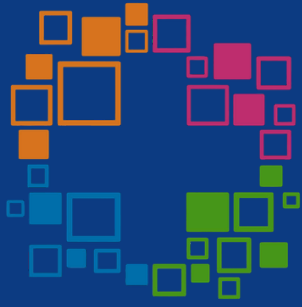




California Initiative to Advance
Precision Medicine

2025 Annual Report





California Initiative to Advance Precision Medicine 2025 Annual Report to the California Legislature

Report prepared by the California Health and Human Services Agency (CalHHS)

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Executive Summary

The California Initiative to Advance Precision Medicine (CIAPM) was launched in 2015 to support cutting-edge biomedical and health research that harnesses data to generate new insights, prioritizes whole-person care, and advances community-driven solutions to reduce health inequities. CIAPM's mission is to drive the development of innovative technologies and personalized strategies and to coordinate cross-sector partnerships for prevention, diagnosis, and treatment to improve the health and well-being of all Californians.

Precision medicine aims to provide the right treatment for the right person at the right time, by accounting for all aspects of one's biology, behavior, lifestyle, and environment to provide personalized and optimized health interventions.

CIAPM funds precision medicine research that considers the whole person, including social determinants of health, for individualized prevention, diagnostic, and treatment strategies. In CIAPM's research grantmaking, CIAPM facilitates and supports innovative research studies that engage community-based organizations (CBOs) as co-leaders, so that communities impact, are impacted by, and benefit from the research.

For ten years, CIAPM has funded demonstration research projects across the scope of precision medicine and supported cross-sector partnerships throughout California to achieve more equitable health outcomes. CIAPM's portfolio in 2025 included community-centered biomedical research on adverse childhood experiences (ACEs) and depression and the release of funding opportunities for representative precision medicine research.

Significant milestones of CIAPM in 2025 include:

- CIAPM reaffirmed its mission, stated above, which is aligned with [CalHHS's strategic priorities](#) of seeing the whole person, using data to drive action, and focusing on equity.
- CIAPM assessed program impact over its ten years, which is detailed in this report. Highlights include that grantees received \$49 million in CIAPM support and brought in \$102 million in additional funding, a 2x return on investment. CIAPM's 21 research projects engaged over 200,000 Californians as participants in research, formed over 200 partnerships, and mentored over 200 students.
- CIAPM released two Request for Applications (RFAs) for Representative Precision Medicine Research, with one RFA focused on academic-academic or academic community partnerships (\$6 million total, 3-5 awards, 2.5-year project duration) and one RFA for doctoral students (\$2 million total for up to 15 awards, 2.5-year project duration).
- Four of the seven projects within the ACEs Research Program concluded in 2025, with three projects receiving no cost extensions into 2026 to complete their study and conduct analyses.
- CIAPM continued to oversee and manage the Depression Research Program and facilitate collaborations. Project teams hosted CIAPM staff for three site visits, and staff hosted teams for a Depression Research Symposium in Sacramento, showcasing progress and facilitating discussions among teams.
- CIAPM convened research teams of the ACEs and Depression Research Programs for a Current Grantees Meeting to share lessons learned, best practices, and key takeaways from research projects and began a recurring Research Roundtable for ACEs and Depression teams to discuss cross-cutting themes of their research.
- Staff and lead ACEs researchers showcased the ACEs Research Program at the Pediatric Academic Societies meeting, including sharing preliminary data at the intersection of ACEs, toxic stress, biomarkers, implementation science, and policy implications.





- Staff shared CIAPM's grantmaking model and expanded our precision medicine network through attendance at the 2025 Precision Medicine World Conference.
- CIAPM published the [Evaluation Report for the Cancer Disparities Research Program](#), which includes independent evaluations by out-of-state subject matter experts.
- CIAPM mentored three graduate student interns and fellows studying at California institutions, who furthered programmatic efforts and trained in research administration, science policy, and public policy.

2026 Priorities

- CIAPM will celebrate its 10-year anniversary with an event in early 2026.
- CIAPM will manage the review and selections process for the two Representative Precision Medicine Research RFAs, featuring the statutorily-mandated [expert selection committees](#) who will review applications and make recommendations for awards. By Summer 2026, CIAPM will launch two Representative Precision Medicine Research cohorts and manage awarded projects.
- CIAPM will close out the ACEs Research Program and prepare an Evaluation Report to assess the projects' progress and impact for the California Legislature.
- CIAPM will continue to oversee the Depression Research Program and facilitate collaborations.
- The team will continue sharing the CIAPM model and expanding its precision medicine network through attendance at the annual Precision Medicine World Conference.
- CIAPM will honor the invaluable contributions of five Council members completing their six-year terms: Drs. Clara Lajonchere, Keith Yamamoto, Kenneth Kim, Fatima Muñoz, and Hakan Sakul. Notably, Drs. Lajonchere and Yamamoto have expertly served as Chair and Vice Chair, respectively, since 2020.
- CIAPM will explore potential collaborations within CalHHS to advance precision medicine and public health through research and innovation.

Recognizing the public and the Legislature's continued interest in the strides CIAPM has made, the California Health and Human Services Agency respectfully submits this report. [Health and Safety Code, Division 110. § 130302, subd. (4) (A)]





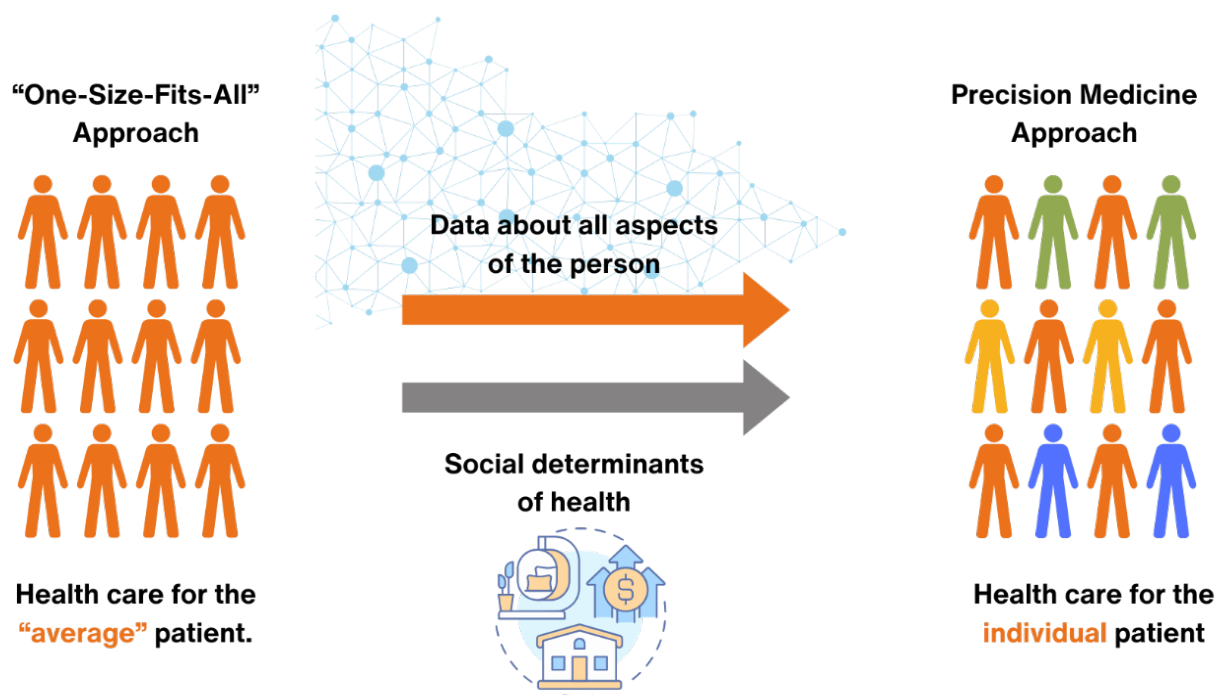
Background and History

What is Precision Medicine?

Medical research and interventions have historically explored the fundamentals of disease, often looking for cures, treatments, or preventatives that target the root causes or similar characteristics from patient-to-patient.

However, over the decades, as researchers have learned more about the biology of disorders and disease, what works for one person may be the very opposite strategy for another. The same disease can manifest differently from patient-to-patient, often a result of one's environment, social conditions, physiology, and genetics.

Precision medicine, sometimes known as *precision health* or *personalized medicine*, attempts to merge all aspects and influences of a person's health to create tailored health care interventions for a patient based on their diverse genetics and individual health and life circumstances (see image below). These interventions often account for one's environmental or social determinants of health by accounting for environmental exposures, access to housing and utilities, care, education, and nutrition, or discrimination based on gender, ethnicity, or orientation.



Caption: Precision medicine breaks the mold of a standard biomedical approach by integrating data about the 'whole-person' for an individualized health care experience.

About CIAPM

Established in 2015, CIAPM is a first-of-its-kind initiative in state government that supports world-class biomedical and health research that harnesses data to generate new insights, prioritizes whole-person care, and advances community-driven solutions to reduce health inequities. Our mission is to drive the development of innovative technologies and personalized strategies and to coordinate cross-sector partnerships, acting as a nexus to engage collaboration across multiple stakeholders, including academia, industry, healthcare, nonprofits, and community-based organizations, to improve the health and well-being of all Californians.





Housed in the California Health and Human Services Agency, the program was established by Governor Jerry Brown and the California Legislature and has since demonstrated the critical role that state government can play to drive the development of innovative technologies and personalized strategies for prevention, diagnosis, and treatment.

The Initiative develops funding calls for research demonstration projects that focus on addressing health equity gaps and nurtures novel prevention strategies, diagnostics, or treatments that take into account a person's genetic, health, and life circumstances for precise health interventions. Research in this area prioritizes 'big data' to generate new insights, prioritizes whole-person care, and advances community-driven solutions to reduce health inequities.

Over ten years, CIAPM has funded 21 projects across the health spectrum at 13 nonprofit, academic research institutions and this year launched a fifth research portfolio in 'Representative Precision Medicine' (see below).

CIAPM Allocation of Funds

Budget Year	Budget Appropriation for Precision Medicine (in millions)	Number of Demonstration Projects Funded	Demonstration Project Topics
2014/2015	\$3.0	2	• Pediatric cancer • Genetics of infectious diseases
2016/2017	\$10.0	6	• Traumatic brain injury • Remote heart monitoring • Genomic sequencing • Mobile mental health • Multiple sclerosis • Prostate cancer
2017/2018	\$10.0	3	• Cancer health disparities
2018/2019	\$30.0*	4	• Adverse Childhood Experiences (ACEs)
2020	\$-18.2**		
2021/2022	\$12.415*	3	• ACEs
2022/2023	\$9.25*	3	• Depression
2022/2023	• \$6 • \$2	• 3-5 projects • 10-15 student researchers	• Representative Precision Medicine Research through Partnerships • Doctoral Student Representative Precision Medicine Research

*Currently funded projects

**In 2020, \$18.2 Million from CIAPM's 2018/2019 appropriation was diverted to the General Fund to support critical services for the COVID-19 pandemic.





As selected examples, CIAPM-funded precision medicine advances have lead researchers and health care providers to:

- Genetic research that revolutionized infectious disease diagnostics and later helped identify and track [COVID-19](#) variants, including the **first known U.S. case of the COVID-19 omicron variant**, in collaboration with CDPH. The team was also granted FDA breakthrough device designation for two separate diagnostic tests and launched a California startup company, Delve Bio (UCSF, Lead Researcher: Dr. Charles Chiu). Because of this work, patients may be able to receive an accurate infection diagnosis, leading to faster and more precise treatment.
- AI research that could detect impacts from traumatic brain injuries and was **qualified by the FDA as a medical development device tool** (UCSF, Lead Researcher: Dr. Pratik Mukherjee). Because of this work, patients may be able to receive an accurate and faster diagnosis after head trauma, leading to more effective treatment plans.
- Research that integrated community health workers into cancer care delivery, through culturally appropriate patient education and navigation. The team found **patients were 3-times more likely to receive tumor testing and 5-times less likely to be hospitalized**, improving cancer care in Latino communities and serving as a scalable model for underserved communities. (Stanford University, Lead Researcher: Dr. Manali Patel). Because of this work, patients receiving support from community health workers receive a faster and more accurate cancer diagnosis, leading to fewer hospital visits and potentially more precise treatment.
- Research in identifying ‘unpredictability’ as a novel adverse childhood experience (ACE), **which can predict some health outcomes** that were missed by traditional ACEs screening alone. The screener for unpredictability has **been translated into more than seven languages** and incorporated into national research studies on child and adolescent development. (UC Irvine, Lead Researcher: Dr. Tallie Z. Baram). Because of this work, providers may be to used unpredictability screening as a tool to understand child development risks.
- Research on a **scalable precision stress management program**, tailored to a person’s primary stressor, that **reduced** self-reported **stress by roughly 20%**. (UCLA, Lead Researcher: Dr. George Slavich). Because of this work, people may be able to improve their stress virtually by modulating their stressors, such as with sleep, physical activity, and more.
- Ongoing research to develop and test the ability for an identify-affirming digital mental health platform paired with peer counseling to **reduce or prevent depressive symptoms in youth**, including LGBTQ+ youth. (Santa Clara University, Lead Researcher: Dr. Greg Hajcak). Because of this work, youth may be able to reduce their depression through a personalized digital application and peer counseling.

CIAPM 10-Year Anniversary

CIAPM is celebrating its ten-year anniversary, marking a decade of leadership in advancing health equity and precision medicine research across the state. In the last decade, CIAPM has received \$67 million in appropriations from the Legislature and awarded \$49 million in research grants.

These investments have yielded several hundred peer-reviewed publications, academic presentations both domestically and internationally, and notable press attention. However, the real value of the work has been improving the health of Californians with new, patented, and personalized tools in the areas of treatment, prevention, and diagnosis that are tangible, and address the lived-experience of Californians so that health interventions are not “one-sized-fits-all.”

As the examples above show, CIAPM research funds have galvanized a robust ecosystem of cross





sector partnerships that feed and grow off each other, tying researchers together directly with the communities they serve.

CIAPM continues to honor the values of a *Healthy California for All*, coined by the Newsom Administration and CalHHS, with their most recent Request for Applications for ‘Representative Precision Medicine Research’ through partnerships between institutions and research by doctoral students. CIAPM grants have served to fill a critical gap in investment and workforce development, both historically and in the current research ecosystem, as federal spending becomes unpredictable.

We are excited to share more about these achievements in the next section, *A Decade of Discovery: Impact of State-Funded Precision Medicine Research*, which provides a retrospective look at the last ten years of CIAPM research and its return on investments both in dollars and in human impact.





A Decade of Discovery: Impact of State-Funded Precision Medicine Research (2015-2025)

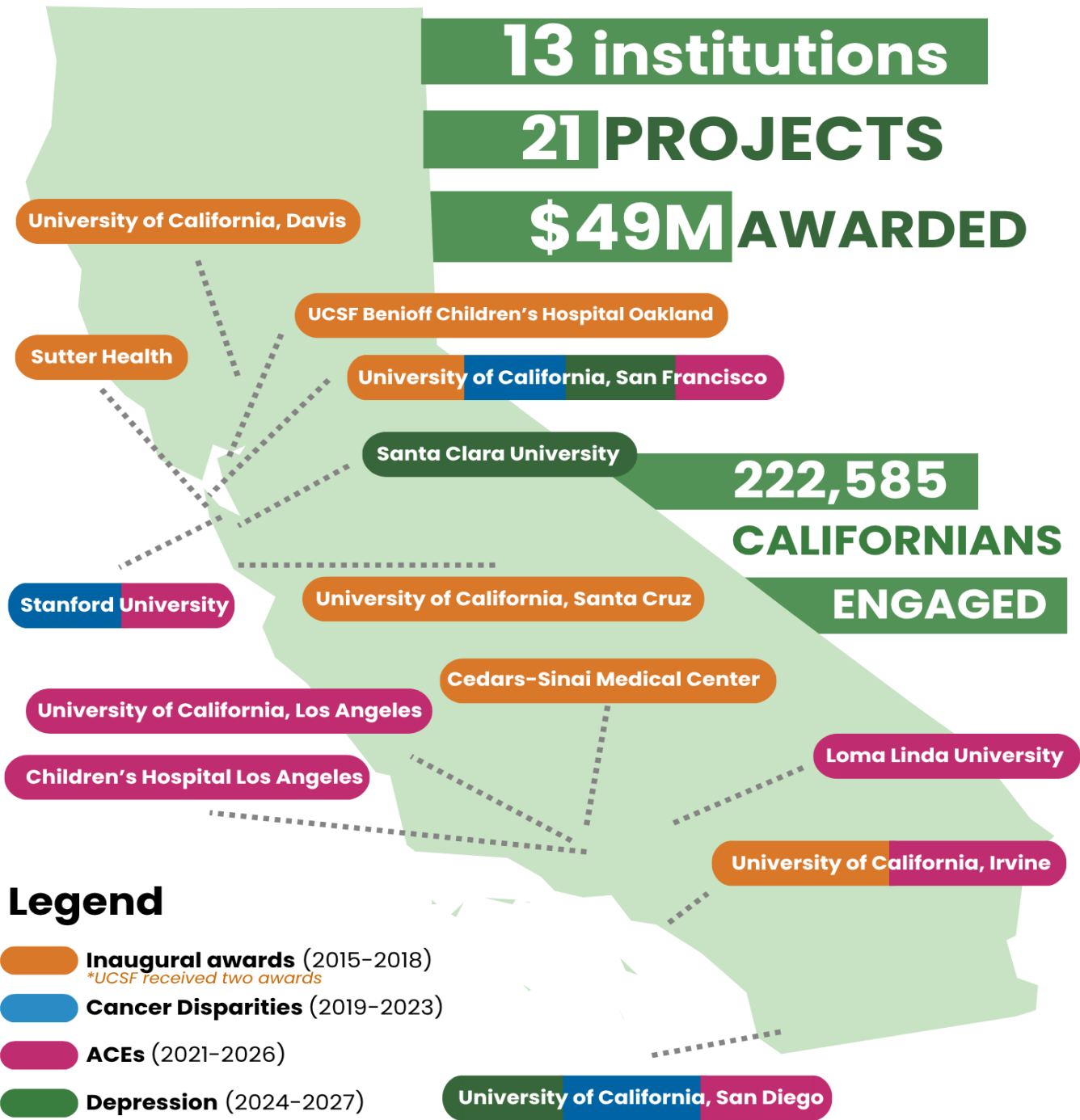
A Compilation of all CIAPM-funded Research Program Sites

10 YEARS

13 institutions

21 PROJECTS

\$49M AWARDED



Caption: Map of all 21 supported CIAPM demonstration projects between 2015 and 2025. Some universities have been awarded in multiple funding cycles.





California Initiative to Advance Precision Medicine (CIAPM): 10 Years of Impact

CIAPM supports biomedical and health research that harnesses data to develop new diagnostics, treatments, and preventative tools to reduce health inequities and advance whole-person care. State investments have resulted in scientific advancement, workforce development, lasting partnerships, and sustained research and care programs across California.



SCAN ME

 **Across 21 projects and 10 years, CIAPM has awarded...**



CIAPM researchers have attracted additional funding...



\$49 Million

to complete initial project goals



\$102 Million

from private sector, philanthropic, institutional, and federal awards

**~2x Return
on State
Investment**

CIAPM-funded projects have leveraged initial state investments to attract substantial additional funding, extending the scale and longevity of California's research and community impact.



CIAPM-supported research has led to...

High-impact scientific products that accelerate discovery, disseminate new data, and translate precision medicine research into clinical and community settings, revolutionizing medical practices.



315

**peer-reviewed
publications**



544

**presentations at
academic
conferences**



86

**press
articles**



6

patents



11

clinical trials



33

**validated
technologies
or
approaches**



14

**new web
resources
and toolkits**



CIAPM grantees are developing the biomed workforce...

By training and mentoring researchers and care practitioners, building California's precision medicine capacity.

Mentored

Developed



220

**students,
fellows, and
community
health workers**



13

**novel curricula
or training
programs**

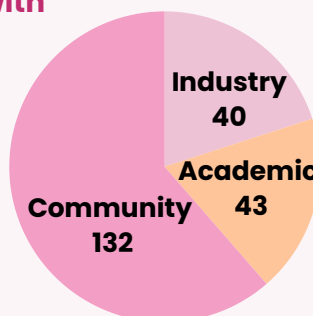


CIAPM grantees have established ...

partnerships with



216
**organizations
across
sectors**



These Innovative and long-lasting partnerships support equitable research, translation, and implementation of precision medical practices.



**Californians
engaged**

222,585

**participants in direct
study**

10,085

**people screened/
tissues analyzed**

212,500



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



CIAPM@chhs.ca.gov



Inaugural Precision Medicine Research Program (2015-2018)

The inaugural eight projects of the CIAPM program demonstrated the breadth and power of applying precision medicine and big data and computing capabilities across a wide swath of disease states. The two main goals of the program were to: 1) gain a better understanding of disease mechanisms, and 2) foster a more modern and equitable approach to health care using technology and data. An initial two projects were funded, followed by an additional supplement supporting six additional projects focusing either on disease interventions or new tools.

Cancer Disparities Research Program (2019-2023)

The goal of the Cancer Disparities Research Program was to fund demonstration research projects that aimed to improve access to precision medicine cancer care approaches, for patient populations that suffer from cancer health disparities, through collaborations between academic, community, and nonprofit and private partners.

Adverse Childhood Experiences (ACEs) Research Program (2021-2026)

The ACEs Research Program was designed to drive innovation using a precision medicine approach to understanding the biological mechanisms of, and improving clinical means of, addressing toxic stress from ACEs, particularly as a path toward reducing health disparities. Four research projects were awarded, followed by an additional supplement to support three more, that each address the impacts of ACEs from different angles.

Depression Research Program (2024-2027)

The Depression Research Program was designed to drive innovation with a precision medicine approach to improve outcomes for patients with, or at risk for, depression and reduce health inequities. Three research projects were awarded that each address the impacts of depression from different angles.

Over the decade, researchers felt that CIAPM provided an incomparable value-add in their research programs by supporting cross-disciplinary research and clinical training for their teams and incentivizing and requiring community engagement and participation at the core of the investigations.

Grantee Perspectives on the Importance & Value of CIAPM Funding

CIAPM's funding opportunities have evolved over its ten years, from focusing on proof-of-principle research across precision medicine to being centered around a specific disease or health condition, to requiring academic-community partnerships (starting with the Cancer Disparities Research Program), to also requiring private sector collaborations (with the Depression Research Program). Below are selected grantee perspectives on the importance and value of CIAPM funding.

Inaugural Research Program

- Sutter Health: Most health systems do not provide enough clinical-face time or comprehensive chronic care for multiple sclerosis. The CIAPM program allowed for unmatched patient engagement in symptom reporting, education, and treatment decision-making. Patients felt that doctor's visits were more efficient and aligned with addressing the most severe symptoms, leading to modifications in health behavior, encouraging more sharing of their daily health information and feelings of direct involvement in their health trajectory.
- University of California, Santa Cruz: The CIAPM funding model allows flexibility to add on community and medical partners, expanding the database of genomic samples, and integrating research findings directly into local clinics.
- University of California, Irvine: The CEASAR study at UCI was able to benefit from CIAPM support by uniting a board of eager patient advocates to educate researchers on lived experi-





ences and social determinants of health that affect prostate cancer patients that are otherwise overlooked in clinical practice, and how to engage with communities for participant recruitment. With this information, the prostate cancer risk model prioritized the highest risk cancer patients for more aggressive health monitoring.

Cancer Disparities Research Program

- Stanford University: CIAPM's funding mechanism prevents 'lopsided science,' capturing a fuller research picture by intentionally including communities. Community leaders at community-based organizations (CBOs) have lived experience of what is seen in the community, what factors or questions might be missing in the research, and how to incentivize participants. The funding mechanism also allows a "payment-forward" mechanism where CBOs can be incentivized to participate from project inception instead of reimbursed after months of project progression. Because of this, cancer research centers can more efficiently and effectively deploy their research into communities.
- University of California, San Francisco: CIAPM's support allowed the researchers and practitioners to understand what real-world barriers prevented Latinas from accessing genetic screens, and to establish a reimbursement model where participants did not need to worry about testing costs. CIAPM's funding allowed [the team] to recruit a large number of women who are not currently represented well in existing datasets.

ACEs Research Program

- Loma Linda University: A unique feature of CIAPM funding is the opportunity to combine a community intervention with basic science research. Other sources of funding often focus on either community programs or biological research, but rarely both. Because of the unique nature of the CIAPM funds, [the LLU team] is creating primary care and community-level partnerships which will directly benefit the families served, and [is] conducting a rigorous biological, psychological, and social evaluation.
- University of California, Los Angeles: By requiring each CIAPM project team to have clinical and/or community partners, CIAPM is helping ensure that the taxpayer dollars that are spent supporting cutting-edge science in California will translate into better health and wellbeing for the great people of this state.
- University of California, San Diego: The preeminent aspect of being funded by CIAPM has been the ability to bring together researchers, community partners, and residents as part of a co-design process to develop impactful community interventions that address health needs.

Depression Research Program

- Santa Clara University: CIAPM requirements for funds to directly benefit the community is unique and demonstrates that community engagement isn't just a "nice to have" but a "must have" for sound science with actual public impact. This structure has helped ensure that [the SCU] study will conduct community-engaged participatory research, which is uncommon in broader academia... The type of work [the team] is doing would literally be impossible without funds from the CIAPM. The funding from CIAPM has ensured that, at the very least, [SCU] will be able to positively benefit the mental health of LGBTQ+ youth in CA.
- University of California, San Diego: This type of work requires team science through thoughtful partnership among academics, health care system, community, and private entities. This CIAPM initiative and funding embodies support to meet such needs by its emphasis on 'team science.' In addition, the level of sizable funding enables much needed equitable resource allocation across the partners and the engagement of a large number of participants/patients required to meaningfully answer research questions of high translational value.





