## UC Berkeley

<table>
<thead>
<tr>
<th>Name</th>
<th>Field</th>
<th>Project Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zakaria Al Balushi</td>
<td>Materials Science and Engineering</td>
<td><em>Designing Scalable Topological Qubits for Quantum Computing</em></td>
</tr>
<tr>
<td>Abbye Atkinson</td>
<td>Law</td>
<td><em>The Racial Origins of American Bankruptcy Restrictions</em></td>
</tr>
<tr>
<td>Isaac Bleaman</td>
<td>Linguistics</td>
<td><em>Documenting the linguistic diversity of Yiddish-speaking Holocaust survivors</em></td>
</tr>
<tr>
<td>Tolani Britton</td>
<td>Graduate School of Education</td>
<td><em>Postsecondary Educational Trajectories of Formerly Incarcerated Persons</em></td>
</tr>
<tr>
<td>Carmine-Emanuele Cella</td>
<td>Music</td>
<td><em>Understanding and modelling music timbre</em></td>
</tr>
</tbody>
</table>
Desiree Fields  Geography  Archive of Urban Futures

Brandi Summers  Geography  Archive of Urban Futures

Mark Fleming  School of Public Health  Aligning systems of poverty governance in California: Health care, social services, and criminal justice

Daena Funahashi  Anthropology  Authority Under Erasure: Re-constituting the Constitution in Thailand

Yangnan Gu  Plant and Microbial Biology  Linking abnormal cell proliferation with autonomous death: a tumor-resistance strategy offered by plants

Kenyatta AC Hinkle  Art Practice  THEY
Drew Jacoby-senghor  Haas School of Business  *Effect of Diversity on Ethical Decision-Making*

Armando Lara-millan  Sociology  *The Rise of Chronic Illness Billing*

Andrew Leong  English  *Reviving Early Japanese American Drama*

Simo Makiharju  Mechanical Engineering  *Measurement of 3D velocity field in optically opaque media*

Christopher Martin  Integrative Biology  *Diabolical survival of critically endangered Mojave Desert pupfishes and the potential for genetic restoration*

Priya Moorjani  Molecular and Cell Biology  *Genomic Insights into Human Adaptation and Health*
Courtney Desiree Morris  
Gender and Women's Studies  
*Mossville: Race, Memory, Ecology*

Samuel Pimentel  
Statistics  
*Joint treatment-outcome variable importance in observational study design*

Raluca Scarlat  
Nuclear Engineering  
*The Relationship between Acidity of Molten Salts and Their Properties*

Rebecca Tarvin  
Integrative Biology  
*Evolving toxin-sequestering fruit flies*

Sarah Vaughn  
Anthropology  
*The Aesthetics of Corporate Environmentalism*

Chunyan Yang  
Graduate School of Education  
*Influence of Anti-Asian Discrimination and Violence on Asian American Teachers’ Wellbeing and Teacher Workforce: A Mixed-method Longitudinal Study*
Michael Zuerch  Chemistry  
Coherent manipulation and ultrafast control of exciton-magnon-phonon interaction in quasi-two-dimensional antiferromagnets

Maria Chondronikola  Nutrition  
The role of the thermogenic adipose tissue in cancer cachexia

Christine Diepenbrock  Plant Sciences  
Plant breeding for improved human nutrition: an end-to-end methodological framework

Tiffany Lowe-Power  Plant Pathology  
A genetic map of a plant pathogen’s life cycle
2021 University of California Hellman Fellows

Sascha C.T.  
Environmental Toxicology  
*UC DECI - An integrative transporter database for drug and environmental chemical interactions*

Matthew Ellis  
Chemical Engineering  
*Deep Learning Enhanced Grey-box Modeling for Buildings*

Maureen Kinyua  
Civil and Environmental Engineering  
*Organic Waste Infrastructure for Nutrient and Energy Recovery; Capacity Analysis and Road Map*

Harishankar Manikantan  
Chemical Engineering  
*Simulating Neurovascular Polymer Dynamics: A New Paradigm in Alzheimer’s Research*

Priya Shah  
Chemical Engineering  
*Light Activated Gene Expression for Biomanufacturing*

