2024 University of California Hellman Fellows

UC Berkeley

| Ahmed Alaa | Computational Precision Health | Understanding the Cardioprotective Role of GLP-1 Therapies using Causal Deep Learning |
|----------------------|---------------------------------------|------------------------------------------------------------------------------------------------------|
| Francis Annan | Agriculture and Resource Economics | Using Monitoring Technologies to Improve Public Distribution Programs |
| Rosemarie de la Rosa | Public Health | Examining Associations Between Blood Lead Levels and Asthma Among Children in Oakland, California |
| Patrice Douglass | Gender and Women's Studies | Race and Abortion Ethics: Antiblackness and the Opacity of Liberty |

| Georgios Eftaxiopoulos | Architecture | Building Certainty |
|------------------------|--------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------|
| Cynthia Gerlein-Safdi | Civil and Environmental Engineering | Enhancing Climate Change Insights through Advanced Understanding of Greenhouse Gas Dynamics in Ecosystems |
| Rachel Gershon | Business | The Paradox of Plenty: How Unlimited Access Can Reduce Consumer Usage |
| Kosa Goucher-Lambert | Mechanical Engineering | What does it mean to be "creative" in an era of engineering design fueled by generative AI? Method development and user study |
| Micah Khater | African American and African Diaspora Studies | Vanishing Points: Black Women, Carceral Margins, and Genealogies of Escape |
| Dorothy Kronick | Public Policy | Is there a tradeoff between suspects' rights and crime control? Empirical evidence from Latin America 2 |

| Michael Lindsey | Mathematics | Constructing and Leveraging Fast Adaptive Discretizations for Electronic Structure |
|--------------------|-----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Kristina Lovato | Social Welfare | Building the Capacity of Child Welfare Systems to Serve Unaccompanied Immigrant Transitional Age Youth (TAY) during the Precarious Transition to Adulthood |
| Wenbin Lu | Astronomy | Surprising Outcomes of Neutron Stars Born in Binary Systems |
| Eric Ma | Physics | Fluorescence of Optical Phonons |
| Cassondra Marshall | Public Health | Evaluating an Interprofessional Collaboration Between a Community Doula Organization and Clinical Partners |
| Luther Obrock | South and Southeast Asian Studies | Islamic Poetry in Sanskrit Verse: A Bilingual Edition and Study of Śrīvara's Kathākautuka |

| Ahmad Omar | Materials Science & Engineering | Bringing Thermodynamics to Life |
|----------------------|----------------------------------------|---------------------------------------------------------------------------------------------------|
| Jorge Otero-Millian | Optometry | Virtual prisms to quantify and manage strabismus using mixed reality |
| Rahul Parson | South and Southeast Asian Studies | Calcutta's Raking Lights: Marwaris and Hindi Literature in New India |
| Onja Razafindratsima | Integrative Biology | Living in the Dark: Exploring how moon phases and luminosity influence lemur activity at night |
| Carolyn Stein | Business | Discrimination in Job Design |
| Denis Titov | Nutritional Sciences and Toxicology | Targeting cancer by hyperactivating the Warburg Effect 4 |

| Jingshen Wang | Biostatistics | Synthetic digital Tau-PET image biomarker creation with generative AI for diagnosing and treating neurodegenerative diseases |
|---------------|----------------------------------------|------------------------------------------------------------------------------------------------------------------------------|
| Ziqi Wang | Civil and Environmental Engineering | From the Direct Physical Impact of Hazards to the Emotional Well-being of Individuals |
| Omar Wasow | Political Science | American Ethnic Violence Lab |
| Ashley Wolf | Public Health | The role of the gut microbiome in protection against Shigella infection |

