Headline: Breaking Barriers: Two-day inaugural STEM conference at UCLA

Subdek: Hosted by the CSRC, Latina Futures 2050 Lab, and the UCLA Physical Sciences Department, "Quebrando Barreras: Breaking Barriers in STEM" brought over 250 people from across the U.S., Canada, and Mexico

By Sandra Baltazar Martínez

More than 250 people attended the inaugural "Quebrando Barreras: Breaking Barriers in STEM Conference," a two-day event on UCLA campus that drew attendees from across the United States, Canada, and México, representing 52 universities.

The April 17-18 gathering, hosted by the UCLA Chicano Studies Research Center (CSRC), the Latina Futures 2050 Lab, and the UCLA Physical Sciences Division, offered attendees three tracks with nine concurrent sessions that dug deep into chemistry, other STEM fields, and personal journeys of perseverance and success. Bringing world-known experts alongside undergraduate, graduate, and postdoctoral scholars had been a long-held vision by the conference chair, Osvaldo Gutierrez, UCLA chemistry professor and inaugural Fraser and Norma Stoddard Chair in Contemporary Chemistry.

"I had been dreaming of this event for years. The intention was to not only create a space where expert researchers could share their discoveries, but also establish a network for mentorship opportunities," said Gutierrez, who also serves as the UCLA Chicano Studies Research Center (CSRC) inaugural Senior STEM Faculty Director. "Ultimately, we want postdoctoral scholars and early-career faculty to walk away with career roadmaps, and undergraduate students to feel inspired. I know 'Quebrando Barreras' achieved both."

The conference received additional support from the UCLA Chemistry and Biochemistry Department, Latina Futures 2050 Lab, the California NanoSystems Institute, and the University of California – Hispanic Serving Institutions Doctoral Diversity Initiative (UC-HIS DDI).

Gutierrez's role as STEM faculty director at the CSRC deepens the CSRC's connections in STEM as the center continues to expand its multidisciplinary reach, said Veronica Terriquez, CSRC director and Latina Futures 2050 Lab cofounder. Latina Futures 2050 Lab is an initiative spearheaded by the CSRC in partnership with the Latina Policy and Politics Institute at UCLA.

“This conference was an ideal partnership for the Latina Futures 2050 Lab, as it represents concerted efforts to address gender, racial/ethnic, and other barriers in STEM fields,” Terriquez said. “I am confident that the workshops helped raise consciousness about some of the challenges Latinas and other women of color encounter in STEM, and also provided all with strategies for expanding pipelines to lucrative careers in science.”

Presenters’ talks included “Tunable DNA hydrogels as Biomaterials for Bone Regeneration” and “Cocrystals as Rockets.” Others shared personal stories, such as “Breaking Good, from Community College to Carbocations and Crystals” and “A Chilango in the Realm of the Ivory Towers; From an Organometallic Lab to a Physics Department Through Simulations.”

Speakers also reflected on the motivations behind their work ethics and values, as well as their non-linear paths — whether shaped by parents working in California’s agricultural fields or by the times they were not accepted into a graduate program — or by being the only person of color or woman in a STEM department.

Experts came from multiple UC, Cal State, and community college campuses, as well as institutions such as Harvey Mudd, USC, Stanford, Caltech, and NASA’s Jet Propulsion Laboratory, with additional presenters traveling from Boston, Toronto, and Mexico.

The three tracks emphasized a shared theme: the value of mentorship and personal storytelling.

“More than a conference to discuss our individual findings and contributions to STEM, I wanted to bring people together who integrate science and humanity — and who were willing to inspire and connect with graduate students who are filled with questions about their futures,” Gutierrez said.

Track three, “Quebrando Barreras: Breaking Barriers in STEM Early Career and Tenure Track Positions” hosted and funded by Latina Futures 2050 Lab, brought experts such as keynote speaker Angela Byars-Winston, professor at the University of Wisconsin’s Department of Medicine. In 2011, Byars-Winston was selected as a Champion of Change by the White House through President Barack Obama’s Winning the Future initiative for her research efforts to diversify science fields.

“It’s no secret that as the number of women in STEM fields grow, so do the number of gender, racial, class, and other structural issues. Through this track, we offered participants — especially early career faculty — a safe space where they could find a community to share lived experiences and know that their cultural knowledge is recognized as vital to scholarly excellence,” Terriquez said.

For more photos of the event:

Instagram: UCLA Chicano Studies Research Center and Latina Futures 2050 Lab

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