Taken together, CIAPM uniquely supported more efficient patient care and an avenue for patients to advocate and share their experiences about their barriers and care needs. Several projects directly encouraged patients to help guide the research based on these social health determinants to improve patient recruitment, teaching researchers about real-world communities. Several teams attribute the funding as the sole reason for expanding or obtaining genetic samples from this recruitment. By tying the science and community together, it ensured that treatment options helped the broadest swath of patients.

Self-Reporting on Training & Education

All CIAPM-funded research programs are encouraged to engage trainees in biomedical research and in health care and community settings. Below are selected perspectives from CIAPM-funded teams on the impact of training and education of trainees, practitioners, and of the broader community made possible through CIAPM funding.

Inaugural Research Program

- University of California, Santa Cruz: The CKCC pediatric cancer program developed a medical protocol where doctors could learn more about the complex interplay of genetics and the mechanism of their patient's rare cancer and integrate genetic sequencing to identify potential drug targets. The implementation of "Tumor Boards" allowed physicians to share and learn together about rare tumor treatment and harmonize on treatment plans across departments and with patients. Additionally, the project consistently incorporated pediatric cancer advocacy events and presentations, engendering further trust amongst parents for pediatric participation.

Cancer Research Program

- Stanford University: The CIAPM project helped train a generation of California-based promotoras that can deliver culturally-aligned educational approaches to convey the value of genomic research participation, while centering family as supports for this participation, helping fill important patient education gaps.
- University of California, San Diego: Engaging CHWs directly in patient education on research engagement (other than just navigating health services) immediately helped identify gaps and establish the fundamental curriculum for training CHWs to recruit and educate trial patients.

ACEs Research Program

- Loma Linda University: The Loma Linda team developed the Families Implementing Resilient Systems Together (FIRST) curriculum to optimize the delivery of vital information and resources to a diverse population of families experiencing ACEs. The training empowers professionals with the knowledge and skills needed to strengthen families and build resilience in youth.
- University of California, Irvine: The experience from CIAPM funding enhanced [one researcher's] skills, deepened the understanding of Adverse Childhood Experiences (ACEs), and solidified interest in pursuing an academic career. [The work further solidified a commitment] to community-engaged research on ACEs and health equity, and to be able to involve students in the work. [She] felt grateful to have had the opportunity to collaborate with and learn from an outstanding, multidisciplinary group of colleagues as part of the CIAPM-funded project. Further, the collaborations have now expanded beyond just the project to several other community-engaged, health equity-focused research projects.
- University of California, Los Angeles: In addition to research goals, CIAPM funded UCLA to develop a Massive Open Online Course and research training program on stress, health, and resilience, which enrolled 125 individuals from 17 countries, 22 states, and 93 universities and institutions.





Depression Research Program

- Santa Clara University: The funding from CIAPM ensures that multiple scholars (across multiple levels — associate professors, assistant professors, post-doctoral fellows, master's students, and undergraduate students) in the area of [LGBTQ+ mental health] are employed and able to continue to ensure that progress in this field will not stop.
- University of California, San Francisco: This project has provided opportunities for medical students and psychiatry fellows to use their educational background to provide feedback and guide the project's development from a clinical perspective, giving clinical trainees firsthand experience in research.

In sum, CIAPM funding helped provide cross-training of researchers and clinicians in each other's disciplines and in the science of community engagement, permanently expanding the pool of trained researchers with a unique interest in health equity. This was especially true of research that was historically underfunded or intentionally defunded in recent years, preserving support for personnel and critical research.

Community members also directly learned more about research participation. This was especially true of teams that incorporated community health workers (or promotoras) in the research pipeline to educate patients about the research study, the value add of participation, and how to tailor and overcome barriers to improve health outcomes. Through this, patients received structured education on their disease states and what they could do to manage their conditions outside of the clinic.

Promotoras themselves also reciprocally learned about the intricacies of disease care and research.

Self-Reporting on Community Engagement

Starting with the Cancer Disparities Research Program, CIAPM grantmaking required academic-community partnerships in the application process through award management and completion. Below are perspectives from project teams about the value of community engagement, which often included CHWs (or promotoras) as trusted messengers, also encouraging family engagement in clinical care.

Cancer Research Program

- Stanford University: Stanford's CHW-promotora method provided researchers with a community-centric model that disaggregated which social determinants of health serve as the biggest cancer risks and as barriers to access for specific sub-populations, by casting the widest possible net for stakeholder engagement. Since these determinants are often ignored in research, communities felt voice in the research by capturing lived (poverty, environment, stress) and biological cancer causes.
- University of California, San Francisco: CIAPM's supported-project allowed a venue to provide clear meaningful explanations of research, making patients increasingly aware about their data rights, informed consent, and how to be active, civically-engaged partners in research. CHWs help convey to researchers the complexities in cancer care, since every patient story yields a different barrier to address.

ACEs Research Program

- University of California, Irvine: The Community Advisory Board brought expanded understanding of the ways in which early life adversity may be affected by lived experiences related to culture, belief systems, and the social and physical environment. The CAB members made substantial contributions and enhancements to the research methods by deepening thinking about ACEs, through suggestions for broadening research methods and improving the research experience for participants.





- University of California, San Diego: 1,500 San Diegans shared 7,990 stories about community resources and services, leading to identifying key themes that could impact protective factors for childhood obesity and local policy programs for actionable impact.
- University of California, San Francisco: Although [one community partner] worked in the violence prevention field for nearly 30 years, this was her first time being involved in a Precision Medicine project. She learned a lot in the process and was inspired to see that the interventions being studied can help children maintain healthy biomarkers and even interrupt an early aging process. In the future, she would love to apply these lessons to community-led interventions in low-resource settings. [She is] working towards identifying sustainable funding sources to continue to provide therapeutic interventions to children and their caregivers in low-resource health settings.

Depression Research Program

- Santa Clara University: [One Youth Advisory Board Member] appreciated the opportunity to utilize lived experiences to help advocate and create an inclusive and diverse study that will greatly benefit the younger LGBT community.
- University of California, San Diego: The lasting impact [the community partner for UCSD] hopes to make centers on sustaining a trusting relationship that allows for research programs within the community to flourish. [Their] goal is always to work collaboratively both internally and externally so that findings from the projects are not only representative of diverse participants but also sustainable or informative after grant funding ends.

Overall, CIAPM's support allowed community-engaged research teams to learn from and impact the community, through better understanding of lived experiences and of implementation challenges and solutions.

CIAPM funding also provided certain livelihood supports necessary for clinical participation, which in some instances could improve overall health and not simply as part of a clinical intervention. Community Advisory Boards were directly involved in guiding the research by sharing lived-experiences and in several examples generated a list of 'grassroot' supports in the community that medical systems alone do not maintain, creating overall healthier communities.

Read more below for overviews of the four research programs, featuring brief summaries of all 21 funded research projects.





California Initiative to Advance Precision Medicine

Precision medicine is an approach that uses data, such as genetics, biomarkers, medical history, environment, and social factors for personalized and tailored prevention, diagnosis, and treatment of disease. To achieve this, precision medicine deploys advanced technologies like genomic sequencing, artificial intelligence, and mobile health tools to collect data for individualized interventions.

CIAPM's Inaugural Research Program

In 2015, the California Initiative to Advance Precision Medicine (CIAPM) was launched to leverage California's diverse research ecosystem to demonstrate the potential of this innovative approach to improve equitable health outcomes. Approximately ~\$11 million was allocated to support the first eight demonstration projects between 2015 and 2018, which addressed a wide breadth of diseases and technologies, summarized below.



University of California, Santa Cruz. Lead Investigator: David Haussler, M.D. 2015-2018, \$1.7 Million. California Kids Cancer Comparison

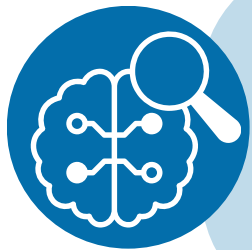
Why: 30% of children diagnosed with cancers in California lack effective therapeutic options.

Impact: Found new targets for personalized childhood cancer therapeutics and treatment using computer-aided analysis of novel tumor genomic markers (RNA) in 100% of children with untreatable tumors.

University of California, San Francisco. Lead Investigator: Charles Chiu, M.D., Ph.D. 2015-2018, \$1.7 Million. Precision Diagnosis of Acute Infectious Disease

Why: To provide faster and more precise diagnosis and treatment of brain infections and lower the costs associated with rare and unidentifiable bacterial and neurological infections.

Impact: Improvement of acute infectious disease diagnosis time from 72 hours to 8 hours through the development and clinical application of a minimally invasive metagenomic next generation sequencing (mNGS) test; later implemented to aid the discovery of the first omicron-variant of COVID in California.



University of California, San Francisco. Lead Investigator: Pratik Mukherjee, M.D., Ph.D. 2017-2018, \$1.2 Million. Artificial Intelligence for Imaging of Brain Emergencies

Why: Delayed diagnosis time is associated with irreversible brain damage and can be improved by deploying artificial intelligence in emergency response imaging.

Impact: An FDA medical device development tool using automated image analysis for emergency-detection of traumatic brain injury, led to accurately diagnosis of intracranial bleeding in 99% of brain scans using over 100,000 brain images.

Cedars-Sinai Medical Center. Lead Investigators: Brennan Spiegel, M.D., Noel Bairey-Merz, M.D., Jennifer van Eyk, Ph.D. 2017-2018, \$1.4 Million. Early Prediction of Major Adverse Cardiovascular Events Using Remote Monitoring

Why: Cardiovascular disease is the leading cause of death in men and women in California, occurring more often in younger women and racial/ethnic minorities, leading to oversight of early signs, inconsistent healthcare, and resulting in detrimental disease progression.

Impact: Major Adverse Cardiac Events (MACES) were predicted in patients with ischemic heart disease through the development of wearable sensors for remote, real-time monitoring of physical, biochemical and psychical measurements, alerting patients when urgent need to see a doctor is warranted.





California Initiative to Advance Precision Medicine



Children's Hospital Oakland Research Institute. Lead Investigator: David Martin, M.D. 2017–2018, \$1.2 Million. Full Genome Analysis to Guide Precision Medicine

Why: Many children with rare or unexplained genetic disorders do not receive a diagnosis, limiting opportunities for effective treatment.

Impact: Researchers used Full Genome Analysis (FGA) to identify previously unknown genetic causes of disease in approximately 40% of pediatric participants, helping guide future treatment decisions and demonstrating the value of providing no-cost genetic screens in largely underserved and low-insurance coverage populations.

University of California, Davis. Lead Investigator: Nicholas Anderson, Ph.D. 2017–2018, \$1.2 Million. Personal Mobile and Contextual Precision Health

Why: Chronic disease management is often limited by a lack of real-time information about patients' health, behaviors, and social factors between clinical visits.

Impact: The project developed a mobile health application integrated with Electronic Health Records (EHRs) that enabled patients and providers to share and monitor health data in real time. The scalable precision health approach demonstrated improvement in chronic disease management in both rural and urban communities.



University of California, Irvine. Lead Investigator: Sheldon Greenfield, Ph.D. 2017–2018, \$1.4 Million. Early Prostate Cancer: Predicting Treatment Response

Why: Treatment outcomes for prostate cancer vary widely, and existing approaches do not fully account for the clinical, genetic, and social factors that influence patient outcomes.

Impact: Researchers developed a personalized risk-prediction model that combined clinical information, genomic data, and social factors to better predict treatment response. The project identified disparities in outcomes and supported tailored surveillance and risk-based treatment strategies for diverse patients.

Sutter Health. Lead Investigator: JB Jones, Ph.D., MBA. 2017–2018, \$1.2 Million. Precision Medicine for Multiple Sclerosis (MS): Making It Work

Why: People living with multiple sclerosis (MS) require ongoing, individualized care, but providers often lack tools that integrate clinical information, patient experiences, and treatment decisions.

Impact: The project developed neuroSHARE, a platform that integrated clinical data, patient-reported outcomes, and Electronic Health Record (EHR) information to support personalized MS care. Patients became more engaged in tracking and sharing symptoms, improving communication and shared decision-making with providers.



Program Impact in California



In its first three years, CIAPM funded 8 research projects, involving 88 partners across healthcare, nonprofit, and academia, generated 106 scientific publications in renowned journals, 125 presentations at national and international conferences, and obtained over \$53 million in additional non-state funding.



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



CIAPM@chhs.ca.gov



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

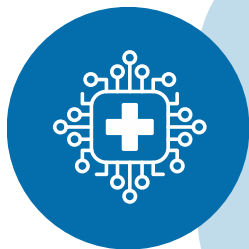
- **Why:** Genetic and tumor testing tools and robust patient samples are **limited in Latina communities**.
- **How:** Identify genetic variants that may **predispose Latinas to breast cancer** and train community health workers (CHWs) to conduct **outreach and education** among Latina communities.
- **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.



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California Initiative to Advance Precision Medicine

In 2021, CIAPM announced seven awardees from the request for proposals, "Addressing Health Impacts of Adverse Childhood Experiences (ACEs) through a Collaborative Precision Medicine Approach."

CIAPM's ACEs Research Program

What are ACEs? ACEs refer to 10 types of abuse, neglect, and household dysfunction that, when encountered in early life, can negatively impact lifelong physical and mental health due to activation of the toxic stress response. According to data from the UCLA Center for Health Policy Research in 2022, 72% of adults in California have experienced at least one ACE and 20% have experienced at least 4 ACEs.

Types of Adverse Childhood Experiences

Abuse



sexual



physical



emotional

Neglect



emotional



physical



mental
illness



partner
violence

Household Challenges



parental
separation



incarceration



substance
misuse or
dependence

Program Goals and Collaborations: Through collaborations between academic and community partners, 7 funded projects aim to identify biological and behavioral markers of the health impacts of ACEs to enable earlier detection and tailored interventions that improve the health of children, youth, and their families.

The ACEs Research Program funded 7 demonstration projects (turn the page to read about projects 3-7).

1

University of California, Irvine, Lead Investigator: Tallie Z. Baram, MD, PhD. 2021-2025, \$2.9

Million. Using Precision Medicine to Tackle Impacts of Adverse and Unpredictable Experiences on Children's Neurodevelopment

- **How:** The UC Irvine team aims to identify how a novel actionable ACE, unpredictability, influences the developing brain at an individual level and discover biomarkers that distinguish those impacted by ACEs from those who exhibit resilience.
- **Impact:** This approach could inform the delivery of evidence-based interventions to those in greatest need, ameliorating accumulating health disparities.

Stanford University, Lead Investigator: Sayantani Sindher, MD. 2022-2026, \$3 Million

Systems-based, Multidisciplinary Assessment of Adversity and Toxic Stress for Individualized Care

- **How:** The Stanford team aims to develop a biomarker assessment to identify toxic stress, guide precision medicine treatment recommendations, and ultimately assess treatment efficacy.
- **Impact:** This toxic stress assessment profile could help providers more easily identify patients affected by toxic stress and recommend personalized intervention treatment strategies.

2



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



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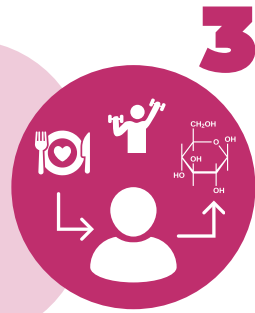
California Initiative to Advance Precision Medicine

In 2021, CIAPM announced seven awardees from the request for proposals, "Addressing Health Impacts of Adverse Childhood Experiences (ACEs) through a Collaborative Precision Medicine Approach."

Children's Hospital Los Angeles, Lead Investigator: Pat Levitt, PhD. 2021-2025, \$2.5 Million

Scalable Measurement and Clinical Deployment of Mitochondrial Biomarkers of Toxic Stress

- **How:** The CHLA team aims to improve early detection of ACEs through screening and laboratory measures that identify disruptions in metabolic health and toxic stress.
- **Impact:** Through early identification and interventions, the team seeks to improve health and quality-of-life outcomes for infants and families



4



Loma Linda University, Lead Investigator: Ariane Marie-Mitchell, MD, PhD, MPH. 2021-2026, \$2.9 Million. A Multi-Component Intervention to Strengthen Families and Build Youth Resilience

- **How:** Using Health, Education, and Learning partnerships, the Loma Linda team aims to optimize the delivery of information and resources to families based upon different levels of need.
- **Impact:** This intervention could be a scalable approach for pediatric preventive care and lead to decreased toxic stress, reduced disparities, and increased positive health outcomes.

University of California, Los Angeles, Lead Investigator: George Slavich, PhD. 2021-2026, \$3 Million. Identifying Social, Molecular, & Immunological Processes for Mitigating Toxic Stress & Enhancing Personalized Resilience

- **How:** The UCLA team aims to develop educational programs on stress and resilience and study how ACEs influence biological functioning and perceived stress, using multi-omics approaches.
- **Impact:** The team's scalable precision intervention could identify social, molecular, and immunological processes that can be targeted to reduce stress-related disease risk.



6



University of California, San Diego, Lead Investigator: Gary Firestein, MD. 2021-2025, \$3 Million. Advancing a Precision Population Health Approach to ACEs to Reduce Health Disparities

- **How:** The UCSD team aims to develop a community-based intervention to mitigate ACEs, build resiliency to toxic stress, and reduce childhood obesity within Latino communities.
- **Impact:** The intervention is informed by and co-designed with community engagement teams, serving as a model for a community-based approach to improve ACE-related health outcomes.

University of California, San Francisco, Lead Investigator: Neeta Thakur, MD, MPH. 2021-2025, \$3 Million. The Collaborative Approach to Examining Adversity and Building Resilience Program

- **How:** The UCSF team aims to study biomarkers associated with ACEs and test the effectiveness of interventions that reduce caregiver stress and improve the child-caregiver relationship.
- **Impact:** This approach could demonstrate the effectiveness of mitigating the health impacts of ACEs, measured by biomarkers and health outcomes, through reduction in caregiver stress.





California Initiative to Advance Precision Medicine

In 2024, CIAPM announced three awardees from the request for proposals, "A Precision Medicine Approach to Improve the Prevention, Diagnosis, and Treatment of Depression."



CIAPM's Depression Program

Program Goals and Collaboration: Through collaborations between academic, community, and industry partners, these three-year projects aim to improve outcomes in patients with, or at risk for, depression.

What is depression? Sad or "empty" mood, diminished interest in activities, fatigue and loss of energy, changes in sleep and/or appetite, aches or pains, difficulty concentrating, feelings of worthlessness and guilt, and thoughts of death and suicide.

Santa Clara University, Lead Investigator: Greg Hajcak, PhD, \$2.9 Million

Building an Affirming Life and Navigating Challenging Emotions (BALANCE Study)

- **Why:** 20% of all youth experience depression, youth with LGBTQ+ identities are twice as likely to experience depression and are among the least likely to receive mental health services.
- **How:** Test the effectiveness of a personalized digital application and telehealth-based peer counseling, tailored to youth with LGBTQ+ identities.
- **Impact:** The intervention could be scaled broadly to positively impact depression among LGBTQ+ youth and serve as an evidence-based mental health approach.



University of California, San Diego, Lead Investigator: Suzi Hong, PhD, \$3 Million

Making the Unseen Seen Trial of Depression (MUST-D): Scrutinizing social determinants of depression to advance precision and equitable care

- **Why:** Monitoring of social determinants of health (SDoH) for mental health outcomes is rarely performed or integrated into depression care.
- **How:** Determine effects of SDoH on depression in the most vulnerable and build a system to implement SDoH-informed care by identifying factors that lead to risk or resilience.
- **Impact:** The study aims to uncover barriers to care-seeking and access, address stigma of depression, and enhance culturally-sensitive care.



University of California, San Francisco, Lead Investigator: Tony Yang, MD, PhD, \$3 Million

Precision Mental Health to Predict Risk, Prevent, and Treat Depression in Publicly Funded Youth

- **Why:** Publicly-funded youth, which often include justice-involved, youth in foster care, low-income youth, typically of color, are at disproportionately higher risk for developing depression.
- **How:** Use precision medicine approaches to identify publicly funded youth at the highest risk for developing depression and who are likely to respond to a mindfulness intervention.
- **Impact:** This study aims to identify risk, prevent, and treat clinical depression in publicly-funded youth via timely and individualized interventions.





Representative Research Program

Reducing Health Disparities Through Representative Research

Overview

Historically, clinical research has been characterized by a lack of representation that does not match the demographics of the disease burden or health condition under study. This lack of representation compromises the generalizability of clinical research findings to the total population, hinders innovation, limits access to effective medical interventions and treatments, and compounds health disparities in the populations underrepresented in clinical research. Populations underrepresented in research include, but are not limited to, racial and ethnic minoritized populations, older adults, pregnant and lactating individuals, LGBTQ+ populations, and persons with physical or developmental disabilities. Clinical research and clinical trials that better match the demographics of the disease or health condition of interest, address the historical lack of representation in research, and results in 'representative research.' Therefore, in 2025, CIAPM launched two Requests for Applications (RFAs) to support representative precision medicine research within California that includes underrepresented populations and reduces health disparities, with the view that research benefits all people within California and promotes health innovation for all California communities.

Development, Release, and Timeline

CIAPM released two RFAs for representative precision medicine research on October 15, 2025, inspired by feedback from the California Precision Medicine Advisory Council (CPMAC). The first RFA, focused on partnerships, will award up to \$6 million to support approximately 3-5 project teams conducting representative precision medicine research projects over 2.5 years. The second seeks to award approximately \$2 million to support up to 15 doctoral students conducting representative precision medicine research projects over 2.5 years. The RFAs are available on the [CIAPM Website](#).

Request for Applications: Representative Precision Medicine Research Through Partnerships

This RFA supports representative precision medicine research through partnerships (academic-community or academic-academic partnerships) by supporting 3-5 research projects for 2.5 years (\$1.2-2 million/project, \$6 million total). Academic-community partnerships must ensure that the research is not only scientifically rigorous but also grounded in the real-world needs of the populations or communities it seeks to benefit; academic-academic partnerships must break down silos between academic institutions and bring together complementary approaches and expertise.

The application submission process is divided into three stages:

Stage 1: Letters of Intent (LOI), due November 21, 2025 (required, but non-binding and not scored)

Stage 2: Initial Applications, due January 23, 2026 (required and scored)

Stage 3: Full Applications (by invitation) due April 24, 2026 (only a subset advanced to this stage)

By the full application stage, projects include at least one academic or community collaborator.

Timeline:

RFA Release: October 15, 2025





RFA Informational Webinar: October 30, 2025

Letter of Intent Deadline: November 21, 2025

Initial Application Deadline: January 23, 2026

Notification of Finalists: March 13, 2026

Full Application Deadline: April 24, 2026

Notification of Awards: May 2026 (earliest possible)

Awards Start: June 2026 (earliest possible)

Awards End: December 2028

CIAPM received a record number of letters of intent (91, from 20 California institutions). Initial and Full applications and awardees were recommended by the Expert Selection Committee and announced in Summer 2026, including receiving 68 Initial applications from 17 research institutions

	Total Number	Number of Institutions
Letter of Intent	91	20
Initial Applications	68	17
Full Applications	17	12

Request For Applications: Doctoral Student Representative Precision Medicine Research

This RFA supports doctoral student representative precision medicine research by supporting ~15 doctoral students for 2.5 years (\$62,000/year/student, \$2 million total). The applicant must be a current PhD, DrPH, MD-PhD, or other doctoral-level student conducting research at a non-profit California academic research institution and in good academic standing. Applicants’ projects will additionally enhance their own education and training, providing career development that facilitates bridging interdisciplinary fields to advance precision medicine, and increases representation in science that is likely to lead to valuable findings on health disparities. Applicants must have a mentor(s) that will supervise and support the research.

The application submission process is in one stage.

Timeline:

RFA Release: October 15, 2025

RFA Informational Webinar: November 6, 2025

Application Deadline: January 30, 2026

Notification of Awards: April 2026 (earliest possible)





Awards Start: May 2026 (earliest possible)

Awards End: November 2028

Expert Selection Committee Proceedings

In 2025, CIAPM recruited two out-of-state expert selection committees to review applications for each RFA, based on their expertise across the spectrum of representative research and precision medicine. Through June 2026, these committees, shown below, will recommend which applications advance to the Finalist stage and are invited to submit Full Applications for the Partnerships RFA, and recommend awardees from the Partnerships Finalist pool and Doctoral Student applicant pool to be finally awarded. The review and selections follow CIAPM policies and procedures and are described in the RFA. Selection criteria include the strength of a project's significance, potential for public benefit, approach, overall impact, suitability of the partnership (for partnership research projects) and training plan/applicant potential (for doctoral student research projects).