2024 University of California Hellman Fellows

UC Davis

| Imtiyaz Khanday | Plant Sciences | Investigating Seed Development in Cereal Crops |
|-----------------|-----------------------|--------------------------------------------------------------------------------|
| Anya Brown | Evolution and Ecology | Can microbial sharing enhance host survival? |
| Maria Maldonado | Plant Biology | Understanding kelp photosynthesis to develop better carbon fixation strategies |
| Alcia Rusoja | Education | The Educational Experiences of Venezuelan Immigrants in Northern California |

| Hyoyoung Jeong | Electrical and Computer Engineering | Closed-Loop Wireless System for Autonomous Seizure Monitoring and Mitigation |
|----------------|----------------------------------------|-------------------------------------------------------------------------------------------------------|
| Akua Banful | English | Constructing the Tropics: Empire and Discourses of Climate |
| Emorie Beck | Psychology | Social and cognitive health dynamics as digital risk biomarkers of ADRD |
| Veronica Lerma | Sociology | Criminalizing Chicanas: Intersectional Criminalization and Resistance in California's Prison Alley |
| Tanuja Mishra | Design | Bots 'n' Beings: Democratizing access to open-source AI technologies |
| Xiao Hui Tai | Statistics | Armed Conflict and Women's Economic Empowerment in Africa 7 |

| Shingirai Taodzera | African American and African Studies | Resourceful African Kingdoms |
|--------------------|-----------------------------------------|--------------------------------------------------------------------------------------|
| Kathleen Whiteley | Native American Studies | Justice in Balance: The Indians of California versus The United States of America |

2024 University of California Hellman Fellows

UC Irvine

| Fangyuan Ding | Biomedical Engineering | Systematic characterizaion of protein-nucleic adic binding kinetics in a universally-applicable manner |
|-----------------------------|--------------------------------|-----------------------------------------------------------------------------------------------------------|
| Abigail Lapin Dardashti | Art History | Itinerant Modernism: Politics and the Rise of Afro-Brazilian Art |
| Pablo Lara Gonzalez | Developmental and Cell Biology | Elucidating the importance of mitotic duration control in embryogenesis and in cancer |
| Katherine Trieste Rhodes | Education | African American Children's RICH Mathematical Word Problems |

| Alejandra Rodriguez Verdugo | Ecology and Evolutionary Biology | Principles of multispecies interactions for evolution and function of microbial communities |
|--------------------------------|-----------------------------------------|-----------------------------------------------------------------------------------------------------|
| Javier Sanchez | Physics and Astronomy | Quantum electronics with injection-molded two-dimensional crystals |
| Xian Shi | Mechanical and Aerospace Engineering | Synthesis and Assembly of Carbon Battery Electrodes Using Natural Gas |
| Ji Seon Song | Law | Crisis Policing |
| Irene Isela Vega | Sociology | Racialized Social Ladders: Navigating Mobility Alongside Persistent Inequality |
| Travis Wiles | Molecular Biology and Biochemistry | LIFE, DEATH, & SYMBIOSIS: Igniting Viral Outbreaks in the Gut Microbiome to Promote Health 10 |

2024 University of California Hellman Fellows

UCLA

| Tiffany Barber | Art History | Undesirability and Her Sisters: Black Women's Visual Work in the New Millennium |
|-----------------------|-------------------------------------------|------------------------------------------------------------------------------------|
| Alexander Bloedel | Economics | Modeling and Incentivizing Rationally Inattentive Agents |
| Laura Chavez-Moreno | Chicana/o and Central American Studies | How Schools Make Race: Teaching Latinx Racialization in America |
| Christopher Gutierrez | Physics and Astronomy | Visualizing light emission from 2D quantum materials with atomic resolution |

| Christopher Herring | Sociology | The Causes and Consequences of Unstable Exits from Permanent Supportive Housing |
|---------------------|-----------------------|------------------------------------------------------------------------------------------------------------------------------------------------|
| Thomas Hodgson | Musicology | Music Streaming in the Global South |
| Alvine Kamaha | Physics and Astronomy | Optimizing the Sensitivity of Noble Liquid Detectors to Search for the Missing Matter of the Universe |
| Choon Hwee Koh | History | A History of Money in the Ottoman Empire (1500-1900) |
| Tai Lam | Management | Antitrust in Advertising-Subsidized Markets: Youtube Content Economy |
| Aaron Littman | School of Law | Organizing Protection and Advocacy: The Role of Federally Mandated Disability Rights Agencies in Litigating Conditions of Confinement 12 |