Beth Ferguson  
Design  
*Environmental Design for Micromobility and Public Transit*
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<tr>
<th>Name</th>
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<tr>
<td>Martin Fraas</td>
<td>Mathematics</td>
<td><em>Microscopic Theory of Anyons in the Fractional Quantum Hall Effect</em></td>
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<tr>
<td>Gozde Boncu-Berk</td>
<td>Design</td>
<td><em>CalmWear: Sensory Smart Clothing</em></td>
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<tr>
<td>Diana Moreira</td>
<td>Economics</td>
<td><em>The Costs and Benefits of Meritocracy: Evidence</em></td>
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<tr>
<td>Santiago Perez</td>
<td>Economics</td>
<td><em>The Costs and Benefits of Meritocracy: Evidence</em></td>
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<tr>
<td>Clarissa Rojas</td>
<td>Chicanx Studies</td>
<td><em>And still we love: b/ordering violence on the U.S. Mexico border</em></td>
</tr>
<tr>
<td>Lauren Young</td>
<td>Political Science</td>
<td><em>A Global Test of the Subnational Targeting and Effects of State Repression</em></td>
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</tbody>
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UC Irvine

Adeyemi Adeleye  Civil & Environmental Engineering  Remediation of Metal-Contaminated Agricultural Soils Using Nanotechnology and Machine Learning

Swethaa Ballakrishnen  School of Law  Rethinking Inclusion: Diversity Performance(s) in Legal Institutions and Pipelines

Vibhuti Ramachandran  Global and International Studies  Producing the Trafficked Victim: Law, Prostitution, and NGO Intervention in India

Judit Romhanyi  Physics & Astronomy  Z2 or Not Z2? Topological Protection in Quantum Magnets

Christopher Seeds  Criminology, Law & Society  Care in the End: Understanding Incarcerated People's Decisions about End of Life and Best Practices for Prison Hospice
Celia Symons  Ecology and Evolutionary Biology  
*Resilience to Heatwaves: The Consequences of Multiple and Interacting Forms of Thermal Variability*

Adriana Villavicencio  School of Education  
*Disrupting Racism in Schools: Studying the Outcomes of a Racial Justice Program*

LaToya Baldwin Clark  Law  
*Boosting Ahead: Private Money in Public Schools*

Idan Blank  Psychology/Linguistics  
*The Relationship Between Word Meanings and Non-Linguistic Knowledge of Concepts*
### 2021 University of California Hellman Fellows

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<tr>
<th>Name</th>
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<tr>
<td>Jun Chen</td>
<td>Bioengineering</td>
<td>A Textile-Based Sensing System for Obstructive Sleep Apnea Diagnosis</td>
</tr>
<tr>
<td>Artur Davoyan</td>
<td>Mechanical and Aerospace Engineering</td>
<td>Transition Metal Dichalcogenide Optoelectronic Circuits for Future Telecommunications</td>
</tr>
<tr>
<td>Ugo Edu</td>
<td>African American Studies</td>
<td>Cosmetic Body Modifications in Nigeria: From Fattening Rooms to Creams and Surgery</td>
</tr>
<tr>
<td>Carissa Eisler</td>
<td>Chemical and Biomolecular Engineering</td>
<td>Realizing High Performance, Low Cost Solar Concentrators via the Directional Luminescence of Surface-Sensitive Nanocrystals</td>
</tr>
<tr>
<td>Ashvin Gandhi</td>
<td>Management</td>
<td>Minimum Wages and Employment Composition</td>
</tr>
<tr>
<td>Nandita Garud</td>
<td>Ecology and Evolutionary Biology/Human Genetics</td>
<td>Uncovering the Landscape of Mutations in the Human Gut Microbiome</td>
</tr>
</tbody>
</table>
Ju Hui Judy Han  Gender Studies  Out of Order: Queer Feminist Politics in Korea and the Korean Diaspora

Vishal Jugdeo  Art  “A Trembling Field of Glass”

Miriam Marlier  Environmental Health Sciences  Evaluating the Use of Prescribed Burning to Reduce Wildfire Pollution in California

Karen McKinnon  Statistics/Institute of the Environment and Sustainability  Climate Change and Marine Heat Waves

Eric Min  Political Science  Negotiations in War

Sobukwe Odinga  African American Studies  Hostages to Fortune: Deceit, Diplomacy, and US-Africa Security Politics
Miriam Posner  Information Studies  “Seeing Like a Supply Chain: The Hidden Life of Logistics”

Giovanni Rossi  Sociology  Understanding Facial Expression as a Tool for Social Action