Representative Precision Medicine Research Through Partnerships RFA Expert Selection Committee



Chair
Elaine Mardis, PhD
Professor
Ohio State University



Olusola Ajilore, MD, PhD
Professor
University of Illinois Chicago



Caitlin Gloeckner Allen, PhD,
MPH
Associate Professor
Wake Forest University
School of Medicine



José A. Bauermeister, PhD,
MPH
Professor
University of Pennsylvania



Sunny Chieh Cheng, PhD, RN
Associate Professor
University of Washington



Shawn Chiang, PhD, MPH
Assistant Professor
Texas A&M University



Elizabeth Gross Cohn, RN,
PhD, FAAN
Professor
City University of New York



Jack Cordes, PhD
Assistant Professor
Tufts University



Juan Carlos Espinoza Salomon, MD
Chief Research Informatics
Officer
Lurie Children's Hospital





Darrell Hudson, PhD, MPH
Professor
University of Michigan



Douglas Knutson, PhD
Associate Professor
Oklahoma State University



Jewel Mullen, MD, MPH, MPA
Associate Professor
University of Texas at Austin



Akinlolu Ojo, MD, PhD, MBA
Professor
University of Kansas



Wei Perng, PhD, MPH
Associate Professor
University of Colorado



Paula S. Ramos, PhD
Associate Professor
Emory University



Elizabeth H. Ruder, PhD, MPH,
RDN
Associate Professor Rochester
Institute of Technology



Dorothy D. Sears, PhD
Professor
Arizona State University



Arash Shaban-Nejad, PhD,
MPH, MS, FAMIA
Associate Professor
University of Tennessee
Health Science Center





Bonnielin K. Swenor, PhD,
MPH
Professor
Johns Hopkins University



Martin Tristani-Firouzi, MD
Professor
University of Utah



Celina I. Valencia, DrPH
Assistant Professor
University of Arizona



Stacey J. Winham, PhD
Associate Professor
Mayo Clinic

Doctoral Student Representative Precision Medicine Research RFA Expert Selection Committee



Chair
Gloria D. Coronado, PhD
Professor
University of Arizona



Elizabeth Aquino, PhD, RN,
FAAN
Clinical Associate Professor
University of Illinois–Chicago



Marie Barnard, PhD
Associate Professor
University of Mississippi





Elena Cyrus, PhD, MPH
Associate Professor
University of Central Florida



Andrew T. Dewan, PhD, MPH
Professor
Yale University



Susan Everson-Rose, PhD, MPH
Professor
University of Minnesota



Bertha Hidalgo, PhD, MPH
Associate Professor
University of Alabama at Birmingham



Rohan D. Jeremiah, PhD, MPH
Professor
University of Illinois—Chicago



Daisy Le, PhD, MPH, MA
Associate Professor
George Washington University



Gwen Lomberg, PhD
Professor
Medical College of Wisconsin



Caleb C. McKinney, PhD, MPS
Professor
Georgetown University



Michelle Odum, EdD, MPH
Assistant Professor
George Washington University





Beth L. Pineles, MD, PhD
Assistant Professor
University of Pennsylvania



Anne Saw, PhD
Associate Professor
DePaul University



Peter X.-K. Song, PhD
Professor
University of Michigan



Qianqian Song, PhD
Assistant Professor
University of Florida



Louisa A. Stark, PhD
Professor
University of Utah



David T. Takeuchi, PhD
Professor
University of Washington



Suzanne Vang, PhD
Assistant Professor
New York University
Grossman School of
Medicine



Wei-Qi Wei, MD, PhD, FAMIA,
FACMI
Associate Professor
Vanderbilt University



Aggie J. Yellow Horse, PhD
Associate Professor
Arizona State University





Program Highlights

Communications

Newsletters

CIAPM continued to release regular newsletters, providing a network of over 1,450 recipients with updates and opportunities to be engaged with the program.

The newsletters shared key CIAPM announcements, provided meeting updates and summaries, introduced new and outgoing interns and council members, and highlighted important publications and presentations for the ACEs and Depression Research Programs, among other information. The series of Researcher Spotlights continued through 2025, highlighting CIAPM-funded investigators and community researchers, detailing how their leadership is critical to the goals of the ACEs and Depression Research Programs. The newsletters also served as an important venue for highlighting the launch of the 'Representative Precision Medicine Research' RFA.

Current and archived newsletters are available on the CIAPM website. Interested stakeholders can also sign up for the distribution list on the website.¹

Evaluation Report for the Cancer Disparities Research Program

In late 2025, CIAPM published their second evaluation report of the Initiative, this time focused on the *Cancer Disparities Research Program*. This research program largely focused on identifying barriers to effective cancer care, demonstrating effective cancer care practices, and developing early successes in the implementation of novel research approaches.

Collectively, the program focused on breast cancer patients among primarily Spanish-speaking and Latino communities in CA, to identify susceptibilities and potential treatments and care strategies tailored to this community. As a result, the research program developed advanced tools and educational materials for diverse Latina populations to identify cancer risk (UCSF, Dr. Elad Ziv), developed an AI platform to guide the prediction of possible tumor treatments (UCSD, Drs. Tamayo and Kim), and used culturally-astute community health workers to successfully improve on preventative and acute cancer care (Stanford, Dr. Patel).

Key learnings from the Cancer Disparities projects included:

- (1) Understanding genetic diversity in Latinas can help refine genetic cancer risk assessments for breast cancer.
- (2) Community health worker-led health care interventions can lead to earlier diagnoses and improved cancer care.
- (3) Leveraging academic-community partnerships, in tandem with community health workers, can help align investigators and the community on research goals, recruit participants, and educate the community about precision cancer care and treatments, especially in underserved settings.
- (4) Machine learning/artificial intelligence can potentially predict the efficacy of cancer treatments based on tumor genetics.

To read more about the results of the cancer research portfolio, please visit the [CIAPM Publications page](#).²

1 [CIAPM Email List Registration Page](#)

2 [2025 Cancer Disparities Research Program Evaluation Report to the California Legislature](#).



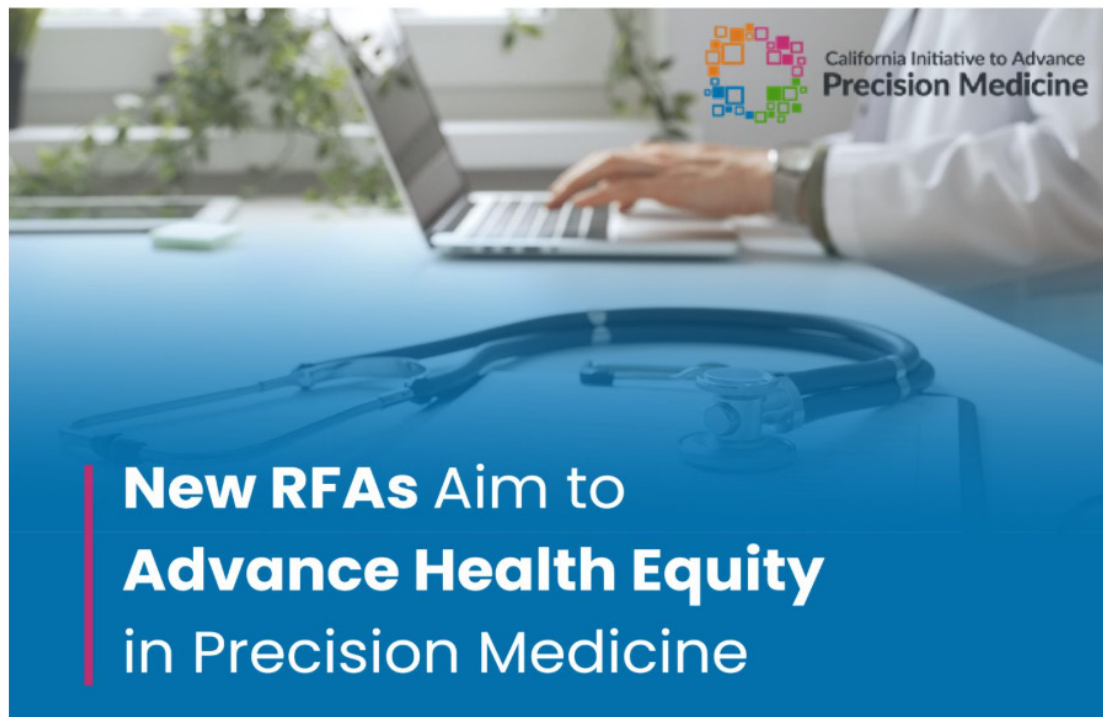


Caption: Evaluation report cover page and map of the CIAPM Cancer Research Program highlighting the lead research sites and 16 partnering institutions.

Representative Precision Medicine Research RFA Dissemination

The launch of the Representative Precision Medicine Research RFAs, as well as application instructions and deadlines for both *Partnerships* and *Doctoral Students* was widely distributed to our newsletter recipient list, social media, curated e-lists of university research offices, and featured on the CalHHS webpage and blog.





New RFAs Aim to Advance Health Equity in Precision Medicine

California Announces Funding Opportunities for 'Representative Research' Proposals to Reduce Health Disparities and Increase Participation from Underrepresented Groups

[Blog](#) [Featured](#) [Uncategorized](#) / October 15, 2025

Caption: [Blog post](#) of announcement of Representative Precision Medicine Research program on CalHHS webpage.

The full press release of the RFA announcement is available in Appendix C.

Team Engagements

Precision Medicine World Conference 2025

In 2025, CIAPM resumed their presence at the Precision Medicine World Conference (PMWC) in the Silicon Valley. CIAPM staff Dr. David Reiner, Dr. Ramon Martinez, Saga Barberis and Fellow Joanna Guan hosted a booth with information about the former and currently funded research programs.

Additionally, current and former members of the advisory committee, such as Ysabel Duron and Drs. Clara LaJonchere, Hakan Sakul, Yvonne Maldonado, and Keith Yamamoto connected, presented, and moderated conversations at the PMWC meeting. Of note, Dr. Yamamoto moderated a fireside chat with former FDA commissioner Dr. Robert Califf. Images in the *Social Media* section below.





Social Media

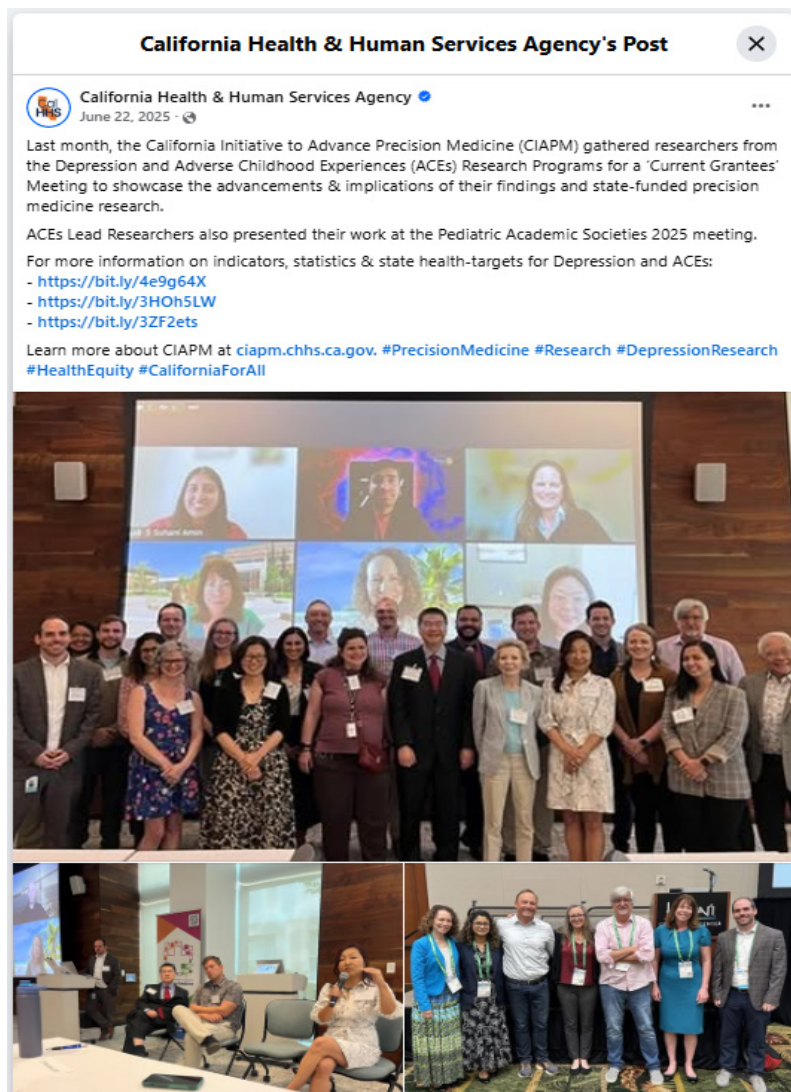
Precision Medicine World Conference



Caption: CIAPM staff Dr. David Reiner, Dr. Ramon Martinez, Saga Barberis and Fellow Joanna Guan hosted a booth at the Precision Medicine World Conference 2025 in Santa Clara. [Original Post](#).

‘Current Grantees’ and Pediatric Academic Societies Meetings





Caption: Recap announcement of CIAPM-supported cohorts of ACEs and Depression researchers presenting their work together at the ‘Current Grantees’ meeting in Sacramento and ACEs researchers attending the Pediatric Academic Societies in Honolulu, HI. Panels moderated by Chief Science Officer David Reiner. [Original Post](#).

Intern Search

CIAPM looked to social media to disseminate a call for interns for the program to a wider audience.

As part of the posting amplification, CIAPM received 29 applications for the open role, demonstrating the broad and state-wide interest in our program for California students seeking training in biomedical policy and grant administration.





California Health & Human Services Agency

8mo • 🌐

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California Initiative to Advance Precision Medicine (CIAPM) Internship: Call for Applications! 🔔

The CIAPM team is expanding to bring aboard a graduate student pursuing a degree in a relevant biomedical science at a UEI-eligible California institution for four months, with the potential for extension.

The intern will support science communications and research administration, joining staff in meetings and engage with program-wide efforts, including administration of research projects, generate, design, and distribute graphics and reports, and contribute to the development of equitable biomedical research.

Applications are welcome through September 5, 2025 for a 12-24 hours/week (flexibly scheduled) remote internship position starting mid-October. UEI account and login are required to apply to the position.

Science communications and research administration: bit.ly/45jOAOd



Caption: [LinkedIn post](#) amplifying an open call for interns for the CIAPM program.





CAL STAR Network
@CALSTARNetwork

...

Thank you to the California Initiative to Advance Precision Medicine for your continued support. We were thrilled to present our research and the important strides we're making in advancing health outcomes. Together, we're paving the way for a healthier, more resilient future!



👤 CIAPM and 2 others

Amplification by Grantees

Caption: [CAL STAR Network amplifies](#) CIAPM Site Visit to UCLA ACEs Research Team by Chief Science Officer David Reiner.

California Precision Medicine Advisory Council (CPMAC)

The California Precision Medicine Advisory Council was launched in 2020 to advise on current and future programs of the Initiative. The 11-member Council is comprised of precision medicine experts from a broad range of backgrounds and sectors, including academia, government, industry, finance, patient advocacy, and clinical care. The Council meets quarterly for discussions and updates on CIAPM's portfolio of programs and projects.

Some of the topics covered during this year's advisory council meetings included the Request for Applications for the 'Representative Precision Medicine Research' program, communications, demonstration project updates, and Advisory Council member additions and onboarding,

The council also said goodbye to a dedicated advisor, Dr. K. Jones, and welcomed Dr. Leigh Ann Simmons (biographies of the new and continuing council members are provided in Appendix F). During the June 2025 Council meeting, advisors renewed the terms for leadership roles of Chair Dr. Clara Lajonchere and Vice Chair Dr. Keith Yamamoto.

In 2026, CIAPM will be actively accepting nominations for several vacancies on the Council as advisors reach their six-year term limits.





Research & Policy Training

In 2025, three graduate student fellows were part of CIAPM and CIAPM recruited an additional intern at the end of the calendar year after saying farewell to interns Laura Adame and Suhani Amin.

Interns supported administrative duties for the California Precision Medicine Advisory Council, helped revise an evaluation report for the cancer research portfolio, co-authored annual reports, supported the launch of the Representative Precision Medicine Research program, and supported the administration of the ACEs and Depression Research Program.





Demonstration Projects

Demonstration research projects are the throughline of CIAPM, supporting precision medicine research in California that considers the whole person, centers community, and seeks to address health disparities.

In 2025, CIAPM led two ongoing demonstration precision medicine research programs, one focused on addressing the health impacts of adverse childhood experiences (ACEs) and the other focused on precision medicine approaches for the prevention, diagnosis, and treatment of depression. Projects in both research programs are co-led by an academic research institution and a community-based organization.

For the ACEs Research Program, CIAPM funded seven projects in 2021 or 2022, several of which concluded in 2025 and several finish in 2026. All projects received a one-year no cost extension due to technical and administrative challenges experienced at the start of their project related to the COVID-19 pandemic. Some projects received an additional no-cost extension to complete study time points and data analyses. These projects seek to advance innovative research that addresses the health impacts of ACEs through a collaborative precision medicine and community-centered approach.

For the Depression Research Program, CIAPM funded three outstanding three-year research projects in 2024 focused on precision medicine approaches to address health disparities in depression. In addition to the academic-community partnership, these projects also required a private sector collaborator to add a capability, scalability, or sustainability to the project.

Adverse Childhood Experiences (ACEs) Research Program

Children's Hospital Los Angeles (CHLA)

Scalable Measurement and Clinical Deployment of Mitochondrial Biomarkers of Toxic Stress (2021-2025)

Lead Principal Investigator: Dr. Pat Levitt

Partners (listed alphabetically): Early Childhood Mental Health Program @ CHLA, Fiesta Educativa, Inc., Help Me Grow Los Angeles, Kaiser Permanente of Southern California, Karsh Family Social Service Center, SHIELDS For Families, St. Anne's, Ventura County Medical Center

Health Issue Addressed:

- Best practices for early screening of ACEs by combining questionnaires with innovative laboratory tests that detect disruptions in metabolic health.

Precision Medicine Approach:

- The team measured biological markers, collected via minimally invasive cheek swabs from infants and their caregivers, to identify molecular signs of toxic stress as the infant develops. The team used a sensor to measure a marker of cardiac activity while the infant and caregiver were performing a task in the laboratory to provide real-time insight into physiological responses and stress responsivity.
- Engaged nonprofit leaders and families in a community advisory board to provide insight on participant communication and retention strategies and enhancing trust and knowledge within the community.

Project Findings:





- Infant development outcomes: Higher levels of biological stress was linked with worse language and motor development at 6 months and lower cognitive & language scores at 24 months.
- Mitochondrial gene mutations: Babies whose mothers had a PEARLS score (measuring ACEs) of 4 or higher had a higher number of spontaneous mutations, suggesting a higher level of biological ‘wear-and-tear’ as a result of chronic stress. Mothers with high PEARLS scores also exhibited a higher number of spontaneous mutations.
- Cardiac responses: Children who have a PEARLS score of 1 or higher, showed worse physiological flexibility, as measured by lower heart rate variability. Mothers with lower PEARLS scores had better physiological health as measured by higher heart rate variability.

Main Accomplishments in 2025:

- The study achieved its enrollment goal in May 2025. To date, cumulative completed visits include 340 participants at the 6-month timepoint, 321 at 12-months, 190 at 24-months, 120 at 36-months, and 38 at the final 48-month follow-up timepoint. Final attrition at the 12-month assessment was 21 participants. The team collected and processed over 1,000 biological samples from mothers and their infants.
- The Community Advisory Board convened quarterly in 2025 with the research group and engaged in discussions including updates on study progress, requests for community input for facilitating participant retention through later timepoints, participant experience and communication strategies, and identification of methods to give back to participating families prior to publication.
- Through 2025, the team trained numerous high school, undergraduate, graduate student trainees, notably funding one postdoctoral fellow and one junior faculty.

What’s Next in 2026:

- The team will complete the study, analyze the data, and share findings through conference presentations and publications.
- The team will continue to share updates via a quarterly newsletter with current and past study participants.
- The study team anticipates completing most 24-month follow-up research visits by the end of 2026 with an anticipated 275 of 24-month appointments completed total, and all remaining 36 and 48-month follow-up visits by the end of 2028.

Impact on Californians:

The Family First Study has established a cheek swab as a high compliance and easy to collect biological sample that can yield up to four biological measures from one sample to identify correlations between biomarker trends and child developmental trajectories. This approach can lead to a highly reliable and scalable measure to identify risk of toxic stress exposure in infancy and childhood in a clinical setting.





Children's Hospital LOS ANGELES

Family First Research Study

LEVITT DEVELOPMENTAL NEUROSCIENCE LABORATORY

FamilyFirst@chla.usc.edu (323) 364-2536

ARE YOU INTERESTED IN LEARNING MORE ABOUT YOUR BABY'S DEVELOPMENT?

Our research team has been awarded a grant from the California Initiative to Advance Precision Medicine to better understand the experiences of mothers and their babies during the first years of life. Join us in exploring and developing tools to better monitor child development!

WHAT YOU WILL DO DURING YOUR VISIT

- Cheek Swab
- Play-based Developmental Assessment
- Mom and Baby Interaction
- Eye-tracking
- Blood Sample from Mom (OPTIONAL)
- Heart Rate from Baby (OPTIONAL)
- Urine Sample from Baby (OPTIONAL)

WHO CAN JOIN?

- Biological mothers of infants, 18+ years old
- Infants aged ≤ 5 months
- Complete a questionnaire to determine eligibility

VISITS

- 6 months
- 12 months
- 24 months (optional)
- 36 months (optional)

WHY PARTICIPATE

- Earn up to \$600
- Rideshare transportation
- Receive baby toys and invaluable insight into your Baby's development!

YOU SHOULD NOT EXPECT ANY DIRECT BENEFIT TO YOU OR YOUR CHILD AS A RESULT OF PARTICIPATING IN THIS RESEARCH.

PRINCIPAL INVESTIGATOR: DR. PAT LEVITT CHLA IRB# 21-00174

Children's Hospital LOS ANGELES

Estudio de investigación: Familia Primero

LABORATORIO LEVITT DE DESARROLLO NEUROCIÉNTIFICO

FamilyFirst@chla.usc.edu (323) 364-2536

¿LE INTERESA SABER MÁS SOBRE EL DESARROLLO DE SU BEBÉ?

Nuestro equipo de investigación ha recibido financiación del programa California Initiative to Advance Precision Medicine para comprender mejor las experiencias de las madres y sus bebés durante los primeros años de vida. ¡Únase a nosotros en la exploración y el diseño de herramientas para mejorar el seguimiento del desarrollo infantil!

QUÉ HARÁ DURANTE SU VISITA

- Hisopo de mejilla
- Evaluación de desarrollo
- Interacción entre madre e hijo
- Rastreo ocular
- Muestra de sangre de la madre (OPCIONAL)
- Ritmo cardíaco del bebé (OPCIONAL)
- Muestra de orina del bebé (OPCIONAL)

¿QUIÉN PUEDE PARTICIPAR?

- Madres mayores de 18 años con bebés ≤ 5 meses de edad
- Complete un cuestionario para determinar si es elegible.

VISITAS

- 6 meses
- 12 meses
- 24 meses (opcional)
- 36 meses (opcional)

POR QUÉ PARTICIPAR

- Recibe hasta \$600 por su participación
- Uber / Lyft gratuito
- Reciba juguetes para su hijo/a y información sobre su desarrollo.

NO DEBE ESPERAR NINGÚN BENEFICIO DIRECTO COMO RESULTADO DE SU PARTICIPACIÓN EN ESTA INVESTIGACIÓN.

INVESTIGADOR PRINCIPAL: DR. PAT LEVITT CHLA IRB# 21-00174

Caption: English and Spanish flyers of the team's Family First Research Study enrolling babies and mothers.

Loma Linda University

A Multi-Component Intervention to Strengthen Families and Build Youth Resilience (2021-2026)

Lead Principal Investigator: Dr. Ariane Marie-Mitchell

Partners (listed alphabetically): FIRST 5 San Bernardino; Help Me Grow Inland Empire; Inland Empire Health Plan; Loma Linda University Faculty Medical Group; Loma Linda University Institute for Community Partnerships; San Bernardino City Unified School District; SAC Health in San Bernardino; University of California, Los Angeles; Walden Family Services

Health Issue Addressed:

- How physician training and referrals can support and improve outcomes for children impacted by one or more ACEs.

Precision Medicine Approach:

- The study involves training pediatricians, community health workers (CHWs), and parenting educators in an evidence-informed curriculum called FIRST (Families Implementing Resilient Systems Together).
- This study of children ages 3-11 years and their families is evaluating whether the FIRST intervention impacts biomarkers of toxic stress and improves child health and psychosocial outcomes.

Project Findings to Date:





- Approximately 5-10% of children presenting for well-childcare were referred to CHWs for additional support. The majority of these referrals were for children with multiple risk factors (ACEs plus socioeconomic stressors and/or developmental delays). Importantly, CHW-support improved child access to medical care and reduced caregiver stress.
- Most ACEs occurred during infancy or toddlerhood. ACEs during those early developmental periods predicted child behavioral symptoms, but ACEs occurring later in childhood did not. Caregiver lifestyle factors buffered the effect of ACEs on child behavioral symptoms.
- ACEs were associated with several baseline child biomarkers including behavioral symptoms, school performance, perceived stress, body temperature differences, HbA1c, and inflammatory and antiviral gene expression.

Main Accomplishments in 2025:

- Through 2025, the team:
 - trained 124 pediatric residents and 36 faculty, 16 CHWs, and 8 parenting educators;
 - counseled over 3300 families and referred families to CHWs for additional support;
 - enrolled 283 child and caregiver research participants.
- One abstract was presented at a national conference and two additional abstracts were accepted for presentations in 2026.