| Peng Ni | Earth, Planetary, and Space Sciences | Understanding Earth's deep subduction cycle using diamond inclusions |
|------------------------------|-----------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|
| Elsa Ordway | Ecology and Evolutionary Biology | Constraining uncertainty in tropical forest responses to global change by understanding seasonal plant physiology |
| Laurel Perkins | Linguistics | Topic-Comment Structure in Thought and Language Acquisition |
| Michael Rubens | Economics | The Dynamic Effects of Monopsony Power: Evidence from U.S. Pilot Markets |
| Danielle Schmitt | Chemistry and Biochemistry | Elucidating the Mechanism of Hydrogen Peroxide-Induced AMPK Activity |
| Thiago Sevilhano Puglieri | Art History | Tikuna/Magüta Natural Colorants: A Community Engaged Research to Investigate Materials, Techniques, Values, and Science of Amazonian Colors 13 |

| David Turner | Social Welfare | The (Good) Trouble With Black Boys: Identity, Community Power, and Reimagining Success in the Carceral State |
|-----------------|------------------------------|-----------------------------------------------------------------------------------------------------------------|
| Thuy Vo Dang | Information Studies | Vietnamese Diaspora in the UK: Oral History and Archival Reciprocity for Community Archives |
| Jennifer Wilson | Bioengineering | Predicting Dual-Treatment Effects Using Simulated "Cellular Highways" in Cancer |
| Luwei Ying | Political Science | The Logic of Terrorist Propaganda |
| Naomi Zewde | Health Policy and Management | Does Public Administration Improve Healthcare Quality? Evidence from Connecticut Medicaid |

2024 University of California Hellman Fellows

UC Merced

| Andrea Polonijo | Sociology | Stigma as a Fundamental Cause of Health Inequalities for Sexual and Gender Minority Populations |
|-----------------|-------------------------------------|----------------------------------------------------------------------------------------------------|
| Pengfei Su | Computer Science and Engineering | Squeezing GPU Computing and Memory Resources in Deep Learning |
| Tomas Rube | Applied Mathematics | Mathematical Methods for Predicting Transcription Factor Binding Kinetics |

2024 University of California Hellman Fellows

UC Riverside

| Jiamin Zhang | Chemical Environmental Engineering | Teaching and Assessing Virtue-Based Engineering Ethics |
|-------------------|-----------------------------------------------|---------------------------------------------------------------------------------------------------|
| Tingting Xiang | Bioengineering | Uncovering the molecular details that govern coral-algal symbiosis using foraward genetic screens |
| Mykhailo Potomkin | Mathematics | Geometric control of active matter flow via computational modeling |
| Lucy Delaney | Evolution, Ecology, and Organismal Biology | That's Life: A Television Show About Organisms (and a novel approach to intro. bio.) |

| Savannah Esquivel | History of Art | Indigenous Insiders: Sights, Sounds, and Cross-Cultural Interactions in Mexico's Early Colonial Monasteries |
|---------------------|----------------|------------------------------------------------------------------------------------------------------------------|
| Jorge N. Leal | History | Rock Angelino: Young Latina/o Ingenuity, Sound, and Solidarity in Late Twentieth-Century Los Angeles |
| Jalondra A. Davis | English | Merfolk and Black Being in Water |
| Michael W. Moses II | Education | Retaining Racially Minoritized Students: An Ethnography of "Warmth" in a Black Undergraduate Mentoring Course |

