



California Initiative to Advance Precision Medicine (CIAPM) launched the Cancer Disparities Research Program in 2019 to research and implement ways to reduce cancer disparities in California, with community collaboration and partnership.

CIAPM's Cancer Disparities Research Program

What are cancer disparities in Californians? The [California Cancer Registry](#) estimates that 50% of Californians will develop cancer, and nearly 25% will die of cancer. Race/ethnicity, socioeconomic status, care access, and neighborhood quality impact cancer incidence and mortality. Black, Asian, Hispanic, and Native American populations are more often uninsured, from low socioeconomic status, and diagnosed with cancer at later stages.

University of California, San Francisco, Lead Investigator: Elad Ziv, PhD. 2019-2023, \$3 Million.

Improving Breast Cancer in Latinas: A Multi-Tiered Approach

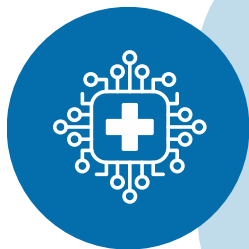
- **Why:** Genetic and tumor testing tools and robust patient samples are **limited in Latina communities**.
- **How:** Identify genetic variants that may **predispose Latinas to breast cancer** and train community health workers (CHWs) to conduct **outreach and education** among Latina communities.
- **Impact:** Developed **tools and education for diverse Latina populations** to **identify cancer risk**, using family history screens and fine-tuned genetic tests.



University of California, San Diego, Lead Investigators: William Kim, PhD and Pablo Tamayo, PhD.

2019-2023, \$3 Million. Integrated Machine-Learning Platform to Inform Precision Therapy in Breast Cancer Patients (Celsus Project)

- **Why:** Artificial intelligence (AI) can be used to **identify treatments** for Latina cancer patients.
- **How:** Develop and refine an **AI model to identify candidate treatments** for patients with triple negative breast cancer, which is common among Latinas.
- **Impact:** Proof-of-concept that an **AI can guide prediction of tumor treatments**, if refined with more genetic samples. Highlighted need for **inclusive patient recruitment**.



Stanford University, Lead Investigator: Manali Patel, MD, MS, MPH. 2019-2023, \$3 Million.

Reducing Cancer Disparities Through Innovative Community-Academic Partnerships - Addressing Latinx **CAN**cer Care **E**quity (ALCANCE) Project

- **Why:** Limited **patient understanding of precision medicine cancer care** impacts research participation, treatment, and outcomes.
- **How:** Integrate **CHWs into preventative and cancer care delivery** to address existing inequities in cancer diagnosis, treatment, and outcomes for Latino patients.
- **Impact:** **CHW-led culturally sensitive education** and intervention model **improved cancer care** in Latino communities and is **scalable for underserved communities**.



Program Impact in California: Three CIAPM-funded cancer disparities research projects involved 15 partners across healthcare, nonprofit, and academia, generated 55 scientific publications in renowned journals, 126 presentations at national and international conferences, and obtained over \$17 million in additional non-state funding.



<https://ciapm.chhs.ca.gov/>



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