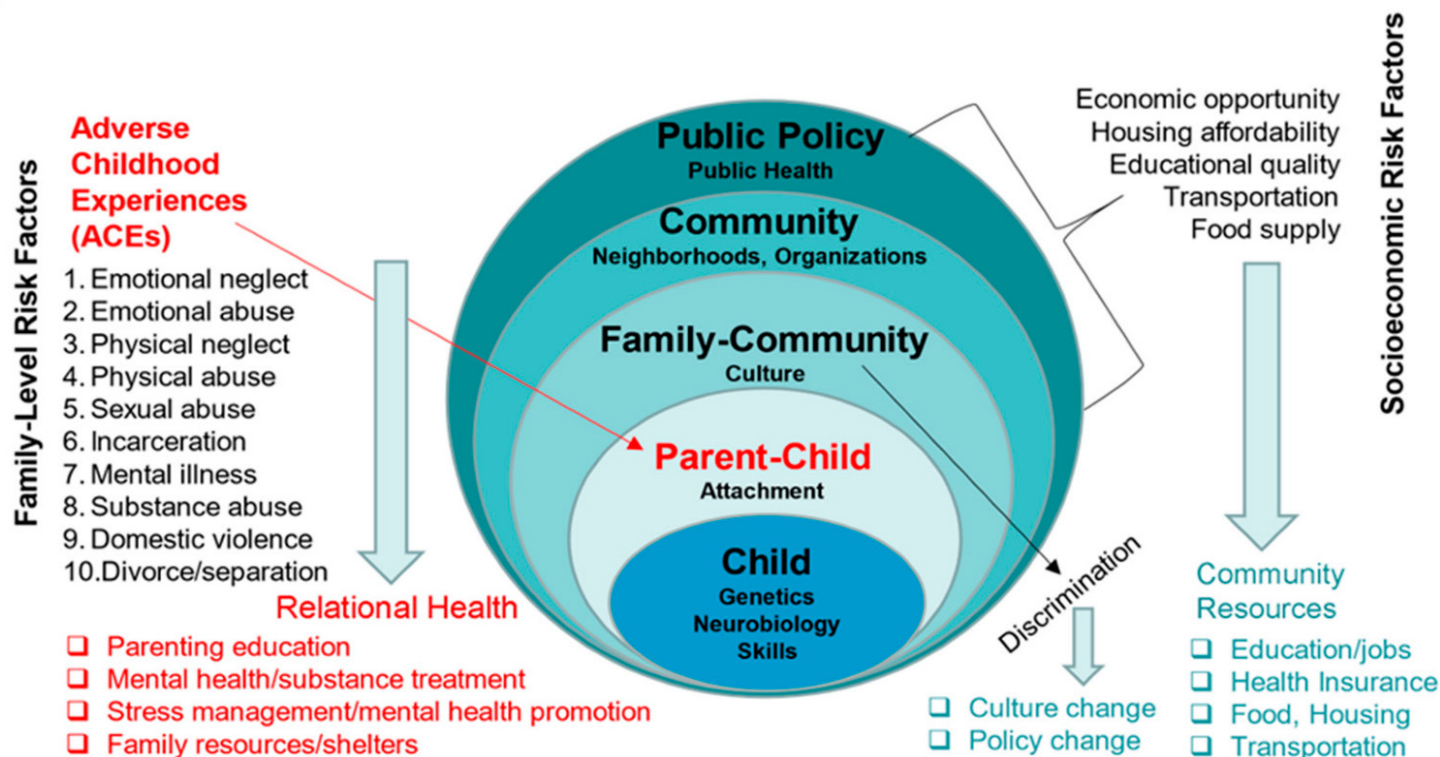
What's Next in 2026:

- The team will develop self-directed formats and online tools for further dissemination of the FIRST curriculum.
- The team will complete data collection and share findings through conference presentations and publications that will address key questions about associations between ACEs, biomarkers of toxic stress, and child health and psychosocial problems. Additional analyses will examine the impact of the FIRST intervention on these associations.

Impact for Californians:

- This work will address key questions about how pediatric practices can use precision medicine to help prevent and address ACEs and thereby improve health and psychosocial outcomes over the lifespan.





Caption: Ecological model of the developing child, and where ACEs affect the child and attachment development.

Stanford University

Systems-based, Multidisciplinary Assessment of Adversity and Toxic Stress for Individualized Care (The SYSTEMAATIC Project) (2022-2026)

Lead Principal Investigator: Dr. Sayantani Sindher

Partners (listed alphabetically): Center for Youth Wellness/Safe and Sound; Central Valley Community Foundation; Federally Qualified Health Center (FQHC) clinics of San Mateo Medical Center; Kaiser Permanente Northern California; Sean N. Parker Center for Allergy & Asthma Research at Stanford University

Health Issue Addressed:

- How to move beyond a symptoms-based strategy to identify and quantify the body's stress response through development and validation of a toxic stress assessment profile.

Precision Medicine Approach:

- Understand differences across neurologic, endocrine, and immune biological pathways in adults who endorse a high number of ACEs compared to adults with no ACEs, to produce a toxic stress assessment profile.
- Assess the feasibility, adaptability, and validity of the toxic stress assessment profile and impact of available resources within partner clinics and organizations.

Project Findings:

- The project findings are preliminary so far because the project is ongoing. Individuals with ACEs have elevated levels of C-reactive protein, which is a well-established marker of inflammation that has been linked to chronic stress and various health conditions.





Main Accomplishments in 2025:

- As of December 2025, the team enrolled 139 of 155 participants in the study.
- The team also completed the infrastructure to support participants in health navigation visits to connect them to community-based resources.
- The team has mentored four students, contributing to successful completion of their master's degrees.

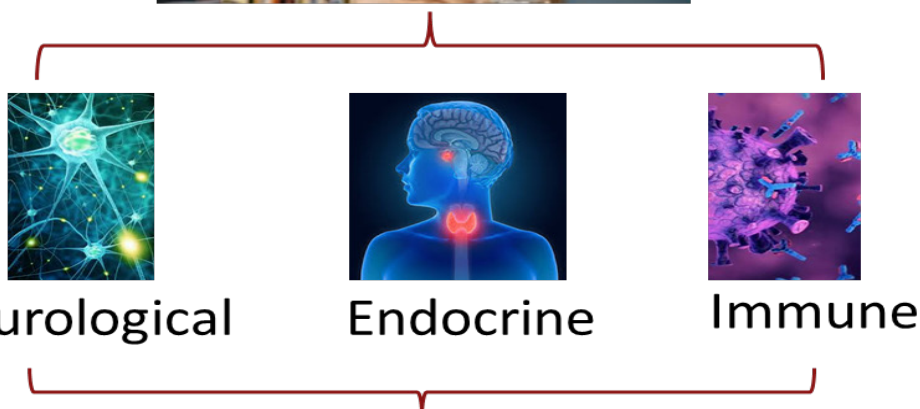
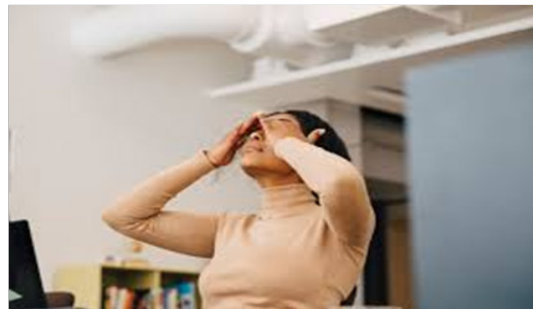
What's Next in 2026:

- The team has completed recruitment and enrollment of study participants and is aiming to complete the one-year study visit data collection and perform data analyses.
- The team has launched two of the planned focus group sessions, with two more planned Summer 2026, which seek to learn about participant experiences within the study and their community-based organizations managing stress.
- Lastly, the team is performing health navigation visits as part of the follow up outreach to facilitate successful participant outcomes.

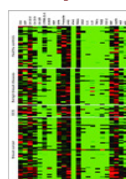
Impact for Californians:

- Because of this work, health care providers may be able to identify, through a blood panel, when a person is experiencing toxic stress, and potentially connect the person with community resources in a timely and personalized manner.

Toxic Stress



Stress panel





Caption: Schematic of stress panel concept, intended to identify and assess toxic stress across neurological, endocrine, and immune biological pathways.

University of California, Irvine

Using Precision Medicine to Tackle the Impact of ACEs (including a Novel Actionable ACE) on Children Neurodevelopment (2021-2025)

Lead Principal Investigator: Dr. Tallie Z Baram

Partners (listed alphabetically): Allevato Pediatrics, Chapman University, CHOC Primary Care Clinic, CHOC Health Center, Clinica CHOC Para Niños, Los Alamitos Pediatrics, Orange Doctors of Kids and Teens, Pediatric and Adult Medicine Tustin, Premier Pediatrics, Sea View Pediatrics, Southern Orange County Pediatric Associates

Health Issue Addressed:

- Uncovering and validating an understudied type of ACE, unpredictable parental and household environment, that would otherwise be unaddressed by current available screening tools.
- Feasibility of collecting and measuring DNA methylation in infant biological samples, which allows the team to examine environmental exposures and changes in gene expression as the infant develops.
- Determining the impact of unpredictable early-life experience on neurodevelopmental outcomes in real-world settings.

Precision Medicine Approach:

- The team implemented a novel screen, Questionnaire of Unpredictability in Childhood (QUIC), trained clinicians on its utility, and measured its associations with neurodevelopmental outcomes in children. Identification of individualized environmental risk patterns early informs more tailored prevention and intervention strategies.
- Collected and maintained biomarkers that can show how childhood adversity may be biologically embedded.
- Involved the 'community engagement studio' a community advisory board in the design, implementation, and dissemination of research studies.

Project Findings:

- The QUIC identified children at risk of developing later mental health concerns who were missed by using the PEARLS, a traditional ACEs screen, alone. By identifying children at risk for later emotional and cognitive concerns earlier and with more precision, families and providers are able to intervene sooner with tailored support.

Main Accomplishments in 2025:

- Through 2025, the team enrolled 157 mother-newborn pairs into the study and obtained 157 infant DNA samples from the infants at one month of age and obtained a 12-month sample from 143 of those infants.
- Completed over 80,000 total development assessments of child exposures to ACEs and unpredictability, as well as over 500 assessments on neurodevelopment.
- Established feasibility and workflow of a novel screener for childhood unpredictability in primary





care settings.

- Through 2025, the team trained 11 undergraduate research assistants, 14 post-baccalaureate researchers, and two post-doctoral research fellows.

What’s Next in 2026:

- The main discoveries are now in press in the journal, *Nature Mental Health*. The team will share findings also through conference presentations and additional publications.
- The team will collaborate with national, regional, and local organizations to implement the QUIC screen.

Impact for Californians:

- Because of this work, providers will be able to use a rapid novel screen that could identify early, actionable targets to improve child and family mental and physical health and aid in identifying risks that otherwise are not detected by current tools.

Goal 1: Implementing the Questionnaire of Unpredictability in Childhood (QUIC-5) in Pediatric Primary Care

Item
My child has a bedtime routine (e.g., is tucked in, parents read him/her a book, takes a bath).
At least one of my child’s parents is unpredictable
At least one of my child’s parents can go from calm to furious in an instant
My child’s parents have a stable relationship with each other.
In my child’s house, things we need are often misplaced so we cannot find them.



Glynn et al., 2019, *Neuropsychopharmacology*;
Lindert et al., 2023, *Frontiers in Psychology*

Caption: Example of items measured in the Questionnaire of Unpredictability in Childhood (QUIC)

University of California, Los Angeles

Identifying Social, Molecular, & Immunological Processes for Mitigating Toxic Stress & Enhancing Personalized Resilience (2021-2026)

Lead Principal Investigator: Dr. George Slavich

Partners (listed alphabetically): All Children Thrive, Am I Hungry, Los Angeles County Department of Health Services, Million Maker, Nutritious Movement, UCLA’s Center for Accessible Education, UCLA Online Teaching & Learning Team, UCLA STAND Program, UCLA-UCSF ACEs Aware Family





Health Issue Addressed:

- Provide training tools for researchers to study stress and precision medicine and the public with educational resources on stress and resilience, such that researchers can leverage these resources to address the stress-related disease burden (e.g., cardiovascular disease, diabetes).
- Examine whether personalized intervention programs can reduce stress levels and promote resilience across biological, psychological, and social life factors.

Precision Medicine Approach:

- The team designed and conducted an intervention study that tests personalized programs that target common stress-related domains in adults, such as eating, relationships, and sleep.
- The team designed a stress measurement and tracking platform that integrates psychological, behavioral, clinical, and various blood-based and sensor-monitored measures.

Project Findings:

- Compared to participants who were in the control condition, adult participants who received a 27-week remote precision stress intervention experienced a decrease in perceived stress levels from initial enrollment to the end of the 27-week-period.

Main Accomplishments in 2025:

- Analyzed data from the 397 participants in a 27-week stress intervention program and submitted findings on the effectiveness of the intervention program to various academic journals and conferences for presentation.
- Through 2025, the team enrolled 305 participants in a 3-week remote study that tracks individuals' stress levels with data from smartwatches, biological samples, and self-reported surveys.
- Completed recordings for the Massive Online Open Course (MOOC) on stress and resilience concepts and research-backed strategies to reduce stress and improve resilience. The MOOC serves as a large learning platform for Californians across the state to learn strategies that reduce stress-related disease concerns.
- Collected and combined psychological, behavioral, and clinical variables that can be used to model the effects of stress on health, and the additional impact of a variety of positive factors (e.g., social connection and belonging, optimism, etc.) and negative factors (e.g., poor diet, sleep, etc.).
- Beta-testing of a population-based stress tracker demonstrates its utility and feasibility, such that more Californians can use this resource to track their stress and identify support strategies to mitigate the development of stress-related disease.
- Through 2025, the team has provided training opportunities for five post-doctoral research fellows and three post-baccalaureate researchers.

What's Next in 2026:

- The team will launch the MOOC on stress and resilience.
- The team will conduct formal usability examination of the stress tracker and seek out potential opportunities to integrate the platform into existing initiatives and systems.
- The team will complete the study, analyze the data, and share findings through conference pre-





sentations and publications.

Impact for Californians:

- Because of this work, people may be able to relieve their stress through personalized tailored interventions based on which domain in their life is most impacted by stress. Researchers anywhere can use the resources generated by the UCLA team to integrate biological and psychological measures in their work, contributing to new knowledge on ACEs.



Caption: Example of 'My Stress Report' that is returned to participants, allowing them to review stressor severity and type.

University of California, San Diego





Advancing a Precision Population Health Approach to ACEs to Reduce Health Disparities (HEALthy4You) (2021-2025)

Lead Principal Investigator: Dr. Gary S. Firestein

Partners (listed alphabetically): American Academy of Pediatrics, California Chapter 3; Chicano Federation; Comité Organizador Latino de City Heights; Family Health Centers of San Diego; Olive-wood Gardens and Learning Center, Kitchenistas; San Diego County Childhood Obesity Initiative; San Diego County Promotores Coalition; San Diego State University School of Public Health; South Bay Community Services; StreetWyz; Vista Community Clinic/Poder Popular; YMCA Partners in Prevention

Health Issue Addressed:

- How to best support families experiencing ACEs and childhood obesity while navigating complex healthcare and social service systems.

Precision Medicine Approach:

- A clinical trial to understand which family services are effective at strengthening family resilience and reducing body mass index among Latino families in a federally qualified health center in San Diego.
- A community-led approach to address local issues affecting family health and well-being.

Project Findings:

- Families that took advantage of parenting training showed transient reductions in child body mass index during the six-month program.
- The services offered were challenging for participants to fully take advantage of. Participants who were able to take advantage of combined promotora (community health worker) and parenting training services showed some greater benefit.
- The San Diego County Obesity Initiative partnered with community-based organizations to gather stories about experiences related to social determinants of health in historically underserved communities and developed a community-led policy agenda with actionable steps for addressing health disparities. This ongoing work is supported by additional funding from the American Heart Association for a new Community Incubator Network project.

Main Accomplishments in 2025:

- The team completed their project, including data analysis and community activities.
- The team mentored and trained five research assistants, two doctoral students, and over 100 clinical staff and promotoras in community research.

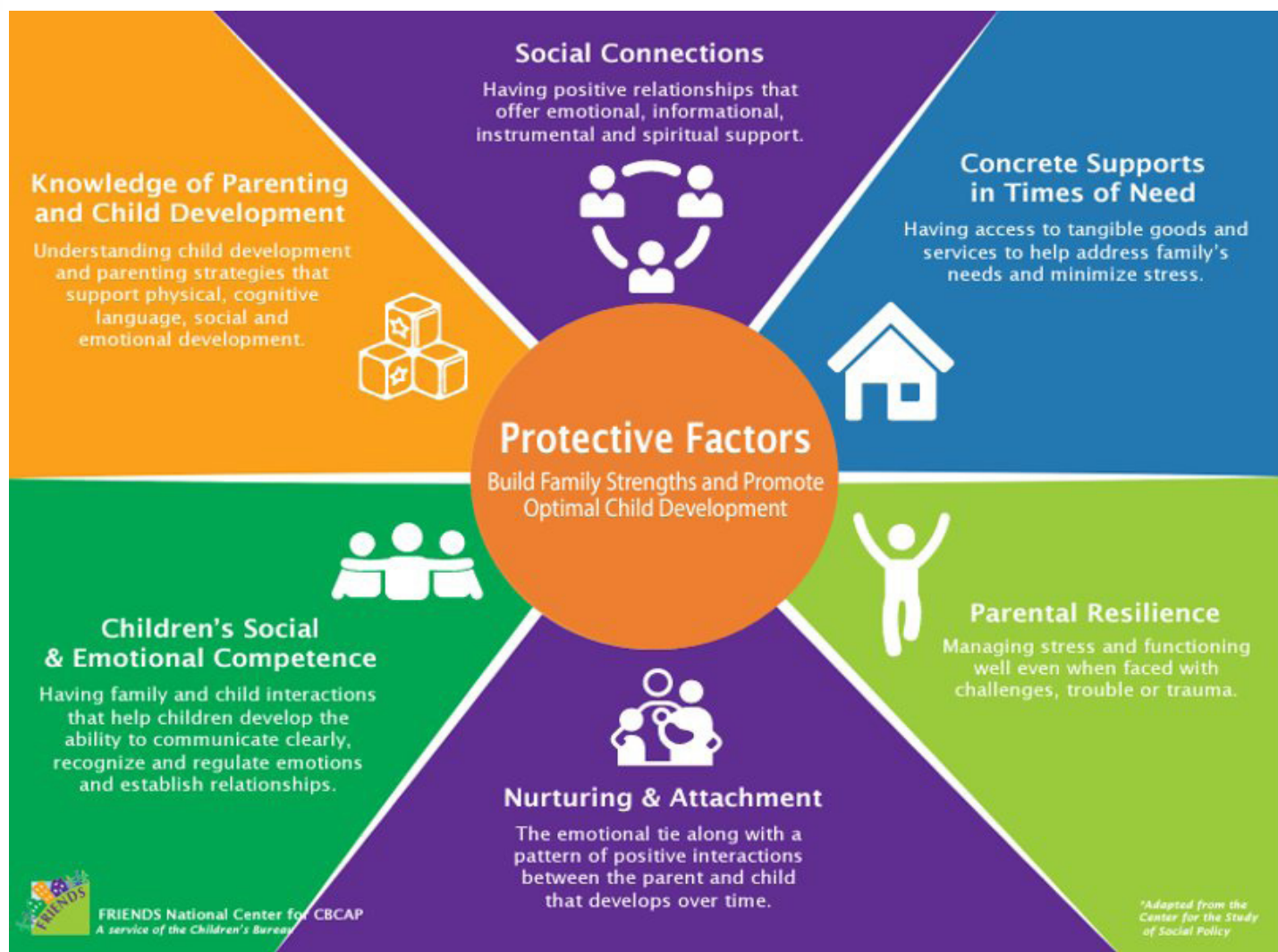
What's Next in 2026:

- Beyond the CIAPM funding period, the team will publish and disseminate their work as well as continue their community engagement activities.

Impact for Californians:

- Because of this work, health care providers may be able to tailor family services for individual family needs, which could lead to more resilient families and improved child health. The study showed that some interventions did not provide measurable long-term benefit, which will help to reshape how support for families might be provided.





Caption: Schematic of Protective Factors, which are the main indicators of family strength for the HEALTHy4You team.

University of California, San Francisco

The Collaborative Approach to Examining Adversity and Building Resilience (CARE) Program (2021-2025)

Lead Principal Investigator: Dr. Neeta Thakur

Partners (listed alphabetically): Benioff Children's Hospital Oakland, Futures Without Violence, Life-Long Medical Care, Santa Barbara Neighborhood Clinic, UC Berkeley, Santa Barbara

Health Issue Addressed:

- How to screen for ACEs using strategies informed by community input and examine effectiveness of child-caregiver programs for addressing biological and psychological effects of ACEs.

Precision Medicine Approach:

- The team followed up on a longitudinal community sample to identify biological markers of risk related to ACEs, and factors that protect children who experienced ACEs, providing insight on the ways ACEs may affect our biology and contribute to poor health and to identify promising interventions.





- The team also conducted a study testing the effect of child-caregiver programs for both child and adult outcomes (related to physical and mental health) and engaged community stakeholders in developing resources for practitioners to conduct ACEs screening.

Project Findings:

- For those children with higher ACE scores, caregivers reported lower levels of perceived health for their child and were also more likely to have symptoms related to asthma and allergic rhinitis five years later.
- Initial analyses of the intervention programs show that, compared to families that received services to navigate resources for their needs, those who received the caregiver-child program reported lower parenting stress three months after initial enrollment. Six months after initial enrollment, both groups, those receiving the intervention program and those receiving resource navigation for their needs, reported lower parenting stress.
- Care providers report limited time during clinical visits as a critical barrier to administering the ACEs screener, too many other required screening tools, and a lack of clear referral resources should a patient be screened.

Main Accomplishments in 2025:

- Through 2025, the team re-enrolled 246 children and their caregivers for a longitudinal study launched five years ago.
- The team enrolled 183 children and caregivers across three California sites: 73 participants at LifeLong Medical in Richmond, 59 at Benioff Children's Hospital Oakland (BCHO), and 51 at Santa Barbara Neighborhood Clinics (SBNC).
- CARE study team also convened eight Family Board (FB) meetings, during which caregivers of both English-speaking and Spanish-speaking backgrounds provided detail feedback on ACEs screening and care delivery in clinical settings.
- In collaboration with their community partner, Futures Without Violence, the CARE team built a resilience toolkit with educational resources about screening for and coping with toxic stress for clinicians and families.
- Through 2025, the team has provided training opportunities for thirteen trainees, including graduate students, post-doctoral fellows, and early career faculty.

What's Next in 2026:

- The team will complete data analysis and share findings through conference presentations and publications.
- The team is integrating Family Board insights to directly use for clinical procedures such as refine reminder systems, session timing, program delivery, and engagement strategies. The team is also exploring ways to continue Family Board involvement beyond this CIAPM-funded project period.

Impact for Californians:

- Because of this work, the team found that clinicians can implement ACEs screening and responses that are reflective of community input, families may be able to receive programs that dually improve outcomes for children and their caregivers, and researchers may be able to identify the effects of ACEs and children's mental and physical health through identification of ACEs-related biomarkers.





Resilience Toolkit Sample

Offering educational resources to all prior to screening

Health Effects and Hope

Harmful experiences in childhood and adulthood can increase health issues such as:

- ✓ Asthma, chronic pain, diabetes
- ✓ Smoking, drinking, prescription and street drug abuse
- ✓ Stress, anxiety, depression, suicide
- ✓ Relationships where you're being hurt or hurting your partner

But that's not the end of the story—there is growing community support, national hotlines/warmlines, and individual support.



Health Effects and Hope

“The stress of hard childhoods we know can affect our health- physical health, emotional health, substance use....but that isn’t the end of the story—we know that these issues can be turned around with supports and help.”

Caption: Sample of resources in a resilience toolkit co-built by community stakeholders, practitioners, and the research team





Depression Research Program

Santa Clara University

Building an Affirming Life and Navigating Challenging Emotions (BALANCE Study) (2024–2027)

Lead Principal Investigator: Dr. Greg Hajcak

Partners (listed alphabetically): Alum Rock Counseling Center; Stanford University; University of California, Los Angeles; Rosalind Franklin University of Medicine and Science; Yale University; Peers.net; Muse; Colibri Digital Marketing

Health Issue Addressed:

- Depression affects approximately 20% of youth, with LGBTQ+ youth experiencing disproportionately higher risk due to stigma, rejection, and victimization; the BALANCE project addresses this by developing a personalized, identity-affirming digital mental health platform paired with peer support to reduce depressive symptoms and improve access to culturally responsive care.
- By addressing both general youth mental health needs and the heightened burden among LGBTQ+ youth, the project integrates scalable digital tools and peer-based support to deliver tailored interventions that reduce stress, increase resilience, and address gaps in traditional mental health services.

Precision Medicine Approach:

- Develop and evaluate a personalized, scalable intervention to reduce depressive symptoms, including among LGBTQ+ youth.
- Integrate multi-level data (symptoms, stress, and biological and physiological indicators such as sleep, cognition, and EEG-derived measures) to determine what works best for whom.

Project Findings:

- Ongoing Youth Advisory Board engagement informed development of intervention content and structure with feedback on modules addressing depression, social safety, behavioral activation, and emotion regulation.
- Learnings from early implementation of the study are supporting refinement of intervention delivery and study infrastructure.

Main Accomplishments in 2025:

- Completed development of the digital mental health application and peer counseling training materials, integrating core intervention components (emotion regulation, behavioral activation, and social safety) into a functional platform.
- Established and activated community and private sector partnerships to support recruitment, outreach, and implementation across California.
- Launched participant recruitment (ages 14–19) and operationalized study workflows, enrolling initial participants.
- Deployed full study infrastructure, including digital intervention delivery, peer support systems, and multi-level data collection (e.g., EEG, blood spot sampling), informed by Youth Advisory Board input to ensure relevance for diverse youth, including LGBTQ+ populations.