2024 University of California Hellman Fellows

UC San Diego

| Mehmet Akten | Visual Arts | Embodied Simulation |
|----------------------|----------------------------------------|--------------------------------------------------------------------------------------------------|
| Nicholas A Antipa | Electrical and Computer Engineering | Chemical Sensing of the Ocean-Atmosphere Microlayer |
| Carol Arcos Herrera | Literature | The Maternal Wound: Reproductive Forces and Postmotherhood in Latin American Feminist Culture |
| Elizabeth L Campbell | Management | Gender, Sexual Harassment Scandals, & Job Search Behavior |

| Ignacio Carvajal | Literature | Xtz'ib'ax ri chak'atajik/Written conquest: Reducción and Territory in the Highlands of Guatemala |
|--------------------|-----------------------------------------|-----------------------------------------------------------------------------------------------------|
| Fabian Paul Eckert | Economics | Spatial Inequality in the United States 1980-2020: Causes, Consequences, and Policy Approaches |
| Jose Ignacio Fuste | Ethnic Studies | Entangled Crossings: Afro-Latinx Migrations Between Race and Empire, 1870s-1930s |
| Neil M Gong | Sociology | The Liberal Management of "Problem Populations" |
| Sylvia Lee Herbert | Mechanical and Aerospace Engineering | Safety Analysis and Control for Systems Biology Applications |
| Zeinab Jahed | NanoEngineering | Understanding the mechanisms of cell damage and repair through nanotechnology 19 |

| Mingu Kang | Electrical and Computer Engineering | Next-Generation AI Hardware: Unlocking Ultra-Low Power Potential via Emerging Computing Paradigm |
|---------------------------|----------------------------------------|-----------------------------------------------------------------------------------------------------|
| Hiruy Sibhatu Meharena | Neurobiology | Molecular and Cellular Convergence of Intellectual Disabilities |
| Kelema Lee Moses | Urban Studies and Planning | Island Modernism/Island Urbanism: Spatial Politics in Honolulu, Hawaiʻi |
| Abdoulaye Ndao | Electrical and Computer Engineering | Metasurface-reformed oximetry: shining structured light on racial bias |
| Holly Okonkwo | Ethnic Studies | Liberatory Code: Race, Gender, and the Politics of Computing |
| Lamar T Perry | Theatre and Dance | Directing RISE & BEINGS as an act of Restorative Justice 20 |

| Colleen Mary Petrik | Oceanography | Modeling seafloor animals is critical for understanding the carbon cycle and fisheries |
|-----------------------------|-------------------|------------------------------------------------------------------------------------------------------------|
| Alexandro Abraham Segade | Visual Arts | Anoche (Last Night) - A Performance and Video Installation for 15th Havana Biennial by Alexandro Segade |
| Lily Weng | Data Science | Transparent AI: Unlocking the Mysteries of Large Language and Multimodal Models |
| Vashan Wright | Oceanography | Reliable pre-cursor signals for earthquakes and slope failure forecasting |
| Haijun Xia | Cognitive Science | Redesigning the Information Space to Unleash the Power of AI |

2024 University of California Hellman Fellows

UCSF

| Ashraf Abugroun | Medicine | Examining the Association Between Social Frailty and Accelerated Aging |
|------------------|------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|
| Mauro Caffarelli | Pediatrics | Validating a Quantitative Electroencephalographic Index for Stroke Recognition in Sedated Patients. |
| Ashley Foster | Emergency Medicine | Crisis Line Follow-up after Emergency Department Discharge for Youth with Increased Risk of Suicide |
| Sheiphali Gandhi | Occupational, Environmental, and Climate Medicine | Understanding Pulmonary Fibrosis Through the Integration of Complex Occupational and Environmental Exposure Assessments (PF-OEM) |

