colon and breast cancer screenings.





UC DAVIS PROFESSOR DEVELOPS FREIGHT TRANSPORT MODEL FRAMEWORK

Miguel Jaller, an assistant professor in the UC Davis Department of Civil and Environmental Engineering, is focused on improving the freight transport system in Colombia. The development of accurate freight demand models is crucial in Colombia and other developing countries where data quality is limited and scarce resources make data collection challenging.

Professor Jaller and colleagues from Colombian universities developed an innovative and strategic freight transport model framework that can more efficiently estimate freight traffic flows and model empty trips. Because it can be used when freight data and resources are limited, their model helps bridge accessibility and mobility gaps. Professor Jaller aims to implement this framework in Colombia in order to improve data availability and support infrastructure investments that will enhance Colombia's competitiveness.

AN INVITATION

Your support will help collaborative teams of UC Davis and Colombian researchers cultivate talent and make new discoveries. We invite you to join us in advancing our projects in Colombia and beyond.

For more information on private support, please contact Juan J. Losada at <u>jlosada@ucdavis.edu</u> or +1 (530) 219-6064.