What's Next in 2026:

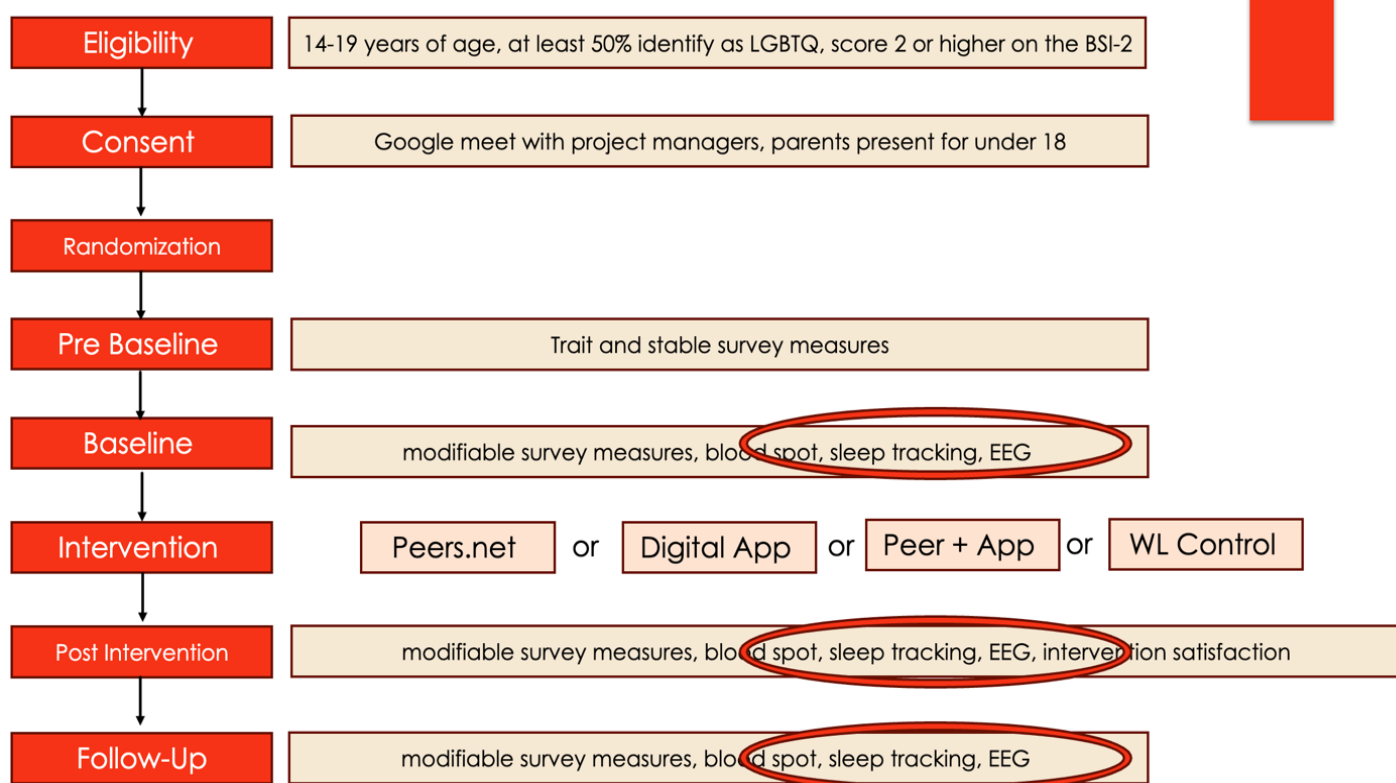




- Continue participant recruitment with the goal of enrolling up to 800 youth, including ~50% LGBTQ+ youth.
- Continue multi-level data collection across psychological, behavioral, and biological measures.

Impact for Californians:

- California youth, including LGBTQ+ youth, will benefit from a scalable, identity-affirming digital mental health platform paired with peer counseling that delivers personalized support to reduce depressive symptoms, improve emotional regulation and resilience, and increase access to culturally responsive care.



Caption: Study design and data collection framework for the BALANCE project. Youth (ages 14–19) are recruited and randomized to digital application, peer counseling, combined intervention, or waitlist control conditions, with multiple physiological measures at baseline, post-intervention, and follow-up to support personalized health.

University of California, San Diego

Making the Unseen Seen Trial of Depression (MUST-D): Scrutinizing Social Determinants of Depression to Advance Precision and Equitable Care (2024–2027)

Lead Principal Investigator: Dr. Suzi Hong

Partners (listed alphabetically): Family Health Centers of San Diego; Global Action Research Center; NeuroUX; UCSD Community Psychiatry Program

Health Issue Addressed:

- How to identify and measure social determinants of health (SDOH) that influence depression outcomes and integrate these factors into clinical care to improve equity and effectiveness of





depression treatment.

Precision Medicine Approach:

- Determine the trajectory of SDOH and real-time health behaviors that are predictive of depression outcomes in adults over a 12-month period.
- Examine social and behavioral factors that influence depression symptom characteristics over a 12-month period.

Project Findings:

- The Community Advisory Board (CAB) informed the development and planning of SDOH data collection methods through co-creation sessions, individual interviews, and usability testing sessions which led to a successful deployment of digital survey tools.

Main Accomplishments in 2025:

- Completed Community Advisory Board (CAB) sessions, patient partner interviews, usability testing of the NeuroUX smartphone-based SDOH data collection platform.
- Established recruitment workflows, completed training and onboarding of patient health navigators, and created patient registry for enrollment in collaboration with Family Health Centers of San Diego.
- Provided training opportunities for student trainees (1 undergraduate, 3 graduate students [2 master's, 1 PhD], 2 medical students).

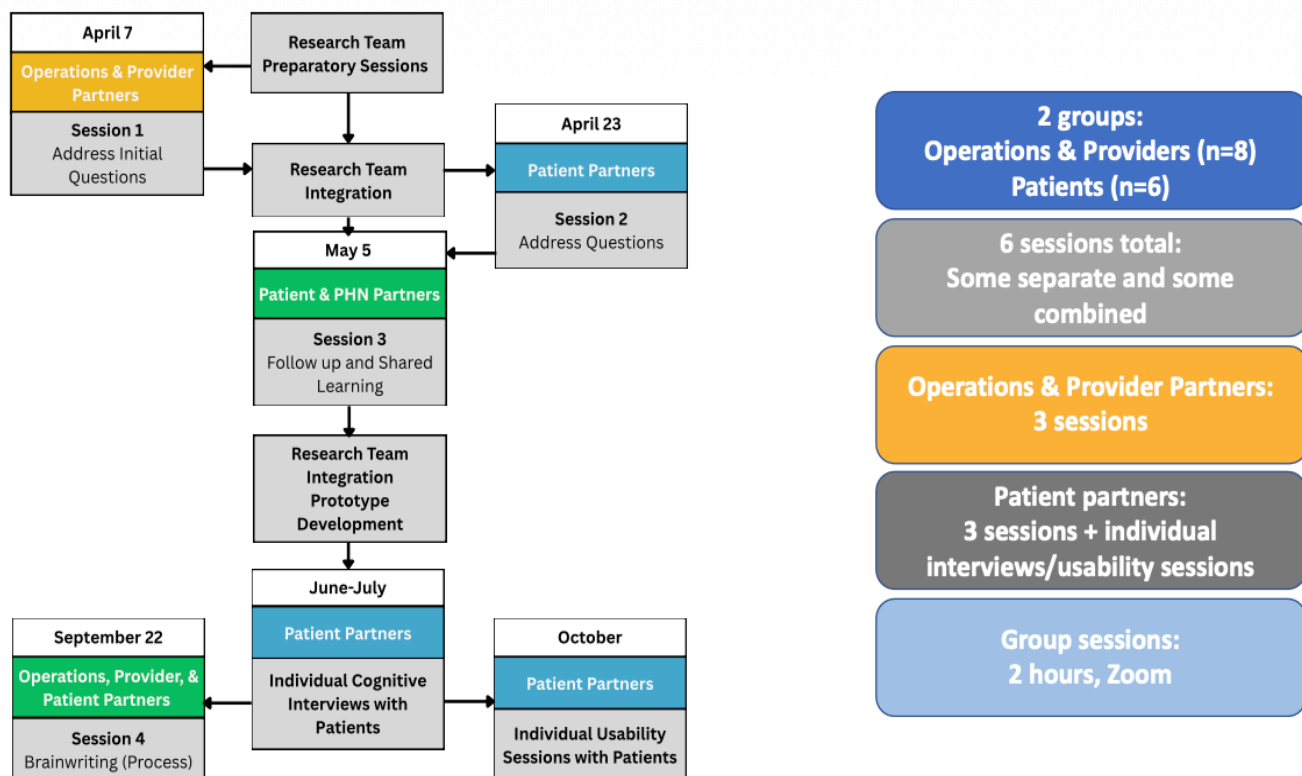
What's Next in 2026:

- Begin participant enrollment and SDOH, health behavior, and depression data collection, supported by collaborations with community and private sector partners.

Impact for Californians:

- Helps California patients, especially those from underserved communities, receive more personalized and effective depression care by integrating social determinants of health (SDOH) and health behavior with clinical data to better identify needs and improve outcomes.





Caption: Framework illustrating how patient and provider input was integrated throughout the research process to inform development of a patient-centered tool.

University of California, San Francisco

Precision Mental Health to Predict Risk, Prevent, and Treat Depression in Publicly Funded Youth

Lead Principal Investigator: Tony T. Yang, MD, PhD

Partners (listed alphabetically): Edgewood Center for Children and Families, NeuMarker, Teen-s4Teens

Health Issue Addressed:

- How to identify publicly funded youth (those who are supported by government programs, services, and other resources) who are at risk for developing depression, personalize treatment recommendations, and build clinical infrastructure for treating depression.

Precision Medicine Approach:

- Identify youth who are at the highest risk for developing clinical depression; identify youth who will respond best to a mindfulness intervention; identify the best clinical treatment option for youth diagnosed with depression.

Project Findings:

- Based on deeper analysis of the NIH Adolescent Brain Cognitive Development (ABCD) dataset, clinical depression was associated with sex (females at higher risk), higher baseline anxiety/depression, early puberty onset, and other lifestyle and social determinants of health factors.





Main Accomplishments in 2025:

- Completed the curation and extraction of NIH ABCD data to identify factors predicting future clinical depression in publicly funded adolescents.
- Launched an initial cohort for a 12-week randomized controlled trial to test the effectiveness of a mindfulness intervention in preventing worsening and relapse of depression.
- Identified and categorized a cohort of publicly funded adolescent patients diagnosed with clinical depression using de-identified UCSF patient data.
- Developed preliminary designs for Teen-BRIDGE, a dashboard to advance the identification and care of clinical depression in adolescents, and received feedback from 8 adolescents and 4 clinicians to incorporate into initial prototype build.
- Developed infrastructure and capacity at community partner Edgewood Center to launch focus groups and a community advisory board (CAB).
- Mentored and trained one medical student and two clinical fellows.

What's Next in 2026:

- Complete depression risk prediction analysis using the NIH ABCD dataset.
- Continue enrollment for the mindfulness intervention.
- Obtain missing and more complex data types for identifying personalized treatment options.
- Deliver a usable BRIDGE dashboard prototype.
- Launch Edgewood CAB and focus groups to gather community feedback.

Impact for Californians:

- If successful, clinicians and patients will benefit from the creation of a precision medicine tool to help identify the risk of, prevent, and treat clinical depression in publicly-funded youth via timely and individualized interventions.





Psychiatric Resources Map (Mockup)

California community resources widget mockup for Adolescent Depression Dashboard

Social Determinants of Health

California Community Resources

1651 4th St San Francisco CA 94158
Healthcare Providers Psychiatrist within 10 miles search

You are looking in **San Francisco County**. The access line for this county is **(888) 246-3333**

Map Satellite

San Francisco

zoom: [icon] [icon]

Daily City... Keyboard shortcuts Map data ©2022 Google Terms of Use Report a map error

Feedback from Community Partner Edgewood

- Learned that you must contact the access line for your county
- Cannot directly contact provider
- Modified design so that users can input their address/zipcode to find specific county access line number

Caption: Mock-up of BRIDGE dashboard page showing California Community resources, searchable by location and type of mental health resource incorporating feedback the team received from community partner Edgewood.





A Look Ahead

In 2026, CIAPM will celebrate its 10-year anniversary with an event highlighting accomplishments and impact, manage the selections process for the Representative Precision Medicine Research RFAs and launch awarded projects, continue to oversee the Depression Research Programs, close out the ACEs Research Program and prepare a comprehensive evaluation report for the Legislature, expand the state's precision medicine network through conferences and convenings, and honor the contributions of five Advisory Council members who are completing their six-year terms.

Ten-Year Anniversary

CIAPM will hold an event in early 2026 to celebrate the important milestone of 10 years of CIAPM, highlighting accomplishments and the impact of the program.

Representative Precision Medicine Research RFAs

Two Selection Committees, identified and recruited by CIAPM, will review applications and make recommendations for awards. CIAPM will oversee the selections process, make awards for 3-5 academic-community (\$6 million total, 2.5-year project term) or academic-academic partners and ~15 doctoral students (\$2.3 million total, 2.5-year project term), and launch the Representative Precision Medicine Research Program. Awarded projects will use a precision medicine approach, advance representative research, which includes underrepresented populations in research studies to better match the demographics of the disease or health condition of study, and aim to reduce health disparities.

Depression and ACEs Research Programs

CIAPM will continue to oversee three research projects that aim to use a precision approach to prevent, diagnose, and treat depression, identifying opportunities for collaboration to maximize impact. CIAPM will also close out the ACEs Research Program and prepare an evaluation report with the contributions of out-of-state subject matter experts to assess projects progress and impact.

CIAPM Networking and Convening

Staff will continue sharing the CIAPM model and expanding our precision medicine network through attendance at the annual Precision Medicine World Conference and CIAPM convenings to bring research teams together.

CIAPM Advisory Council

Several members of CIAPM's Advisory Council will complete their term limit of six years and end their tenure on the Council. CIAPM will recognize the important and resolute contributions of Drs. Clara Lajonchere, Keith Yamamoto, Kenneth Kim, Fatima Muñoz, and Hakan Sakul. Drs. Lajonchere and Yamamoto have deftly served as Chair and Vice Chair, respectively, since 2020.





Appendices

Appendix A. New Publications, Presentations, and Press Coverage of Currently Funded Projects

Adverse Childhood Experiences (ACEs) Research Program

Scalable Measurement and Clinical Deployment of Mitochondrial Biomarkers of Toxic Stress

Lead Principal investigator: Dr. Pat Levitt

Host Institution: Children's Hospital Los Angeles (CHLA)

Presentations

2025: Children's Hospital Los Angeles: Children's Hospital Los Angeles Experts to Present at 2025 Pediatric Academic Societies Meeting. [Meeting Link](#).

Publications

Gateau K, Durazo-Arvizu R, **Levitt P**. Evaluating oxidative stress marker F_{2a} -Isoprostanes relations to early life adversity and as a predictor of neurodevelopment in infants and toddlers. BMC Pediatr. 2026 Mar 17. doi: 10.1186/s12887-026-06702-z. Epub ahead of print. PMID: 41845473. *submitted to journal in 2025.

Databases

Research database with data collected at the research visits.

Educational Aids or Curricula

Biological Marker Assets

- Feasibility and scalability of measuring mitochondrial DNA in cheek swabs of infants and toddlers.
- Feasibility and scalability of non-invasive sensors to measure cardiac activity that indexes parasympathetic nervous system responses in infants and toddlers.

A Multi-Component Intervention to Strengthen Families and Build Youth Resilience

Lead Principal Investigator: Dr. Ariane Marie-Mitchell

Host Institution: Loma Linda University (LLU)

Presentations

Marie-Mitchell A. "Building Resilient Families through Pediatric Practice." Oral presentation, Pediatric Academic Society Annual Meeting, April 2025.

Databases

- Clinical database to evaluate process measures related to the FIRST intervention, including information from medical records and community partnerships;
- Research database with biopsychosocial data collected at the research visits.

Algorithms





Whole Family Care referral and algorithm to determine level of support needed based upon family risk factors.

Educational Aids or Curricula

1. FIRST introductory 4-hour curriculum for pediatric providers
2. FIRST introductory 3-hour curriculum for CHWs
3. FIRST content integrated into seven lessons of the Nurturing Families curriculum
4. Educational handouts for families to print or include in medical record, in English & Spanish
 - a. Understanding ACEs & Resilience
 - b. Stress Management & STOP (self-regulation)
 - c. Healthy Relationships

The SYSTEMAATIC Project: Systems-based, Multidisciplinary Assessment of Adversity and Toxic Stress for Individualized Care

Lead Principal Investigator: Dr. Sayantani (Tina) Sindher

Host Institution: Stanford University

Press

2025: Sean N. Parker Center for Allergy & Asthma Research at Stanford University: The SYSTEMAATIC Project seeks to transform care for individuals affected by adverse childhood experiences (ACEs) and toxic stress. [LinkedIn Post](#).

Using Precision Medicine to Tackle Impacts of Adverse and Unpredictable Experiences on Children's Neurodevelopment: The SoCal Kids Study

Lead Principal Investigator: Dr. Tallie Z. Baram

Host Institution: UC Irvine

Presentations

1. **Glynn LM** (2025). Unpredictability in early life: a novel form of adverse childhood experiences. Lecture for the Schmid College Science Forum, Chapman University.
2. **Glynn LM** (2025). Unpredictability in early life: a novel antecedent of psychopathology. Lecture for the Psychology Department Brown Bag Series, Chapman University.
3. **Glynn LM** (2025). The added value of screening for unpredictability in pediatric primary care. In Mapping effects of unpredictable early life experiences in childhood: from brain circuits to clinical outcomes. Symposium at the Winter Conference on Brain Research, Lake Tahoe, California.
4. **Glynn LM** (2025). The potential of screening for early life unpredictability to enhance child health. Paper presented at the annual meeting of the Society for Biopsychosocial Science and Medicine, Seattle, Washington.
5. **Glynn LM** (2025). Unpredictability: a novel adverse experience. In Advancing Precision Medicine





by Measuring ACEs, Toxic Stress, and Intervention Efficacy with Policy Implications. Basic-Translational-Clinical Roundtable at the annual meeting of the Pediatric Academic Societies, Honolulu, Hawaii.

6. Campi, E., Liu, S.R., Golden, C., Weiss, M., Lucas, C.T., Ehwerhemuepha, L., Stern, H., **Baram, T.Z., & Glynn, L.M.** (2025, May). Adolescent self-report of unpredictable experiences is a better predictor of mental health outcomes than parent-report. [Poster Presentation] Society for Research in Child Development Biennial.
7. Campi, E., & **Glynn, L.M.** (2025, April). Parent and child sensory reactivity independently predict behavior problems in toddlerhood. [Panel presentation] Gatlinburg Conference.
8. Campi, E., Berardi, V., Davis, E.P., Sandman, C.A., & **Glynn, L.M.** (2025, February). Mom is developing too: The reciprocal effects of infant sensory reactivity and maternal sensitivity. Twelfth Annual UCI Conte Center Symposium.
9. Gerdtz, S., Srivastava, S. G., Fox, K., Liu, S., Hennefield, L., Sweiss, E., Poggi-Davis, E., & **Glynn L.** (2025, May 1-4). Does Mom Know About Her Child's Suicidal Ideation (SI)? SI in Children Under 10. [10 Minute Speaker Presentation] Western Psychological Association (WPA) annual conference, Las Vegas, NV.
10. Gerdtz, S., Srivastava, S. G., Fox, K., Liu, S., Hennefield, L., Sweiss, E., Poggi-Davis, E., & **Glynn L.** (2025, February 18). What Children Aren't Saying: Maternal Underestimation of Suicidal Thoughts and Behaviors in Children Under 10. [Poster Presentation] UC Irvine Conte Center Symposium, Irvine, California.
11. Rodriguez, T.C., Sweiss, E.C., & **Glynn, L.M.** (2025, February 18th). Postpartum PTSD: The link between maternal exposure to childhood unpredictability and risk of traumatization during childbirth. [Poster Presentation]. UC Irvine Conte Center Symposium, Irvine CA.
12. Sharma, A., Liu, S. R., & **Glynn, L. M.** (2025, February). Intergenerational Associations of Prenatal Discrimination to Child Mental Health. [Poster Presentation]. UC Irvine Conte Center Symposium, Irvine, California.
13. Simon, V. B. & **Glynn, L. M.** (2025, February). Coloring outside the lines: How young children understand the concept of gender identity. [Poster Presentation]. UC Irvine Conte Center Symposium, Irvine, California.
14. Srivastava, S. G., Gerdtz, S. Sweiss, E.C., Fox, K.R., Hennefield, L., Liu, S.R., Davis, E.P., & **Glynn, L. M.** (2025, February). Consent and concerns: Insights into parental approval for child suicide risk assessments. [Poster Presentation]. UC Irvine Conte Center Symposium, Irvine, California.
15. Vargas, V., Sweiss, E., Sandman, C., Davis, E.P., **Glynn, L.M.** (2025, February) Sex-Dependent Link Between Hyperactivity and Unpredictability. [Poster Presentation]. UC Irvine Conte Center Symposium, Irvine, California.
16. Zanduetta-Duarte, A., Kangas, B.D., Sandman, C.A., Pizza Galli, D.A., **Glynn, L.** (2025, February). Assessing Anhedonic Phenotypes: Validation of the Probabilistic Reward Task-Child Version. [Poster Presentation]. UC Irvine Conte Center Symposium, Irvine, California.
17. Baram TZ. Cal State University, Long Beach, Psychology Colloquia Series, "how early-life experiences influence motivated adult behaviors: circuits, cells and molecules", March 2025.
18. Baram TZ. 2025 UCI Psychiatry Research Retreat: how the Conte Center interfaces with Psychiatry, April 2025.
19. Baram TZ. 38th Winter Conference on Brain development (St. Kitts), How do unpredictable paren-





tal and environmental signals disrupt brain circuit maturation: A Neurobiology perspective, January 2025

20. Baram TZ. Winter Brain Conference (Lake Tahoe): A novel childhood adversity explained, January 2025.
21. Baram TZ. National Children's Hospital IDDRRC, Washington. DC: How early-life Adversity governs adult behaviors- from the clinic to the lab, and back, March 2025.
22. Baram TZ. Neuromeeting, Department of Acute Brain and Cardiovascular Injury, Istituto di Ricerche Farmacologiche Mario Negri IRCCS, Title: How Early-Life Insults Shape Adult Behaviors – From the Clinic to the Lab, and Back, March 2025.
23. Baram TZ. NIH/NIEHS, how early-life experiences govern motivated adult behaviors: from the clinic to the lab and back; Durham, NC, May 2025
24. Baram TZ. FENS & Brain Prize Brain Conference on the Adaptive Brain, Crete, Oct. 2025
25. Baram TZ. International Society for Developmental Psychobiology (ISDP) Symposium, The Impact of ELA on the Developing Brain: Clarifying Spatiotemporal Cascades, Presenter, November, San Diego 2025

Publications

1. **Liu, S. R., Bailey, N. A.,** Romero-González, S., Moors, A., Campos, B., Davis, E. P., & Glynn, L. M. (2025). The QUIC-SP: A Spanish language tool assessing unpredictability in early life is linked to physical and mental health. *PloS one*, 20(1), e0298296. <https://doi.org/10.1371/journal.pone.0298296>
2. **Liu, S. R.,** Taylor Lucas, C., **Maxwell, M. Y.,** Lindert, N. G., Vargas, V. M., Cooper, D. M., Golden, C. V., Weiss, M. A., & Glynn, L. M. (2025). Provider and Parent Perspectives on Pediatric Screening for Research on Early Life Adversity. *Health education & behavior : the official publication of the Society for Public Health Education*, 52(6), 690–700. <https://doi.org/10.1177/10901981251342791>
3. Hardy, M., Chen, Y., **Baram, T. Z.,** & Justice, N. J. (2024). Targeting corticotropin-releasing hormone receptor type 1 (Crhr1) neurons: validating the specificity of a novel transgenic Crhr1-FlpO mouse. *Brain structure & function*, 230(1), 12. <https://doi.org/10.1007/s00429-024-02879-0>
4. Davis, E. P., Leonard, B. T., Jirsaraie, R. J., Keator, D. B., Small, S. L., Sandman, C. A., Rishbrough, V. B., Stern, H. S., Glynn, L. M., Yassa, M. A., **Baram, T. Z.,** & Rasmussen, J. M. (2025). Sex-Specific Effects of Early-Life Unpredictability on Hippocampal and Amygdala Responses to Novelty in Adolescents. *Biological psychiatry global open science*, 5(6), 100561. <https://doi.org/10.1016/j.bpsgos.2025.100561>
5. Birnie MT, **Baram TZ.** The evolving neurobiology of early-life stress. *Neuron*. 2025 May 21;113(10):1474-1490. doi: 10.1016/j.neuron.2025.02.016. Epub 2025 Mar 17. PMID: 40101719; PMCID: PMC12097948.
6. Glynn, L. M., Liu, S. R., Golden, C., Weiss, M., Lucas, C. T., Cooper, D. M., Ehwerhemuepha, L., Stern, H. S., & **Baram, T. Z.** (2025). Unpredictability is an early-life adversity that contributes to outcomes. *Nature Mental Health*, *In press*
7. Sweiss, E. C., Berardi, V., Davis, E. P., Sandman, C. A., & **Glynn, L. M.** (2026). Mom is developing too: Preliminary evidence for the reciprocal effects of infant sensory reactivity and maternal behavior. *Development and psychopathology*, 1–9. Advance online publication. <https://doi.org/10.1017/S0954579425101090>





8. Weber R, Mortazavi A, Baram TZ, Floriou-Servou A. Probing the roles of developmentally active neurons in early-life adversity induced disruptions of adult behaviors. *Frontiers in Neuroscience*. 2025;19:1671495. PMID: 41064232.

Press

2025: The Good Men Project: How Early-Life Stress Can ‘Reprogram’ the Brain

2025: UC Irvine News: UC Irvine research reveals how childhood adversity shapes the brain and behavior

2025: Medical X Press: Research reveals how childhood adversity shapes the brain and behavior

2025: Futurity: How early-life stress can ‘reprogram’ the brain – Futurity

2025: UCI Health: Childhood adversity affects half of children worldwide with lasting brain and mental health impacts. [UCI Health Post](#).

Databases

Research database with data collected at the research visits, including over 75,000 screens for childhood unpredictability.

DNA library of biological samples from infants and mothers.

Educational Aids or Curricula

1. The team’s screening tool for childhood unpredictability are translated into 7 different languages and used worldwide.
2. Methods and screens for childhood unpredictability are now include in two large U.S. national studies, HBCD, and, starting in the new cycle, ABCD.

Networks and Collaborations

- American Academy of Pediatrics to consider including the QUIC-5 in recommended screens. ABCD and HBCD national studies now include the QUIC-5.