| Sasha Gorrell | Psychiatry and Behavioral Sciences | Multi-modal assessment of muscle function and related cognition among inpatients with anorexia nerv |
|-----------------|---------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|
| Bridget Keenan | Hematology and Oncology | Mechanisms of response and resistance to cellular therapy in colorectal cancer |
| Nhung Nguyen | Medicine | Feasibility and Acceptability of a Smartphone-based Geofencing Intervention for Vaping Cessation among Young Adults |
| Carlos Penilla | Pediatrics | Promoting Health, Increasing Self-Efficacy and Reducing Alcohol-Related Risk Behavior in Latinx Adolescents |
| Daniel Soulsby | Pediatric Rheumatology | Application of the Socioecological Model to Elucidate Health Disparities in JIA |
| Michael Spinner | Hematology and Oncology | A Phase II Trial of Pembrolizumab + GVD with ctDNA-Guided Consolidation in Patients with Relapsed/Refractory Classic Hodgkin Lymphoma 23 |

| Jennifer Velloza | Epidemiology and Biostatistics | Formative research to develop a status-neutral HIV adherence support intervention for key populations in San Francisco |
|------------------|--------------------------------|------------------------------------------------------------------------------------------------------------------------|
| Paul Wesson | Epidemiology and Biostatistics | If you are not counted, you don't count: Estimating the number of people experiencing homelessness in Los Angeles |
| Mary Jue Xu | Otolaryngology | Implementation of a Disease-Focused Tumor Board at Muhimbili and Ocean Road Cancer Institute |
| Madeline Yung | Ophthalmology | Development of a self-guided curriculum for medical student ophthalmology clerkship |

2024 University of California Hellman Fellows

UC Santa Barbara

| Haewon Jeong | Electrical and Computer Engineering | From Dirty Data to Fair Prediction: Data Preparation Framework for End-to- End equitable Machine Learning |
|---------------|----------------------------------------|--------------------------------------------------------------------------------------------------------------|
| Chenhao Jin | Physics | Ultrafast manipulation of topological magnets |
| Yader Lanuza | Sociology | Undocumented & Privileged: Immigrant Selectivity and Legal Status in High School-to-College Transition |
| Regina Lapate | Psychological and Brain Sciences | The Life of Memories Project |

| Gen Li | Earth Science | Geologic Carbon Dioxide Drawdown: Fate of Earthquake-Eroded Organic Carbon |
|--------------------------|---------------|-----------------------------------------------------------------------------------------------------------------------------------|
| Amrah Salomon Johnson | English | Confluences: Indigenous Fugitivity on the Border |
| David Stein | History | Fearing Inflation, Inflating Fears: The Civil Right Struggle for Full Employment and the Rise of the Carceral State, 1929-1989 |

2024 University of California Hellman Fellows

UC Santa Cruz

| Josefina Bittar | Languages and Applied Linguistics | Language Use and Change among Paraguayan Immigrants in Spain |
|----------------------|-----------------------------------------------|-------------------------------------------------------------------------------------------|
| Vaggos Chatziafratis | Computer Sciences and Engineering | Theoretical Foundations of Contrastive Machine Learning |
| Bradley Colquitt | Molecular, Cell, and Developmental Biology | Theme and Variations: The Development and Evolution of Birdsong at the Molecular Level |
| Mia Gong | Linguistics | Documenting Linguistic Diversity: Anaphoric Variations in Transeurasian Languages |

| Hannah Hausman | Psychology | Improving Problem-solving, Metacognition, and Mindsets Through Self- explanation |
|-----------------------|-----------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|
| Vanessa Jonsson | Applied Mathematics | AI driven T cell immunotherapy target discovery |
| Rene Espinoza Kissell | Education | School Debt Under Fiscal Surveillance |
| Carlos Martinez | Latin American and Latino Studies | Examining Asylum Deterrence Policies & Migrant Captivity on the U.S Mexico Border |
| Matthew Schumaker | Music | Traditional Instruments and New Music Technology at the Korean Experimental Music Festival |
| Xiao Wang | Chemistry and Biochemistry | Exploring Exciton-polaritons in Two-dimensional Transition Metal Dichalcogenides using Wavefunction-based Ab Initio Methods 28 |

2024 University of California Hellman Fellows

Arial Zucker

Economics

Price Incentives for Resource Conservation: Experimental Evidence from Groundwater Irrigation