Identifying Social, Molecular, & Immunological Processes for Mitigating Toxic Stress & Enhancing Personalized Resilience

Lead Investigator: Dr. George Slavich

Host Institution: UC Los Angeles

Presentations

1. O’Shields, J., Mowbray, O., **Slavich, G. M.**, Fusco, R., Baldwin, A., & Boyas, J. (2025, January). The longitudinal effects of early adversity on BMI, inflammation, and depressive symptoms: Results from a nationally representative sample of the United States. Paper presented at the 2025 annual meeting of the Society for Social Work and Research, Seattle, WA.
2. Schüssler-Fiorenza Rose, S. M., & **Slavich, G. M.** (2025, February). Adverse childhood experiences and arthritis-related functioning and disability. Poster presented at the 2025 annual meeting of the Association Academic Psychiatrists Annual Assembly, Phoenix, AZ.





3. Rathbun, K. P., Li, X., Hu, B., Fan, W., Hoogland, A. I., Gudenkauf, L. M., Welniak, T. L., Rodriguez, Y., Bryant, C. A., Decosta, H. L., Irizarry-Arroyo, N. E., Yamoah, K., Oswald, L. B., Jim, H. S. L., Gwede, C. K., Penedo, F. J., Park, J. Y., **Slavich, G. M.**, Small, B. J., & Gonzalez, B. D. (2025, March). Risk factors for worse symptom burden in a cohort of diverse prostate cancer survivors. 2025 annual meeting of the Society of Behavioral Medicine, San Francisco, CA.
4. O'Neill, R. M., **Slavich, G. M.**, Thayer, J., Weinkauff, C. C., Ahn, C., Allison, M., Smith, T. W., Smyth, J. M., Taylor, D. J., Uchino, B. N., Ruiz, J. M. (2025, March). Testing an integrated framework of environmental safety, social safety, and social vigilance as psychosocial contributors to cardiovascular disease. Poster presented at the 82nd annual meeting of the Society for Biopsychosocial Science & Medicine, Seattle, WA.
5. Kim, J. H. J., Pham, T., Nguyen, B., Nguyen, H., Gray, Z., Hua, D., & **Slavich, G. M.** (2025, March). The Vietnamese Adult STRAIN: Psychometric properties and predictive utility. Poster presented at the 82nd annual meeting of the Society for Biopsychosocial Science & Medicine, Seattle, WA.
6. Liu, C. C., Kelly, C., Huang, Q., Juster, R. P., **Slavich, G. M.**, Picard, M., & Trimpff, C. (2025, March). Preliminary associations between immune cells mitochondrial respiratory capacity, depression, anxiety, and adversity. Paper presented at the 82nd annual meeting of the Society for Biopsychosocial Science & Medicine, Seattle, WA.
7. Higgins, E. T., Recchio, J., Rosenkranz, M., Davidson, R., **Slavich, G. M.**, Nord, E., Gresham, L., Barnes, A., & Schaefer, S. M. (2025, March). Inflammation and lifetime stressor severity are associated with blunted cortisol but not skin conductance responses to acute psychosocial stress. Poster presented at the 82nd annual meeting of the Society for Biopsychosocial Science & Medicine, Seattle, WA.
8. Doom, J. R., Rivera, K. M., Scott, S. R., Khattab, H., Martin, C. K., & **Slavich, G. M.** (2025, March). Psychosocial stress, health behaviors, and cardiovascular health in adolescence. Paper presented at the 82nd annual meeting of the Society for Biopsychosocial Science & Medicine, Seattle, WA. 25
9. Rivera, K. M., Acedo, G., Khattab, H. M., **Slavich, G. M.**, & Doom, J. R. (2025, March). Association between lifetime stressor exposure and hair cortisol among adolescents. Paper presented at the 82nd annual meeting of the Society for Biopsychosocial Science & Medicine, Seattle, WA.
10. Alvarez, G., Miller, A. B., Cole, S., Rodriguez-Thompson, A., Patel, K., Martin, S., Bonar, A., **Slavich, G. M.**, Rudolph, K., Nock, M., Hastings, P., Giletta, M., Prinstein, M., & Sheridan, M. (2025, March). Neural activity during cognitive control is associated with pro-inflammatory gene expression in adolescent girls. Paper presented at the 82nd annual meeting of the Society for Biopsychosocial Science and Medicine, Seattle, WA.
11. Haefner, C. E., Higgins E. T., Laubacher, C. M., Gresham, L. K., Barnes, A. L., Skinner, S., Abercrombie, H. C., Rosenkranz, M. A., Davidson, R. J., **Slavich, G. M.**, & Schaefer, S. M. (March, 2025). Associations between lifetime stressor severity, amygdala and hippocampal volumes, and cortisol responses to acute stress. 2025 meeting of the Society for Affective Science, Portland, OR, USA.
12. Afshar, K., Mengelkoch, S., Firestone, K., & **Slavich, G. M.** (2025, May). Unpredictable childhood, predictable stress outcomes: The influence that emotional regulation and perceived emotional support have on perceived stress and treatment efficacy. Paper presented at the 2025 Undergraduate Research & Creativity Showcase, Los Angeles, CA.
13. Moriarity, D. P., Sullivan-Toole, H., Gassen, J., Lee, C., Olino, T. M., & **Slavich, G. M.** (2025, June). Hierarchical inflammatory phenotypes of depression featuring multiple inflammatory pro-





teins. Paper presented at the 2025 Psychoneuroimmunology Research Society Conference, Bordeaux, France.

14. Barry, L. E., Habib, M., Nianogo, R. A., & **Slavich, G. M.** (2025, June). The role of personality in the association between adverse childhood experiences and chronic conditions. Paper presented at the 2025 annual meeting of the Society for Epidemiological Research. Boston, MA.
15. Zhuang, X., Yang, Z., Cordes, D., **Slavich, G. M.**, & Jessica Z. K. Caldwell, J. Z. K. (2025, July). Task fMRI recognition activation at midlife associated with genderinfluenced lifetime stressor exposure in women at risk of Alzheimer's disease. Poster presented at the 2025 Alzheimer's Association International Conference, Toronto, Canada.
16. Firestone, K., Gassen, J., & **Slavich, G. M.** (2025, August). Turning stress into success: Exploring the impact of stress mindset on athletic performance. Poster presented at the 2025 annual meeting of the American Psychological Association, Denver, CO.
17. Garrell, C., Kim, L., McCoy-Wilson, K., Morales, N., Muth, N., Padgett, C., Shekarchi, A., Shi, M., **Slavich, G. M.**, & Thompson, N. (2025, September). A quality improvement project to identify best practices to prevent and manage childhood obesity as an adverse childhood experience (ACE)-related health condition: Findings from the Southern California Overweight-Obesity Care Learning Collaborative. Paper presented at the 2025 meeting of the 2025 Annual Meeting of the American Academy of Pediatrics, Denver, CO. 26
18. Li, X., Hu, E., Jacobs, K. D. L., Hoogland, A. I., Welniak, T. L., Rodriguez, Y. V., Bryant, C. A., Decosta, H. L., Irizarry-Arroyo, N. E., Yamoah, K., Oswald, L. B., Jim, H., Small, B. J., Gwede, C. K., Penedo, F. J., Park, J. Y., **Slavich, G. M.**, & Gonzalez, B. D. (2025, September). Life stress and cognitive impairment in a racially diverse cohort of prostate cancer survivors. Poster presented at the 47th annual meeting of the Society of Behavioral Medicine, Chicago, IL.
19. Davis, M. M., Miller, A. B., Rudolph, K. D., **Slavich, G. M.**, Giletta, M., Hastings, P. D., Knock, M. K., Prinstein, M. J., & Sheridan, M. A. (2025, September). Longitudinal changes in neural reactivity and regulation of emotions: Role of executive function. Poster presented at the 2025 Flux Congress, Dublin, Ireland.
20. Martinez, J. E., Martinez, L., Medrano, R., Solis, I., Alcina, J., Silva, G., Tristao Pereira, C., Giudicessi, A., Gonzalez Catalan, M., Saldana, D., **Slavich, G. M.**, Cronin-Golomb, A., & Quiroz, Y. T. (2025, October). Sex-specific associations between lifetime stressor exposure and cognition in older adults from the Boston Latino Aging Study (BLAST). Paper presented at the 53rd annual meeting of the International Neuropsychological Society, New Orleans, LA.
21. Baena, A., Martinez, J., Martinez, L., Ramirez-Perez, N., Giudicessi, A., **Slavich, G. M.**, Aguillon, D., & Quiroz, Y. T. (2025, November). Early-life adversity, brain pathology and cognition in autosomal dominant Alzheimer's disease. Poster presented at the 2025 annual meeting of the Gerontology Society of America, Boston, MA.
22. Afshar, K., Gassen, J., Mengelkoch, S., & **Slavich, G. M.** (2025, November). β -Endorphin buffers against social stress-induced neural threat reactivity and inflammation in adolescent females. Poster presented at the 2025 annual meeting of the Society for Neuroscience, San Diego, CA.
23. Gasteiger, C., Crena, A., Pagador, K., Jiang, T., Zion, S., Jo, B., **Slavich, G. M.**, Spiegel, D., Steele, N., Berek, J. S., Schapira, L., & Crum, A. J. (November, 2025). Changing mindsets to improve whole-person health: A decentralized randomized trial of a novel digital intervention. Poster at the 2025 Joint Meeting of the Clinical Oncology Society of Australia and International PsychoOncology Society, Adelaide, Australia.

Publications





1. Moriarity, D. P., & **Slavich, G. M.** (2025). Theoretical and quantitative disconnect when modeling adverse childhood experiences using a common factor framework: An argument for causal indicator models in stressor research. *Child Development*, 96, 1255-1259. doi: 10.1111/cdev.14230
2. O'Shields, J. D., **Slavich, G. M.**, & Mowbray, O. (2025). Adverse childhood experiences, inflammation, and depression: Evidence of sex- and stressor specific effects in a nationally representative longitudinal sample of U.S. adolescents. *Psychological Medicine*, 55, e140. doi: 10.1017/S0033291725001102
3. T. Korecki, J. R., **Slavich, G. M.**, Ganz, P. A., Irwin, M. R., Cole, S., Crespi, C. M., & Bower, J. E. (2025). Depression and inflammation in women with breast cancer: Risk and resilience factors. *Biopsychosocial Science and Medicine*, 87, 405-417. doi: 10.1097/PSY.0000000000001398 20
4. Barrera, J. A., Straube, L. D., Huml, Z., Yelder, R. M., Zion, S. R., Evans, K. M., Louis, K., Moriarity, D. P., Gasteiger, C., **Slavich, G. M.**, & Crum, A. J. (2025). Can catastrophes be opportunities? A randomized clinical trial testing a brief mindset intervention for reducing inflammation and depression following COVID-19. *Brain, Behavior, and Immunity*, 129, 1028-1038. doi: 10.1016/j.bbi.2025.07.011
5. Davis, K. M., Shields, G. S., **Slavich, G. M.**, & Zilioli, S. (2025). Stress, positive affect, and sleep in older African American adults: A test of the stress buffering hypothesis. *Annals of Behavioral Medicine*, 59, kaaf013. doi: 10.1093/abm/kaaf013
6. DeSomma, A., Maletz, S., Basinski, T. L., Morales, R., de Castria, T. B., Bloomston, M., Chen, D. T., Douglas, W. G., Huguet, K. L., Jeong, D., Jiang, K., Kim, D. W., Luthra, A., Pimiento, J. M., Rajasekhara, S., Velanovich, V., Park, M. A., Shields, G. S., **Slavich, G. M.**, & Permuth, J. B. (2025). Lifetime stressor exposure and depression among patients with pancreatic cancer: Insights from the Florida Pancreas Collaborative. *BMC Cancer*, 25, 1530. doi: 10.1186/s12885-025-15007-w
7. Garrisi, K., Tsai, A. P., Patel, K. K., Gruhn, M. A., Giletta, M., Hastings, P. D., Nock, M. K., Rudolph, K. D., **Slavich, G. M.**, Prinstein, M. J., Miller, A. B., & Sheridan, M. A. (2025). Early Exposure to Deprivation or Threat Moderates Expected Associations Between Neural Structure and Age in Adolescent Girls. *Child Maltreatment*, 30, 623- 637. doi: 10.1177/10775595241301746
8. Clayton, M. G., Cole, S. W., Giletta, M., Hastings, P. D., Nock, M. K., Rudolph, K. D., **Slavich, G. M.**, & Prinstein, M. J. (2025). Proinflammatory gene expression is associated with prospective risk for adolescent suicidal thoughts and behaviors over twelve months. *Development and Psychopathology*, 37, 1676-1684. doi: 10.1017/S095457942400186X
9. Ganz, A. B., Rolnik, B., Chakraborty, M., Wilson, J., Tau, C., Sharp, M., Reber, D., **Slavich, G. M.**, & Snyder, M. P. (2025). Corrigendum to "Effects of an immersive psychosocial training program on depression and well-being: A randomized clinical trial" [J. Psychiatr. Res. (2022) 150: 292-299]. *Journal of Psychiatric Research*, 191, 814-816. doi: 10.1016/j.jpsychires.2025.06.035
10. Hamlat, E. J., Mayer, S. E., Laraia, B., Moffitt, T. E., Surachman, A., Dutcher, E. G., Zhang, J., Lu, A. T., Yang, T. T., Mashash, M., **Slavich, G. M.**, & Epel, E. S. (2025). Maternal childhood adversity accelerates epigenetic aging of children. *Health Psychology*, 44, 479-488. doi: 10.1037/hea0001427
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22. Schüssler-Fiorenza Rose, S. M., Rehkopf, D. H., Snyder, M. P., & **Slavich, G. M.** (2025). Prevalence of adverse childhood experience exposure by disability status. *JAMA Health Forum*, 6(1):e244881. doi: 10.1001/jamahealthforum.2024.4881 22
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25. Kim LY, Schüssler-Fiorenza Rose SM, Mengelkoch S, Moriarity DP, Gassen J, Alley JC, et al. California Stress, Trauma, and Resilience Study (CalSTARS) protocol: A multiomics-based cross-sectional investigation and randomized controlled trial to elucidate the biology of ACEs and test a precision intervention for reducing stress and enhancing resilience. *Stress*. 2024.





26. Gilgoff R, Mengelkoch S, Elbers J, Kotz K, Radin A, Pasumarthi I, et al. The Stress Phenotyping Framework: A multidisciplinary biobehavioral approach for assessing and therapeutically targeting maladaptive stress physiology. *Stress*. 2024.

Press

2025: UCLA Health: Mother's warmth in childhood influences teen health by shaping perceptions of social safety. [UCLA Health News](#).

2025: EurekAlert: Mother's warmth in childhood influences teen health by shaping perceptions of social safety. [EurekAlert Post](#).

2025: News-Medical: Maternal warmth in early childhood shapes health through social safety. [News-Medical News Release](#).

2025: The Telegraph: Loving mothers key to good mental health, says US study. [The Telegraph News Release](#).

Databases

Public virtual dashboard of stress burden tracking, survey data, ambulatory assessments (of blood-based and sensor monitored biologic markers), and lab results.

Educational Aids or Curricula

Massive Open Online Course platform

Networks and Collaborations (Dr. Slavich participates in the following related to grant)

- California Stress and Resilience Network (as a result of CIAPM funding)

Advancing a Precision Population Health Approach to ACEs to Reduce Health Disparities (HEALthy4You)

Lead Investigator: Dr. Gary S. Firestein

Host Institution: UC San Diego

Publications

- 1) Viglione, C., Westermann, A., Godino, J., Rhee, K.E., Melendrez, B., Tu, X.M., Boyle, D.L., Hogarth, M., Aarons, G.A., Crespo, N.C., Gidwani, P., Holguin, M., Juarez, C., Merino-Gonzalez, D.B., Osorio, L., Ramirez, H., Smith, M., Terrana, A., Firestein, G.S., & Hekler, E. (2025). Process evaluation and lessons learned from the formation of a multi-sector partnership: the Healing Experiences of Adversity among Latinos (HEALthy4You). *Frontiers in Health Services*, 5:1607665. doi: 10.3389/frhs.2025.1607665
- 2) Viglione, C., Soon, K., Wittleder, S., Rhee, K.E., Boynton-Jarrett, R., Gidwani, P., Melendrez, B., & Hekler, E. (2025). The California adverse childhood experiences screening roll-out: a survey study of ACEs screening implementation in primary care. *Frontiers in Public Health*, 13:1446555. doi: 10.3389/fpubh.2025.1446555
- 3) Melendrez, B., Wright, S., Bearse, A.M., Nguyễn, L.T., Resnick, J., Hekler, E., Alvarez, D., Arias, M., Barber-Dunham, D., Felisme, E., Garcia, J., Lepule, T., Lizarraga, R., Moreno, R., Billups, N., Gordon, K., Galvan, L., Osorio, L., Oswald, B., Palacio, L., & Serpas, S. (2025). Transforming a





regional initiative by building community power to advance health equity. *Progress in Community Health Partnerships: Research, Education, and Action*. doi: 10.1353/cpr.2025.a967356

Data and Resources

- REDCap Database: Comprehensive dataset including demographic characteristics, survey data, electronic health record data, and intervention participation records
- Biospecimen Repository: Blood samples collected and biobanked for future analyses examining biological markers of stress and resilience. These specimens are available for future research. This plan was established a priori to enable the biospecimens to be gathered while still leaving sufficient funds to achieve the other aims of the project.
- Community Report: Lay-audience summary of study findings presented to community partners and San Diego County Childhood Obesity Initiative
- Manuscript Proposal Toolkit: Guidelines and toolkit for community-based organizations outlining best practices for community-researcher collaboration in manuscript development, informed by community-based participatory research and data justice frameworks

The Collaborative Approach to Examining Adversity and Building Resilience (CARE) Program

Lead Principal Investigator: Dr. Neeta Thakur

Host Institution: UC San Francisco

Publications

1. Adaptations and Acceptability. *Journal of Child & Adolescent Trauma*. 2025.
2. Balico LCM, Selistre LS, Hessler D, Thakur N, et al. Pediatric ACEs and Related Life-Events Screener (PEARLS-BR): prevalence and health outcomes in a Brazilian context. *Jornal Brasileiro de Psiquiatria*. 2025.
3. Balico LCM, Thakur N, Long D, et al. Pediatrics ACES and related life event screener (PEARLS): translation, transcultural adaptation, and validation to Brazilian Portuguese. *Jornal de Pediatria*. 2025.
4. Balico LCM, Selistre LS, Hessler D, et al. Pediatric ACEs and Related Life-Events Screener (PEARLS-BR) latent domains and child health in a Brazilian sample: a confirmatory factor analysis and correlation study. *Jornal Brasileiro de Psiquiatria*. 2025.
5. Evans MC, Kia-Keating M, Hessler D, Hernández DS, Schechter MS, Thakur N, et al. Pediatric ACEs and Related Life Events Screener (PEARLS v2): Adaptations and Acceptability. *Journal of Child & Adolescent Trauma*. 2025. <https://doi.org/10.1007/s40653-025-00774-2>

Databases

Feedback from the CARE Family Board on ACEs screening and intervention response programs that will be shared with clinic providers and researchers;

Research database with data collected at the research visits.

Educational Aids or Curricula

1. Resilience Toolkit (developed in collaboration with Futures without Violence)





Depression Research Program

Personalized and scalable interventions for reducing depression among adolescents: Combining novel digital therapeutics and peer counseling

Lead Principal Investigator: Greg Hajcak, PhD

Host Institution: Santa Clara University

Educational Aids or Curricula

- Training materials for digital application content and peer counseling focused on emotion regulation and affirming care.

Presentation

2025: TYDE (University of Virginia): LGBTQ+ Digital Health Conference. [Conference Link](#).

Making the Unseen Seen Trial of Depression (MUST-D): Scrutinizing social determinants of depression to advance precision and equitable care

Lead Principal Investigator: Suzi Hong, PhD

Host Institution: University of California San Diego

Press

- **UC San Diego Herbert Wertheim School of Public Health and Human Longevity Science (2025). LinkedIn feature on CIAPM-funded depression precision medicine project.** Highlights Dr. Suzi Hong's \$3M award and the use of SDOH-integrated, smartphone-based data systems to advance individualized depression care in California. [LinkedIn Post](#).

Precision Mental Health to Predict Risk, Prevent, and Treat Depression in Publicly Funded Youth

Lead Principal Investigator: Tony Yang, MD, PhD

Host Institution: University of California San Francisco

Presentations

Xueyuan Li, Tracy Luks, Pierre Nedelec, David Quezada, Tony T. Yang. Predicting Depression Risk in Publicly Funded Youth using Psychosocial, Demographic and Resting State fMRI in the ABCD Dataset. Presented at the 2025 UCSF Department of Radiology and Biomedical Imaging Research Symposium.





Appendix B. Summaries of Previously Funded Projects: New Publications, Presentations, Press, and Patents of Past CIAPM Projects

Stanford University

Reducing Cancer Disparities Through Innovative Community-Academic Partnerships

Lead Principal Investigator: Dr. Manali Patel

Host Institution: Stanford University

Partners: Cancer Patients Alliance, Latino Cancer Institute, Pacific Cancer Care, Clinica de Salud del Valle de Salinas

Project Period: 2019–2023

The Addressing Latinx Cancer Care Equity (ALCANCE) project developed and tested a Community Health Worker (CHW)-based model to increase access to high-quality and equitable care for low-income and Latino communities in Monterey and Salinas Valley.

Trainees

The ALCANCE project supported 11 trainees across the career span from undergraduate trainees through to career researchers and medical students. Several trainees in 2025 achieved significant milestones in their careers, including a graduate trainee who received their Masters in Public Health, and another entered candidacy for a Doctorate in Public Health.

Follow-on Funding

The ALCANCE project received several awards for follow-on funding in 2025, including:

- \$100,000 funding from the LUNgevity Foundation (completed)
- Support from the California Breast Cancer Research Program (completed)
- Support from Gilead Sciences for improving shared decision making in breast cancer
- 200,000 funding from American Cancer Society for Navigation

Notable Accomplishments in 2025

Publications:

1. Hanna, M., Wood, E. H., Noyola Perez, A., Villicana, G., Guzman, L. L., Reynaga, J., ... & Patel, M. I. (Jan 2025). Food for Cancer Health Equity: A Qualitative Study Among People With Cancer Who Are Low-Income, Latino or Hispanic, Immigrant, and Individuals With Multiple Minoritized Races and Ethnicities. *JCO Oncology Practice*, OP-2
2. Thomas, M., Agrawal, M., Das, M., & Patel, M. I. (2025). Effect of a volunteer-led precision-medicine multilevel intervention on patient-reported outcomes, receipt of biomarker testing, and time to treatment: A randomized clinical trial. *JCO Oncology Practice*. Advance online publication.
3. Hanna, M., Wood, E. H., Noyola Perez, A., Villicana, G., Guzman, L. L., Reynaga, J., Trotter, C., Koontz, Z. M., & Patel, M. I. (2025). Food for cancer health equity: A qualitative study among people with cancer who are low-income, Latino or Hispanic, immigrant, and individuals with multiple minoritized races and ethnicities. *JCO Oncology Practice*, 21(8), 1203–1211.
4. Olomu, M. U. O., Scherer, C., Wood, E., Escobar, K., Moufarrej, S., Kamran, R., Muir, S., Muñoz, F., Stern, M., Gomez, S., Blayney, D. W., Chew, H., Tealer, L. M., Alanes, A., Moorehead, D., Sanchez, M., Sánchez, K. B., Tinianov, S., Duron, Y., & Patel, M. I. (2025). Assessing barriers to genomic testing in breast cancer among diverse patients: A qualitative community-engaged research study. *Breast Cancer Research and Treatment*, 215(2), 47.





Presentations

1. Wood, EH, Kamran, R, Villicana, G, Guzman, LL, Reynaga, J, Trotter, C, Duron, Y, O'Brien, DG, Koontz, ZM, Patel, MI. Addressing Latinx CANcer Care Equity - Program for Long-term United Skills Building (ALCANCE-PLUS). American Cancer Society. May 2025.

Press

2025: Oncology News Central: *ASCO Report Paints Grim Picture of Worsening Oncologist Shortage*. [Oncology News Central Piece](#).

2025: Stanford Medicine Magazine: *Tackling cancer disparities*. [Stanford Magazine Entry](#).

2025: Stanford Annual Reports – Department of Medicine. *Stanford Scores Big Wins for Equitable Healthcare*. [Stanford Annual Report](#).

University of California, San Diego

Integrated Machine-Learning Platform to Inform Precision Therapy in Triple-Negative Breast Cancer Patients

Lead Principal Investigators: Dr. Pablo Tamayo & Dr. William Kim

Host Institution: UC San Diego

Partners: El Centro Medical Center; Moores Cancer Center; Cancer Resource Center of the Desert; Tri-City Medical Center; SDSU Institute for Public Health (IPH)

Project Period: 2019–2023

The UCSD Cancer Demonstration Project (Project CELSUS) analyzed the genetic profiles of triple-negative breast cancer (TNBC) tumors using a machine-learning computational model.

Notable Accomplishments in 2025

Trainees

The team is developing a new course entitled “*Analytical Approaches to Precision Medicine in Cancer: Data, Models, and Paradigms*” for a Master’s program in Precision Medicine starting in the Fall of 2026.

University of California, San Francisco

Improving Precision Medicine for Breast Cancer in Latinas: A Multi-Tiered Approach

Lead Principal Investigator: Dr. Elad Ziv

Host Institution: UC San Francisco

Partners: Zuckerberg San Francisco General Hospital; Latina Breast Cancer Agency; Latino Cancer Institute; Promoters for Better Health; Vision y Compromiso; City of Hope; UC Davis; Stanford University

Project Period: 2019–2023

The UCSF Cancer Demonstration Project aimed to characterize genetic variations associated with elevated cancer risk, particularly among Latina patients, and to promote genetic testing to assess cancer susceptibility.

Notable Accomplishments in 2025





Publications:

1. Fergus, K. B., Newberg, J., Greenstein, R., Fejerman, L., Carvajal-Carmona, L., et al. (2025). Association between ancestry and tumor somatic mutations in a large national cohort of women with breast cancer. *npj Breast Cancer*, 11(1), 117.
2. Nierenberg, J. L., Adamson, A. W., Hu, D., Huntsman, S., Patrick, C., Li, M., Steele, L., et al. (2025). Whole exome sequencing identifies FANCM as a susceptibility gene for estrogen-receptor-negative breast cancer in Hispanic/Latina women. *Nature Communications*, 16(1), 7816.
3. Huang, X., Lott, P. C., Hu, D., Zavala, V. A., Jamal, Z. N., Vidaurre, T., Fejerman, L., & Ziv, E. (2025). Evaluation of multiple breast cancer polygenic risk score panels in women of Latin American heritage. *Cancer Epidemiology, Biomarkers & Prevention*, 34(2), 234–245.

Press:

1. “Researchers Find Individualized Approach to Breast Cancer Screening Can Lower Chance of More Advanced Disease.” *Imaging Technology News*. 2025. [ITN News Piece](#).

Presentations:

1. Fergus, K. B., Heise, R. S., Madlensky, L., Theiner, S., Tice, J. A., Fiscalini, A., et al. (2025). Implementation of breast cancer polygenic risk scores in a personalized screening trial. *Breast Cancer Research and Treatment*, 211(1 Supplement), S19.
2. Shieh, Y., Roger, J., Yau, C., Wolf, D. M., Hirst, G. L., Swigart, L. B., et al. (2025). Development and testing of a polygenic risk score for breast cancer aggressiveness. *Breast Cancer Research and Treatment*, 211(1 Supplement), S27.
3. Li, J. L., Zanti, M., Williams, J., Jahagirdar, O., Jia, G., Hu, Q., et al. (2025). Genetic architecture of breast cancer across diverse populations: Assessing heritability, genetic correlation, and polygenicity. *Cancer Research*, 85(8 Supplement 1), 2282.
4. Wang, L., Huang, X., Lott, P., Ziv, E., Neuhausen, S. L., Vidaurre, T., & Fejerman, L. (2025). Local genetic ancestry among breast cancer rare mutation carriers from Lima, Peru. *Cancer Research*, 85(8 Supplement 1), 1006.
5. Corpuz, A. F., Huang, X., Ziv, E., Neuhausen, S. L., Fejerman, L., & Vidaurre, T. (2025). Ancestral impact on family history of breast cancer and high-risk mutations among women from Lima, Peru. *Cancer Research*, 85(8 Supplement 1), 7401.
6. Sayaman, R. W., Wolf, D. M., Yau, C., Thorsson, V., Saad, M., Hu, D., Huntsman, S., et al. (2025). Abstract B042: Differential prevalence of immune-associated germline variants across genetic ancestry groups may partially underlie racial and ethnic disparities in breast cancer outcomes. *Cancer Research*, 85(5 Supplement), B042.





Appendix C. Press Releases for the CIAPM Program

California Announces Funding Opportunities for ‘Representative Research’ Proposals to Reduce Health Disparities and Increase Participation from Underrepresented Groups

Published October 15, 2025

California is funding opportunities for innovative research in “representative research” aimed at leveraging the existing expertise within our state for biomedical research, with the goal of including underrepresented populations, who have been underrecognized or historically excluded, as research participants so research can benefit all Californians and reduce health disparities.

To achieve this, the [California Initiative to Advance Precision Medicine \(CIAPM\)](#) is launching two Requests for Applications (RFAs) to inspire and support researchers in the state to bridge interdisciplinary fields and/or create authentic partnerships amongst institutions and/or between institutions and the communities they serve.

The [first RFA](#) seeks to award approximately **\$2.3 million** to support around **15 doctoral students** conducting representative precision medicine research projects in California over a **2.5-year project term**. The [second RFA](#) will award up to **\$6 million** to support approximately **3–5 project teams** conducting representative precision medicine research projects in California over a **2.5-year project term**.

The funding will support precision medicine research studies in California that leverage, integrate, or generate datasets and develop new insights that reduce health disparities.

What is Precision Medicine and Why is it Important?

“Precision medicine can be best described as providing the right treatment for the right patient at the right time, essentially viewing the patient as a whole person,” said **CIAPM Chief Science Officer Dr. David Reiner**. “The research we intend to fund seeks to provide innovative approaches to implement personalized, meaningful, and effective treatments, diagnostic tools, and preventative care that are reflective of the diversity of California.”

[Research is often plagued by silos between academic institutions and/or between communities being served](#). The funded academic research projects will aim to break down these silos to create more comprehensive and successful precision medicine approaches and focus on representative precision medicine research.

Why “Representative Research” is Important in Precision Medicine

“To advance our goal of a healthy California for all, we need research that is representative of **ALL Californians**,” said **Kim Johnson, Secretary of California Health and Human Services**.

“By making clinical research more representative of California’s diversity, research reduces health disparities and promotes health innovation for all California communities.”

Further, doctoral students are the backbone of the biomedical workforce in California, [comprising between 55–68% of the workforce across public and private institutions](#). These students are often incredibly [diverse](#) and more often [propose](#) and [publish](#) on topics reflective of their communities.

Doctoral student applicants must submit their full applications by **January 30, 2026**. Partnership RFA applicants must submit a **non-binding and non-scored Letter of Intent by November 21, 2025**, followed by an initial application due **January 23, 2026**. Please visit the **CIAPM website** (ciapm.chhs.ca.gov) for more details on submission eligibility and requirements or contact ciapm@chhs.ca.gov.

About the California Initiative to Advance Precision Medicine

Housed in the **California Health and Human Services Agency**, the **California Initiative to Ad-**





ance Precision Medicine (CIAPM) was launched in **2015** to support cutting-edge biomedical and health research that harnesses data to generate new insights, prioritize whole-person care, and advance community-driven solutions to reduce health inequities.

Our mission is to drive the development of innovative technologies and personalized strategies and to coordinate cross-sector partnerships for prevention, diagnosis, and treatment to improve the health and well-being of all Californians.

[Original Post on CalHHS Webpage](#)





Appendix E. Biographies for CIAPM Selection Committees

Representative Research Partnerships RFA Selection Committee

Learn more about the [Representative Research Partnerships RFA](#)

Elaine Mardis, PhD (Committee Chair)

Professor, Pediatrics, Co-Executive Director, Steve and Cindy Rasmussen Institute for Genomic Medicine

The Ohio State University / Nationwide Children's Hospital

Elaine R. Mardis, PhD is a nationally recognized leader in genomics and cancer research whose work has been foundational in advancing next-generation sequencing and precision oncology. She is a Professor of Pediatrics at The Ohio State University College of Medicine and serves as Co-Executive Director of the Steve and Cindy Rasmussen Institute for Genomic Medicine at Nationwide Children's Hospital. Her research focuses on genomic characterization of cancer, identification of actionable molecular drivers, and translation of genomic discoveries into clinically relevant diagnostic and therapeutic strategies, with a strong emphasis on pediatric and young adult populations. Dr. Mardis has played key leadership roles in large-scale genomic initiatives and has authored numerous high-impact publications in cancer genomics and genomic medicine. Her work continues to shape how genomic data are integrated into clinical cancer care. Dr. Mardis previously served on 2018 Evaluation Committee as well as the Cancer Disparities Selection and Evaluation Committees.

Olusola Ajilore, MD, PhD

Professor, Psychiatry, Associate Head for Faculty Development

University of Illinois Chicago

Olusola Ajilore, MD, PhD is a Professor of Psychiatry at the University of Illinois Chicago and a nationally recognized leader in depression research and translational neuroscience. He serves as a Professor at the University of Illinois Center for Depression and Resilience and holds multiple leadership roles, including Director of the Mood and Anxiety Disorders Program and Director of the Clinical Research Core. His research focuses on the pathophysiology of major depressive disorder, particularly in the context of medical comorbidities and aging, using advanced structural and functional neuroimaging and brain connectivity methods. Dr. Ajilore received medical and doctoral training in neuroscience and psychiatry and has led interdisciplinary research aimed at identifying patient-specific neural targets to improve diagnosis and treatment. He has contributed to national scientific review efforts and previously served on the Depression Selection Committee.

Caitlin Gloeckner Allen, PhD, MPH

Associate Professor, Implementation Science (Public Health Sciences); Center for Precision Medicine

Wake Forest University School of Medicine

Caitlin G. Allen, PhD, MPH is an Associate Professor at Wake Forest University School of Medicine and a social and behavioral scientist recognized for leadership in implementation science, genomics, and precision public health. Her research focuses on translating evidence-based genomic applications into real-world clinical and community settings to advance health equity. Dr. Allen's scholarship emphasizes participatory implementation science, workforce development through training community health workers in genomics, and effective communication of genomic information among diverse populations. Her work has been featured in *Nature* and *Harvard Public Health Magazine*, reflecting her contributions as a thought leader in precision public health. She received her PhD and MPH





from Emory University and has held faculty and research positions at the Medical University of South Carolina, the Centers for Disease Control and Prevention, Boston University, and the Massachusetts Department of Public Health.

José A. Bauermeister, PhD, MPH

**Professor of Nursing, Director, Center for Health Equity Research
University of Pennsylvania**

José A. Bauermeister, PhD, MPH, FSBM is the Albert M. Greenfield Professor of Human Relations at the University of Pennsylvania, serving as Professor of Psychiatry at the Perelman School of Medicine and Director of the Eidos LGBTQ+ Health Initiative, where he provides national leadership in digital health and behavioral science. His research integrates public health, social science, and technology to design, test, and scale interventions that reduce health disparities among LGBTQ+ communities and youth. Dr. Bauermeister received advanced training in public health and behavioral science and has built a career centered on community-engaged, technology-assisted research addressing social determinants of health. He has authored more than 300 peer-reviewed publications and has led or contributed to over \$240 million in federally funded research. A Fellow of the Society of Behavioral Medicine and an Aspen Institute Health Innovators Fellow, his work advances social justice-oriented approaches to improving population health and promoting equity.

Sunny Chieh Cheng, PhD, RN

**Associate Professor, Nursing & Healthcare Leadership
University of Washington Tacoma**

Sunny Chieh Cheng, PhD is an Associate Professor in the Nursing and Healthcare Leadership program at the University of Washington Tacoma, recognized for her expertise in psychiatric and mental health nursing and her leadership in mental and behavioral health equity research. Her work focuses on community-engaged strategies to improve mental health outcomes for school-aged youth and underserved populations, including developing, evaluating, and translating evidence-based interventions for early-stage psychosis, caregiver support, and school behavioral health promotion. Dr. Cheng employs mixed methods and participatory frameworks to partner with communities and institutions in addressing structural barriers to behavioral health access and care. She has led and collaborated on funded projects that build community capacity, integrate technology into mental health support, and promote equity in service delivery across diverse populations, advancing both research innovation and practical solutions in mental health equity.

Shawn Chiang, PhD, MPH

**Assistant Professor, Department of Health Behavior, School of Public Health
Texas A&M University**

Shawn Chiang, PhD, MPH is a social behavioral scientist dedicated to reducing health disparities in cancer prevention and control through translational digital health and communication science. As an Assistant Professor in the Department of Health Behavior at the Texas A&M School of Public Health, Dr. Chiang focuses on understanding how individual, interpersonal, and social factors influence health behaviors, particularly those related to cancer prevention. Dr. Chiang completed a PhD in Health Behavior and Health Promotion College of Education and Health Professions at the University of Arkansas and a Master of Public Health at the Milken Institute School of Public Health George Washington University, Washington, DC. His formal professional training includes a post-doctoral-fellowships at both the Arkansas Research Center for Public Health & Technology and the Drexel University Health & Digital Media Innovation (HDMI) Lab, a fellowship with the Computational Social





Science Summer Institute (SICSS) at the University of Pennsylvania, and a CDC Evaluation Fellow with the Division of Emergency Operations at the Centers for Disease Control and Prevention.

Elizabeth Gross Cohn, RN, PhD, FAAN

Professor of Medicine

City University of New York School of Medicine

Elizabeth Gross Cohn, RN, PhD, FAAN is a Professor of Medicine at the City University of New York School of Medicine, with a distinguished record of leadership in equity-centered research and academic administration. Her research focuses on health equity, precision medicine, genomics, and community-engaged approaches to preventing and managing chronic disease, particularly cardiovascular disease, through public health training and social marketing strategies. Dr. Cohn received doctoral training in nursing and has held senior academic and leadership roles across major institutions, including service as Rudin Professor of Community Health at Hunter College and Associate Provost for Research at CUNY. Earlier, she served as Executive Director of the Center for Health Innovation at Adelphi University and held faculty and research scientist appointments at Columbia University. A Robert Wood Johnson Foundation Nurse Faculty Scholar and White House Champion of Change in Precision Medicine and Health Equity, she has led federally funded and CDC-supported initiatives and previously served on the Cancer Disparities Selection and Evaluation Committees.

Jack Cordes, PhD

Assistant Professor of Public Health

Tufts University

Jack Cordes, PhD, MS is an Assistant Research Professor in the Department of Public Health and Community Medicine at Tufts University School of Medicine and a recognized leader in spatial epidemiology. His research focuses on substance use disorders and the opioid crisis, emphasizing community-engaged approaches to understand overdose risk, access to harm reduction, and treatment services. Dr. Cordes applies expertise in epidemiology, biostatistics, geographic information systems, and advanced Bayesian and multilevel spatiotemporal methods to develop predictive models and inform public health interventions. He serves as analytic lead for the NIDA-funded Predict-to-Prevent study, identifying overdose hotspots across Massachusetts, and is Principal Investigator of the project *Xylazine in Lowell: Community-Engaged Spatial Analysis and Harm Reduction*. Dr. Cordes earned his PhD in Epidemiology and MS in Biostatistics from Harvard T.H. Chan School of Public Health and is committed to translating complex data into actionable strategies that improve health equity and community outcomes.

Juan Carlos Espinoza Salomon, MD

Chief Research Informatics Officer, Stanley Manne Children's Research Institute; Associate Director, Center for Biomedical Informatics and Data Science; Director, Consortium for Technology & Innovation in Pediatrics (CTIP)

Northwestern University / Lurie Children's Hospital

Juan Carlos Espinoza Salomon, MD is Chief Research Informatics Officer at Lurie Children's Hospital, Associate Director of the Center for Biomedical Informatics and Data Science, and Director of the





Consortium for Technology & Innovation in Pediatrics (CTIP) at Northwestern University. His research integrates health information systems, digital health, pediatric medical devices, social determinants of health, and health equity to improve outcomes for children, especially those from marginalized communities. Dr. Espinoza's work spans pediatric obesity, children with medical complexity, and global health, leveraging informatics and technology to translate research into practical solutions. He earned his MD from USC Keck School of Medicine, completed a pediatric residency at Children's Hospital Los Angeles, and previously served as Assistant Professor of Clinical Pediatrics at CHLA and USC. Dr. Espinoza combines clinical expertise, innovation, and data-driven research to advance child and population health equity.

[Darrell Hudson, PhD, MPH](#)

**James S. Jackson Collegiate Professor and Department Chair, Health Behavior and Health Equity
University of Michigan**

Darrell Hudson, PhD, MPH is the James S. Jackson Collegiate Professor and Chair of the Department of Health Behavior and Health Equity at the University of Michigan School of Public Health. Prior to his appointment at Michigan, he was Professor of Public Health at the Brown School at Washington University in St. Louis and Director for the Center for the Study of Race, Ethnicity, and Equity at Washington University. Dr. Hudson's career is dedicated to the elimination of racial/ethnic inequities in health. His research agenda centers on how social determinants of health affect multiple health outcomes. Dr. Hudson completed his doctoral studies at the University of Michigan School of Public Health, where he also received his MPH. He earned a BA in Psychology from Morehouse College. Prior to his faculty appointment, Dr. Hudson completed a postdoctoral fellowship with the Kellogg Health Scholars Program at the University of California at the San Francisco and Berkeley campuses. Dr. Hudson previously served on the Depression Research Program Expert Selection Committee.

[Douglas Knutson, PhD](#)

**Associate Professor
Oklahoma State University**

Douglas Knutson, PhD, LHSP, ABPP is an Associate Professor in the School of Community Health Sciences, Counseling, and Counseling Psychology at Oklahoma State University, where he teaches, conducts research, and engages in community outreach focused on behavioral health and health disparities. A Licensed Health Service Psychologist and Board-Certified in Counseling Psychology, Dr. Knutson's scholarship emphasizes rural health, LGBTQ+ resilience, transgender and nonbinary affirming care, and mental health outcomes among marginalized and underserved populations. His research employs qualitative and mixed methods approaches to examine social and contextual influences on health and well-being, including self-harm and psychological resilience in sexual and gender minority youth, and to develop supportive interventions for families and communities. He also holds leadership and service roles in academic and professional settings that promote rural mental health, diversity, equity, and inclusion in the behavioral sciences, advancing both research and practical strategies to improve mental health equity.

[Jewel Mullen, MD, MPH, MPA](#)





**Associate Professor, Department of Population Health, Courtesy Associate Professor, Department of Internal Medicine
University of Texas at Austin**

Jewel Mullen, MD, MPH, MPA holds faculty appointments in the Departments of Population Health and Internal Medicine and serves as Director of Health Equity for Ascension Seton and Director of Health Equity and Quality for Central Health, Travis County's health district, where she advocates for underserved communities in Austin, Texas. Her work focuses on advancing health equity, public health policy, and systems-level interventions to reduce disparities. Dr. Mullen previously served as Principal Deputy Assistant Secretary for Health at the U.S. Department of Health and Human Services and as Commissioner of the Connecticut Department of Public Health, and she has held faculty appointments at New York University, University of Virginia, Yale University, and Tufts University Schools of Medicine. She completed a postdoctoral fellowship in psychosocial epidemiology at Yale University, earned her MD at Mount Sinai School of Medicine (Alpha Omega Alpha), and holds an MPH from Yale University and an MPA from Harvard Kennedy School. Her career spans clinical care, research, and public health leadership with a focus on equity.

[Akinlolu Ojo, MD, PhD, MBA](#)

**Executive Dean and Professor of Medicine & Population Health
University of Kansas School of Medicine**

Dr. Akinlolu ("Ojo") Ojo has served as Executive Dean of the University of Kansas School of Medicine since 2019. Previously, he was Associate Vice President for Clinical Research at the University of Arizona and spent 23 years on the faculty at the University of Michigan as the inaugural Florence E. Bingham Research Professor and Professor of Medicine and Epidemiology. He earned his MD from the University of Lagos, an MPH from the University of Alabama at Birmingham, completed internal medicine training at the University of Kentucky, and a fellowship in nephrology at the University of Michigan, where he also earned a PhD in epidemiology and an executive MBA. Dr. Ojo's research focuses on racial health disparities, kidney disease, transplantation, precision medicine, and global health. He has led over \$230 million in NIH and federal funding, including AASK, *All of Us*, and H3Africa. As a nationally recognized clinician and scholar, he has over 220 publications and is a member of the National Academy of Medicine and several other prestigious societies.

[Wei Perng, PhD, MPH](#)

**Associate Professor of Epidemiology, Colorado School of Public Health Deputy Director, Lifecourse Epidemiology of Adiposity and Diabetes (LEAD) Center
University of Colorado**

Wei Perng, MPH, PhD is an Associate Professor of Epidemiology with tenure at the Colorado School of Public Health and serves as Deputy Director of the Lifecourse Epidemiology of Adiposity & Diabetes Center at the University of Colorado. Her research focuses on nutritional epidemiology, childhood obesity, and the structural and environmental determinants of metabolic disease in children and adolescents, applying lifecourse and metabolomics approaches to understand and prevent cardiometabolic risk. Dr. Perng completed postdoctoral training at Harvard University, where she also worked as an Analyst in the Department of Population Health, and earned her MPH and PhD in Epidemiology from the University of Michigan. She has published over 200 peer-reviewed studies, contributing sig-





nificantly to the fields of nutritional epidemiology, metabolomics, and lifecourse research. Through her scholarship, Dr. Perng advances understanding of early-life exposures and their impact on metabolic health, informing strategies for prevention and health equity in pediatric populations.

Paula S. Ramos, PhD

**Associate Professor, Division of Rheumatology, Department of Medicine
Emory University**

Paula S. Ramos, PhD is a human geneticist specializing in the etiology of autoimmune diseases, with a dedicated focus on addressing health disparities in systemic lupus erythematosus (SLE) and systemic sclerosis (SSc). Her multidisciplinary research integrates molecular, statistical and population genetics, with genetic and social epidemiology, together with ELSI (Ethical, Legal, and Social Implications) frameworks to identify the complex genetic and societal drivers of disease in historically underrepresented populations. Dr. Ramos champions representative precision medicine by leveraging academic-community partnerships to advance genetic literacy — a commitment demonstrated by her work training community members, health workers, and graduate students.

Elizabeth H. Ruder, PhD, MPH, RDN

**Associate Professor and School Head, Wegmans School of Health and Nutrition
Rochester Institute of Technology**

Elizabeth H. Ruder, PhD, MPH, RDN is an Associate Professor and School Head of the Wegmans School of Health and Nutrition in the College of Health Sciences and Technology at the Rochester Institute of Technology, where she leads academic and research programs in nutrition and public health. Her research focuses on nutritional epidemiology, community-based interventions, eating behavior, nutritional assessment, and cancer prevention, with an emphasis on translating diet–disease research into effective nutrition education and behavior change strategies. Dr. Ruder earned a BS from Cornell University, a PhD from Pennsylvania State University, and an MPH from the Johns Hopkins Bloomberg School of Public Health, and she is a Registered Dietitian Nutritionist. She completed training in the National Cancer Institute’s Cancer Prevention Fellowship Program and previously served on the faculty at the University of Pittsburgh before joining RIT in 2015. Her scholarship integrates research, education, and community engagement to advance public health nutrition and cancer prevention efforts.

Dorothy Sears, PhD

**Professor of Nutrition and Executive Director, Clinical and Community Translational Research
Arizona State University**

Dorothy D. Sears, PhD is a Professor of Nutrition and Executive Director of Clinical and Community Translational Research in the College of Health Solutions at Arizona State University. She is an internationally recognized expert in cardiometabolic disease and cancer research, employing a transdisciplinary approach that integrates molecular biology, behavioral nutrition, systems biology, gut microbiome analyses, and population health. Dr. Sears’ research focuses on dietary and behavioral interventions, the health effects of circadian alignment of food intake, and chronic disease prevention in women, including studies on intermittent fasting and sedentary behavior in postmenopausal populations. She directs the Women’s Health Collaboratory and serves as an investigator on multi-





ple federally and nationally funded clinical and translational studies. Dr. Sears is actively engaged in mentoring trainees across career stages and in community outreach, translating research findings into evidence-based strategies to improve public health and promote wellness in diverse populations.

Arash Shaban-Nejad, PhD, MPH, MS, FAMIA

**Associate Professor and Director, Population and Precision Health
University of Tennessee Health Science Center**

Arash Shaban-Nejad, PhD, MPH, MS, FAMIA is an Associate Professor at the University of Tennessee Health Science Center and Director of Population and Precision Health within the Center for Biomedical Informatics. His research integrates epidemiology, biomedical informatics, artificial intelligence, and population health analytics to advance disease surveillance, chronic disease research, and health equity-focused decision-making. Dr. Shaban-Nejad develops and applies advanced analytic methods for high-dimensional health data, real-world evidence applications, and data-driven tools to address structural determinants of health and disparities across diverse clinical populations. He holds doctoral and master's degrees with training in public health and computational sciences and collaborates across clinical, academic, and public health settings to translate research into policy and practice. He has previously contributed to scientific review and advisory efforts, including service on the ACEs and Depression Selection Committees, and his work continues to promote equity-oriented, data-informed approaches in population and precision health.

Bonnielin K. Swenor, PhD, MPH

**Professor, The Endowed Professorship of Disability Health and Justice, Director, Johns Hopkins University Disability Health Research Center
Johns Hopkins University**

Bonnielin K. Swenor, PhD, MPH is a Professor of Epidemiology at the Johns Hopkins Bloomberg School of Public Health and Director of the Johns Hopkins Disability Health Research Center, where she provides national leadership in advancing disability-inclusive health equity research. Her research focuses on disability as a critical and often overlooked dimension of health disparities, emphasizing inequities experienced by people with disabilities across the life course. Dr. Swenor integrates epidemiologic methods, population health data, and community-engaged research approaches to examine how structural, social, and environmental factors shape health outcomes for disabled populations. She received advanced training in public health and epidemiology and has led interdisciplinary initiatives that strengthen disability measurement, inclusion, and representation in research and policy. Through her scholarship and leadership, Dr. Swenor has helped position disability as a central component of health disparities research, generating policy-relevant evidence to inform more inclusive public health practice, clinical research, and cancer prevention and care efforts.

Martin Tristani-Firouzi, MD

**Professor, Pediatrics, H.A. and Edna Benning Presidential Chair
University of Utah**

Martin Tristani-Firouzi, MD is a Professor at the University of Utah School of Medicine and a nationally recognized leader in cardiovascular genetics and precision medicine. He serves as Co-Director of the Utah Center for Genomic Medicine, holds the H.A. and Edna Benning Presidential Chair, and





directs the Pediatric Cardiology Genotype–Phenotype Core, where he has led efforts integrating genomic discovery with detailed clinical phenotyping to improve diagnosis and management of inherited cardiac disease. His research focuses on translational genomics, genotype–phenotype correlations, and the clinical implementation of precision medicine in pediatric and adult cardiovascular care. Dr. Tristani-Firouzi received medical training in pediatrics and cardiology and has more than two decades of experience advancing genomic medicine within academic health systems. He previously served as Chair of the American Heart Association Research Committee, helping to shape national research priorities in cardiovascular science. His work emphasizes equitable access to genomic medicine, with particular attention to youth and Latino and Spanish-speaking populations.

[Celina I. Valencia, DrPH](#)

**Assistant Professor, Family and Community Medicine
University of Arizona**

Celina I. Valencia, DrPH is a faculty member and researcher at the University of Arizona, recognized for her work at the intersection of genomics, bioinformatics, and health disparities, with a focus on women's health. Her research leverages genomic and computational approaches to understand biological and structural drivers of inequities in health outcomes among underrepresented populations. Dr. Valencia engages in interdisciplinary research that integrates population health, data science, and equity-focused frameworks, aiming to expand inclusion of Spanish-speaking, Latino, and Native American communities in precision medicine research. She has contributed to initiatives such as the *All of Us* Spanish Convening and actively participates in outreach and community-engaged efforts to foster continued collaboration and equitable research practices. Her work advances the integration of genomics with public health to address health disparities and promote more inclusive precision medicine.

[Stacey J. Winham, PhD](#)

**Associate Professor, Biostatistics
Mayo Clinic**

Stacey J. Winham, PhD is an Associate Professor of Biostatistics and a statistical geneticist at the Mayo Clinic in Rochester, Minnesota, recognized for her research on the genetic etiology of complex diseases and the development of advanced analytic methods for high-dimensional genomic data. Her work focuses on identifying gene–gene and gene–environment interactions, sex-specific genetic effects, and the role of the X chromosome in disease, integrating machine learning and diverse genomic data types. Dr. Winham applies these approaches to studies of psychiatric disorders, breast cancer, and ovarian cancer and holds leadership roles in quantitative methods training through Mayo Clinic's Graduate School of Biomedical Sciences and Center for Clinical and Translational Science. She is deeply committed to mentoring graduate students, postdoctoral fellows, and junior faculty and actively contributes to collaborative research consortia in psychiatric genomics and cancer genetics, advancing both methodological innovation and translational impact in genomic medicine.





Doctoral Student Research RFA Selection Committee
Learn more about the [Doctoral Student Research RFA](#)

Gloria D. Coronado, PhD (Committee Chair)

**Professor
University of Arizona**

Gloria D. Coronado, PhD is a Professor at the University of Arizona and an epidemiologist with a long record of designing and evaluating interventions to improve cancer screening participation and follow-up. She leads and co-directs systems-based programs to raise colorectal cancer screening and follow-up rates across diverse health plans and community clinics. Her research focuses on community-engaged epidemiology, biostatistics, and health disparities, with emphasis on improving screening participation and follow-up among underserved and hard-to-reach populations. Her work applies population segmentation and data-driven outreach approaches that advance equity in preventive health. She integrates community-engagement strategies and culturally tailored materials to extend the reach of evidence-based cancer prevention to Latino, rural, and other priority populations. She also serves in scientific leadership roles and on national advisory committees that guide cancer prevention research and evaluation. Dr. Coronado previously served on the Cancer Evaluation Committee.

Elizabeth “Liz” Aquino, PhD, RN, FAAN

**Clinical Associate Professor, Department of Biobehavioral Nursing Science; Associate Dean for Academic Affairs, College of Nursing
University of Illinois–Chicago**

Elizabeth “Liz” Aquino, PhD, RN, FAAN is a Clinical Associate Professor in the Department of Biobehavioral Nursing Science and serves as Associate Dean for Academic Affairs in the College of Nursing at the University of Illinois–Chicago. She has held leadership roles at the state and national levels, including service as President of the American Nurses Association–Illinois and leadership within national Hispanic/Latinx nursing organizations. Her work focuses on nursing education, academic mentorship, community engagement, and health equity, with emphasis on strengthening academic pathways for diverse students and advancing graduate and professional training. Her scholarly interests include workforce development, social determinants of health, and equity-centered policy and educational reform. Dr. Aquino is trained in nursing and is a Fellow of the American Academy of Nursing. She was recently appointed to the HRSA National Advisory Council on Nurse Education and Practice.

Marie Barnard, PhD

**Associate Professor of Pharmacy Administration; Research Associate Professor, Research Institute of Pharmaceutical Sciences; Graduate Program Coordinator
University of Mississippi**

Marie Barnard, PhD is an Associate Professor of Pharmacy Administration and Research Associate





Professor in the Research Institute of Pharmaceutical Sciences at the University of Mississippi and serves as Graduate Program Coordinator for the Department of Pharmacy Administration. She is the Distinguished Cotton Lecturer in Pharmacy Administration and a faculty affiliate of the Sarah Isom Center for Women and Gender Studies. Her research interests include social and behavioral determinants of health, public health, vaccination behavior, program evaluation, health outcomes, and the health sciences educational pipeline. Her work includes implementation science-informed evaluations of interventions related to HPV vaccination, intimate partner violence, safe prescribing behaviors, and leveraging community pharmacy settings to improve health outcomes. Dr. Barnard earned a Master's degree in epidemiology from the University of Tennessee Health Sciences Center and a PhD in Pharmacy Administration from the University of Mississippi. She has served as principal or co-investigator on more than 50 grants and contracts and is the principal investigator on an NIH-funded youth participatory action project to develop a young adult-centered health promotion research agenda and enhance interest in health sciences careers.

Elena Cyrus, PhD, MPH

**Associate Professor, Department of Population Health Sciences, College of Medicine
University of Central Florida**

Elena Cyrus, PhD, MPH is an Associate Professor in the Department of Population Health Sciences, College of Medicine, at the University of Central Florida and a global health epidemiologist. She also serves as a Visiting Professor at Universidad Peruana de Ciencias Aplicadas and mentors undergraduate, graduate, and medical trainees in international clinical and research settings. Her research focuses on health disparities, behavioral health, and prevention of infectious diseases, substance use, and HIV and sexually transmitted infections among key populations globally. Her work integrates population-based epidemiology with mixed-methods observational approaches and emphasizes syndemic conditions affecting marginalized communities in the Latin American and Caribbean region and beyond. Dr. Cyrus completed extensive predoctoral and postdoctoral training in global health, reproductive health, and HIV and substance use disparities. In 2023, she was the sole recipient of the National Institute on Drug Abuse DP2 Avenir Award for contributions to syndemic research.

Andrew T. Dewan, PhD, MPH

**Professor of Chronic Disease Epidemiology; Director of Graduate Studies
Yale University**

Andrew T. Dewan, PhD, MPH is a Professor of Chronic Disease Epidemiology at Yale University and serves as Director of Graduate Studies, with experience in graduate education, mentoring, and leadership in doctoral training programs. He has extensive experience in interdisciplinary research. His research focuses on genetic epidemiology and genomics, centered on identifying genetic and genomic factors associated with complex diseases using large-scale population and family-based studies. His work includes applications across a wide range of clinical conditions. Dr. Dewan is trained in genetic epidemiology and genomics. He has served in national scientific review and advisory roles related to genetics and health research, contributing methodological and substantive expertise to studies of health and disease.





Susan Everson-Rose, PhD, MPH

**Professor, Division of General Internal Medicine; Associate Director, Program in Health Disparities Research
University of Minnesota**

Susan Everson-Rose, PhD, MPH is a Professor in the Division of General Internal Medicine at the University of Minnesota Medical School and serves as Associate Director of the Program in Health Disparities Research and an Affiliate Professor in the School of Public Health. She contributes to training and mentoring in health equity research and leadership development. Her research integrates psychosocial and social epidemiology to investigate how psychological, social, and environmental factors influence risk for chronic conditions, including women's health outcomes and cardiovascular disease. Her research spans studies of stress mechanisms, social determinants, and mind-body influences on health. Dr. Everson-Rose is trained in psychophysiology and social epidemiology and conducts health disparities and chronic disease research supported by national funding.

Bertha Hidalgo, PhD, MPH, FACE

**Associate Professor, Department of Epidemiology; Associate Dean of Access and Engagement
University of Alabama at Birmingham**

Bertha Hidalgo, PhD, MPH, FACE is an Associate Professor in the Department of Epidemiology and Associate Dean for the Office of Access and Engagement in the University of Alabama at Birmingham School of Public Health. She is also an Associate Scientist with the UAB Nutrition Obesity Research Center and serves as President of the American College of Epidemiology. Her research centers on cardiovascular disease, with expertise in genetic epidemiology and dissemination science. Dr. Hidalgo holds degrees from Stanford University, the University of Southern California, and the University of Alabama at Birmingham. Her research has been funded by the NIH, American Heart Association, and Robert Wood Johnson Foundation, among others.

Rohan D. Jeremiah, PhD, MPH

**Professor of Human Development Nursing Science; Associate Dean for Global Health
University of Illinois–Chicago**

Rohan D. Jeremiah, PhD, MPH is a Professor of Human Development Nursing Science and serves as Associate Dean for Global Health in the College of Nursing at the University of Illinois–Chicago. He has extensive global health experience, including service as a Peace Corps volunteer and leadership of health programs across Sub-Saharan Africa, South Asia, Latin America, the Eastern Caribbean, and the United States. His research focuses on health equity, trauma, behavioral health, and community-engaged research among marginalized and vulnerable populations worldwide, with attention to intimate partner violence, HIV/AIDS, cancer disparities, refugee health, and LGBTQ+ and minority men's health. Dr. Jeremiah is trained in applied medical anthropology and global public health. His work has informed policy and practice through collaborations with organizations such as the United





Nations, PEPFAR, USAID, and the Inter-American Development Bank, and he mentors students and professionals in global and community-engaged public health research.

Daisy Le, PhD, MPH, MA

**Associate Professor of Health Disparities and Oncology, School of Nursing
George Washington University**

Daisy Le, PhD, MPH, MA is an Associate Professor of Health Disparities and Oncology in the School of Nursing at George Washington University and holds affiliated faculty appointments with the Milken Institute School of Public Health and the GW Cancer Center. She advances research and teaching on population health, communication, and equity-centered interventions. Her research focuses on community-engaged cancer prevention and culturally responsive strategies to improve access to cancer screening and preventive services among minority, low-income, and underserved populations, including mobile health technologies and participatory methods. Dr. Le's work has been supported by national funding agencies and has produced peer-reviewed publications on health disparities and community health equity. She served as principal investigator on initiatives such as the MySHARE HPV self-sampling project to increase cervical cancer screening uptake among women living with HIV.

Gwen Lomberk, PhD

**Joel and Arlene Lee Chair in Pancreatic Cancer Research; Chief, Division of Research; Director of Basic Science Research, Department of Surgery
Medical College of Wisconsin**

Gwen Lomberk, PhD is the Joel and Arlene Lee Chair in Pancreatic Cancer Research and serves as Chief, Division of Research, and Director of Basic Science Research in the Department of Surgery at the Medical College of Wisconsin. She is also a Professor of Surgery and Pharmacology and Toxicology. Her research focuses on epigenetic mechanisms driving pancreatic ductal adenocarcinoma, with emphasis on chromatin regulation, histone methylation, and cell cycle control as therapeutic targets. Her work includes epigenomic-based pharmacology and investigations of genetic-to-epigenetic signaling pathways, including synergistic inhibition of Aurora A kinase and H3K9 methylation to induce mitotic catastrophe and suppress tumor growth. Dr. Lomberk is trained as a cancer biologist. She advances basic and translational cancer research and contributes to experimental therapeutics in pancreatic cancer.

Caleb C. McKinney, PhD, MPS

**Professor, Department of Rehabilitation Medicine; Senior Associate Dean for Training, Program Development, and Academic Innovation; School of Medicine
Georgetown University**

Caleb C. McKinney, PhD, MPS is a Professor in the Department of Rehabilitation Medicine at Georgetown University School of Medicine and serves as Senior Associate Dean for Training, Program Development, and Academic Innovation. He leads initiatives to enhance training environments,





foster inclusive excellence, and support the academic and professional development of graduate students, postdoctoral scholars, and junior faculty. His work focuses on enhancing biomedical research training, developing innovative professional development and academic programs, and graduate student development, with emphasis on strengthening pathways into research careers. Dr. McKinney has served as principal investigator and co-principal investigator on federally funded training programs, including the Initiative for Maximizing Student Development (IMSD), contributing to structured training, mentorship, and capacity building for trainees from diverse backgrounds. His leadership supports institutional and national efforts to strengthen the pipeline of diverse scientists and clinicians.

Michelle Odum, EdD, MPH

**Assistant Professor, School of Nursing
George Washington University**

Michelle Odum, EdD, MPH is an Assistant Professor in the School of Nursing at the George Washington University and contributes to training graduate students and researchers in health disparities, public health research methods, and community-engaged scholarship. Her work spans public health informatics, precision science, and evaluation of social determinants of health. Her research focuses on health equity and health disparities and applies data science, artificial intelligence, and big data analytics to explore patterns in social and health data, including social media and electronic health records. Her work supports prevention, containment, and control of infectious diseases and chronic conditions in high-risk and underserved groups and includes funded work and publications addressing aging with HIV and chronic disease outcomes. Dr. Odum is trained in nursing and public health informatics.

Beth L. Pineles, MD, PhD

**Assistant Professor, Department of Obstetrics and Gynecology
University of Pennsylvania**

Beth Pineles, MD, PhD, is a Maternal Fetal Medicine specialist and Assistant Professor of Obstetrics and Gynecology at the University of Pennsylvania's Perelman School of Medicine, with a secondary appointment in Biostatistics and Epidemiology. She holds both an M.D. and Ph.D. in Epidemiology from USC's Keck School of Medicine, bringing rigorous methodological training to her clinical research. Dr. Pineles's research focuses on maternal health outcomes, pregnancy complications, and the deimplementation of ineffective medical practices. She has secured funding from the NIH, PCORI, and major foundations. She also serves as Director of the Penn Medicine Placenta Accreta Spectrum Center of Excellence and is a Senior Scholar at Penn's Center for Clinical Epidemiology and Biostatistics.

Anne Saw, PhD

**Associate Professor of Psychology; Psychology Co-Associate Chair; Director, Chicago Asian American Psychology Lab
DePaul University**





Anne Saw, PhD is an Associate Professor of Psychology and Psychology Co-Associate Chair at DePaul University and serves as Director of the Chicago Asian American Psychology Lab. She teaches graduate and undergraduate courses in community psychology, diversity, and advanced psychological topics. Her research focuses on health and mental health disparities, community engagement, and culturally responsive psychological science, with emphasis on Asian American immigrants, refugees, and other underserved populations. Her work examines structural, sociocultural, and community factors shaping health and mental health outcomes and informs community-driven interventions. Dr. Saw is trained in psychology and works with community partners in Chicago and beyond to develop evidence-based, community-driven interventions that promote health, well-being, and healing. Dr. Saw previously served on the Depression Research Expert Selection Committee.

Peter X. K. Song, PhD

**Professor of Biostatistics
University of Michigan**

Peter X.-K. Song, PhD is a Professor of Biostatistics at the University of Michigan and contributes methodological leadership for interdisciplinary research teams across biomedical, clinical, and population health research settings. He contributes to graduate education and mentorship in biostatistics and quantitative health sciences. His research focuses on statistical methodology for complex and large-scale data, including longitudinal and correlated data analysis, spatial statistics, and big data analytics. His work advances biostatistical theory and applied methods used across health research. Dr. Song is trained in biostatistics. He has served in professional and scientific review roles related to statistical science and health research.

Qianqian Song, PhD

**Assistant Professor; Director of Translational Bioinformatics; Director, Cancer Data Commons
University of Florida**

Qianqian Song, PhD is an Assistant Professor in the Department of Health Outcomes and Biomedical Informatics at the University of Florida College of Medicine and serves as Director of Translational Bioinformatics at the UF Health Cancer Center. She also serves as Director of the Cancer Data Commons and co-leads the UFHCC Cancer AI Working Group and the UFHCC Computational Biology Unit. Her research focuses on artificial intelligence-driven biomedical informatics to advance precision medicine, including the development of deep learning, machine learning, and statistical tools for multi-modal integration of large-scale biomedical data. Her work integrates genomics, transcriptomics, proteomics, single-cell and spatial imaging, and population-level electronic health records. Dr. Song teaches graduate courses in translational bioinformatics and foundations of biomedical informatics.

Louisa A. Stark, PhD

**H.A. and Edna Benning Presidential Endowed Chair; Professor of Human Genetics
University of Utah School of Medicine**





Louisa A. Stark, PhD is a Professor of Human Genetics and Adjunct Professor of Population Health Sciences at the University of Utah School of Medicine where she holds a H.A. and Edna Benning Presidential Endowed Chair. She recently retired from her long-time position as Director of the Genetic Science Learning Center, where she led initiatives that translate genetics, genomics, biology, and health concepts into engaging and accessible educational materials for students and the public that are used around the world. The center has recently been renamed the Stark Science Learning Center in her honor. She also initiated and led the Community Collaboration and Engagement Team of the Utah Clinical and Translational Science Institute, which facilitates collaborations between academic researchers and community stakeholders, with a focus on genetics and genomics. Dr. Stark's work spans science and health education, community engagement, and partnerships that co-design learning resources and outreach activities.

David T. Takeuchi, PhD

Professor
University of Washington

David T. Takeuchi, PhD is a Professor at the University of Washington and has led and contributed to multiple interdisciplinary and federally funded studies. He is actively involved in graduate education and mentorship and has played a role in developing training programs focused on population health inequities. His research focuses on health disparities, mental health, and social determinants of health among diverse populations. His work examines how race, ethnicity, immigration status, and socioeconomic conditions shape mental health outcomes, health service use, and well-being across the life course. Dr. Takeuchi is trained as a social scientist and population health researcher. His work includes studies examining risk and resilience factors in Asian American, Latino, and other underserved communities.

Suzanne Vang, PhD

Assistant Professor, Department of Population Health
New York University Grossman School of Medicine

Suzanne Vang, PhD is an Assistant Professor in the Department of Population Health at NYU Grossman School of Medicine and serves in professional roles including editorial board review for *Cancer Control* and *Frontiers in Oncology – Cancer Epidemiology and Prevention*. She is also a scientific merit reviewer for the Patient-Centered Outcomes Research Institute (PCORI) and contributes to multiple cancer control and prevention collaborations. Her research focuses on the development and evaluation of multilevel interventions to reduce cancer morbidity and mortality, integrating quantitative and qualitative methods to inform targeted and scalable strategies for improving cancer outcomes. The overarching goal of her work is to advance precision in cancer prevention, early detection, and treatment effectiveness across diverse populations. Dr. Vang contributes to the NYU Langone Perlmutter Cancer Center, the NYU Center for the Study of Asian American Health, the NYC Citywide Colorectal Cancer Control Coalition, and the New York State Cancer Consortium.





Wei-Qi Wei, MD, PhD, FAMIA, FACMI

**Associate Professor; Director, Precision Phenotyping Core
Vanderbilt University**

Wei-Qi Wei, MD, PhD, FAMIA, FACMI is a Professor in the Department of Biomedical Informatics at Vanderbilt University Medical Center and serves as Director of the Precision Phenotyping Core. He leads multiple NIH-funded projects, including R01- and P50-level awards within national consortia such as eMERGE and MPRINT. His research focuses on precision medicine, electronic health record phenotyping, and translational genomics, integrating artificial intelligence, machine learning, natural language processing, pharmacogenomics, and large-scale clinical and genomic data. His work has advanced drug repurposing, individualized treatment prediction, and cross-institutional algorithm portability. Dr. Wei is trained as a biomedical informatics physician-scientist. He has authored more than 200 peer-reviewed publications, is an Associate Editor for Nature Digital Medicine, and is a Fellow of the American Medical Informatics Association and American College of Medical Informatics.

Aggie J. Yellow Horse, PhD

**Associate Professor, School of Social Transformation
Arizona State University**

Aggie J. Yellow Horse, PhD is an Associate Professor in the School of Social Transformation at Arizona State University and teaches courses related to racial and ethnic studies, immigration, and health disparities. She has received external research support and recognition for her contributions to understanding racial health inequities and population health dynamics. Her research addresses the social determinants of racial health disparities and structural inequities in health, focusing on how racism and systemic inequality influence physical and mental health outcomes. Her scholarship integrates social demography and public health perspectives to examine health inequities and community contexts shaping health, including impacts for Asian American, Native American, and Pacific Islander communities. Dr. Yellow Horse is trained in social demography and public health perspectives.





Appendix F. Biographies for the CIAPM Advisory Council



Clara Lajonchere, PhD

Chair

Professor & Director for Precision
Health
UCLA



Keith Yamamoto, PhD

Vice Chair

Emeritus Professor & Vice
Chancellor of Science Policy
and Strategy, UCSF



Elize Bradley, DrPH, JD

Senior Health Equity Fellow
Central Valley Community
Foundation



Debra Cooper, PhD

Assistant Secretary, Program
and Fiscal Affairs
CalHHS



E. Gay Grossman

Co-Founder of ADCY5.org





Kenneth Kim, MD
Executive Chairman
Ark Clinical Research



Hala Madanat, PhD
Vice President for Research
and Innovation
San Diego State University



Fatima Muñoz, MD
Director of Research and Health
Promotion
San Ysidro Health



Diana Ramos, MD, MBA
CA Surgeon General
CalHHS



Hakan Sakul, PhD
President
Precision Dx Strategies



**Leigh Ann Simmons, PhD,
MFT, FAAHB**
Professor,
University of California, Davis
- Betty Irene Moore School of
Nursing

Emerita Advisor





K. Jones, PhD

Assistant Secretary, Program
and Fiscal Affairs

CalHHS

Transitioned to Emerita Advisor in 2025

K. Jones, PhD

Dr. K. Jones (they/them) is the Assistant Secretary of Programs and Fiscal Affairs at the California Health & Human Services Agency.

They received their PhD in Interdisciplinary Neuroscience from the University of Missouri and a BS in Psychology from The Ohio State University.

As a postdoctoral research fellow at UC Davis, they were a leader in the field of autism research, specializing in identifying genetic and environmental risk factors of autism spectrum disorder to move closer to a precision medicine approach. They have additional expertise in psychology, neuroimmunology, nutrition, and epidemiology. Dr. Jones has participated in consortiums that resolve science, clinical practice, and policy issues related to autism. They have contributed high-profile scientific manuscripts to the American Association for the Advancement of Science.

After their postdoctoral work, Dr. Jones was selected to be a Society for Neuroscience Policy Ambassador and advocated for voters' rights and social justice issues as the inaugural Trudy Schafer Advocacy Fellow at the League of Women Voters of California. Prior to joining CalHHS, they served as Legislative Director to Assemblymember Dr. Joaquin Arambula.

Incoming Advisor in 2025

Leigh Ann Simmons, PhD, MFT, FAAHB

Dr. Leigh Ann Simmons is a nationally recognized women's health researcher, trained therapist, and health coach focused on changing how people—especially childbearing women—are seen, heard, and treated in health care. She is a tenured Professor at the University of California, Davis - Betty Irene Moore School of Nursing, where she serves as Principal Investigator of the School's first pre-doctoral T32 training program, co-directs the faculty training program in patient-oriented research, directs the Health Equity Across the Lifespan (HEAL) Lab, and co-directs the Perinatal Origins of Disparities (POD) Center.

Dr. Simmons' work advances health equity by addressing chronic disease risk, mental health, and life-course health patterns in communities that are often dismissed or underserved. Using community-engaged and digital approaches, she develops practical, scalable interventions that improve access to care and personalized support. Her research has been funded by the National Institutes of





Health, the Veterans Health Administration, and state and federal agencies, totaling more than \$16 million in direct funds.

Beyond research, Dr. Simmons has trained hundreds of health coaches, partnered with health systems and community organizations nationwide, and served as a Congressional Fellow on the U.S. Senate Health, Education, Labor, and Pensions Committee. She is deeply committed to translating evidence into tools that patients and healthcare systems can use to improve health outcomes.

Appendix G. Agendas & Summaries of CIAPM Meetings

The California Precision Medicine Advisory Council (CPMAC) held four meetings in 2024 in March, July, October, and December. Below are the pre-meeting materials that were provided on our website (Agenda) and the meeting summaries approved by the council after convening (Summary).

21 February 2025 CPMAC Meeting

[February 2025 – CIAPM Advisory Council Meeting Agenda](#)

[February 2025 – CIAPM Advisory Council Meeting Summary](#)

23 June 2025 CPMAC Meeting

[June 2025 – CIAPM Advisory Council Meeting Agenda](#)

[June 2025 – CIAPM Advisory Council Meeting Summary](#)

19 September 2025 CPMAC Meeting

[September 2025 – CIAPM Advisory Council Meeting Agenda](#)

[September 2025 – CIAPM Advisory Council Meeting Summary](#)

17 December 2025 CPMAC Meeting

[December 2025 – CIAPM Advisory Council Meeting Agenda](#)

[December 2025 – CIAPM Advisory Council Meeting Summary](#)

Appendix H. Catalog of CIAPM Newsletters in 2025

CIAPM publishes a free bi-monthly newsletter highlighting program updates, researchers, and advancements in science and precision medicine across California. In 2024, CIAPM published six newsletters sent through our mailing list and those are also archived on our website.

[January 2025 – Precision Medicine in California Newsletter](#)

[March 2025 – Precision Medicine in California Newsletter](#)

[May 2025 – Precision Medicine in California Newsletter](#)

[July 2025 – Precision Medicine in California Newsletter](#)

[September 2025 – Precision Medicine in California Newsletter](#)

[December 2025 – Precision Medicine in California Newsletter](#)





Appendix I. Key Personnel in 2025

Kim Johnson, CalHHS Secretary (October 2024 – Present)

K. Jones, PhD, Assistant Secretary for Programs & Fiscal Affairs (July 2024 – June 2025)

Brian Kaplun, Deputy Secretary for Policy and Strategic Planning (July 2025 – Present)

David Reiner, PhD, Chief Science Officer (April 2023 – Present)

Saga Barberis, JD, Program Officer (January 2023 – Present)

Ramon Martinez III, PhD, Science Communications Officer (January 2024 – Present)

Joanna Guan, MA, Policy Fellow (November 2023 – Present)

Suhani Amin, Policy Intern (December 2024 – June 2025)

Laura Adame, Policy Intern (December 2024 – August 2025)

Natanael Garcia, Policy Intern (December 2025 – Present)