Melissa Sharpe  Psychology  The Effect of Positive Experience on the Encoding of Future Fear Memories

Emily Weisburst  Public Policy  “Do Police Make Too Many Arrests?” An Examination of the Potential Impacts of Reductions in Police Enforcement

Sherry Jueyu Wu  Management  Participatory Budgeting: A Field Experiment in China

Junko Yamazaki  Asian Languages and Cultures  Unresolved Dissonance, Unfamiliar Affect in Postwar Japanese Cinema
UC Riverside

Mona Eskandari  Chemical/Environ. Engineering  
Sustainable Chemical Recycling Technology for the Upcycling of Plastic Waste into Fungible Fuels

Rengin Firat  Mechanical Engineering  
Multiscale Modeling of Sea-Ice: Linking Ice Floe Dynamics to Climate

Timothy Su  Ethnic Studies  
Missing in Action: Agency, Race, & Invention

Antoine Lentacker  Psychology  
What Happens To Future Decisions When We Forget The Past?

Wei Liu  Economics  
What are Effective Forms of Assistance to Advance Homeownership for Disadvantaged Households?
Myisha Cherry  Evolution, Ecology & Orgns Bio  Does Warming Lead to Asynchrony Between Plants and Pollinators?

UC San Diego

Pamela Ban  Political Science  Information Sharing and the Use of Evidence in Congressional Policymaking

Danielle Dean  Visual Arts  Amazon

Julia Michelle Diaz  Sio Department  Speaking of Reactive Oxygen Species: How do marine microalgae get the message through?
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<th>Name</th>
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<tr>
<td>Lalit Deshmukh</td>
<td>Chemistry And Biochemistry</td>
<td>Mechanism of Phosphorylation-mediated Dissolution of Amyloid Fibrils of Human ALIX</td>
</tr>
<tr>
<td>Michael Frazier</td>
<td>Mechanical &amp; Aerospace Engineering</td>
<td>Mechanical Chemistry: Pattern Formation in Active Mechanical Metamaterials</td>
</tr>
<tr>
<td>Teevrat Garg</td>
<td>Global Policy And Strategy</td>
<td>Adoption and the Use of Smart Plugs for Demand Side Management in India</td>
</tr>
<tr>
<td>Erin Hill</td>
<td>Communication</td>
<td>Staying in the Room: Marginalized Workers, Creative Collaborative Labor, and &quot;Pipeline Problems&quot; in Film &amp; TV Development’s Elite Creative Spaces</td>
</tr>
<tr>
<td>Caroline Jack</td>
<td>Communication</td>
<td>Social Imaginaries of Persuasion: US Promotional Cultures in the Twentieth Century</td>
</tr>
<tr>
<td>Byung Chu Kang</td>
<td>Anthropology</td>
<td>White Asians Wanted: Queer Racialization in Thailand</td>
</tr>
</tbody>
</table>
Guarav Khanna  Global Policy And Strategy  Cultural Barriers, Transportation and Internal Trade in Developing Countries

Tania Morimoto  Mechanical & Aerospace Engineering  Soft Growing Robots for Interventions Along Curved Trajectories in the Brain

Shaista Patel  Ethnic Studies  Buffalo Archives: Examining Transnational Relationalities of Indigeneities and Caste


Jade Power  Theatre & Dance  Habla!: Speaking Bodies in Latinx Dance and Performance

Jordan Rose  Visual Arts  The Spell of the Barricade: Art and Politics in France, 1830-1852
Nisarq Shah  Nanoengineering  Engineering Immune Regulation in Juvenile Idiopathic Arthritis

Lingyan Shi  Bioengineering  DOM-SRS Imaging for Studying Diet-Regulated Lipid Metabolism in Aging Related Disease

April Sutton  Sociology  Education and Financial Health Inequalities at the Intersection of Gender, Race and Ethnicity

Yi-Zhuang You  Physics  Classical Shadow Tomography with Shallow Quantum Circuits
Beth Apsel Winger  Pediatrics  Pharmacokinetically Driven, Individualized Dosing of Deferasirox in Transfusion Dependent Thalassemia

Tasce Bongiovanni  Surgery  Postoperative Pain Medication Prescribing for Surgical Patients

Julien Cobert  Anesthesia and Perioperative Care  Quantifying Provider Opinion in the ICU and its Role in Prognosis and Provider Uncertainty and Distress

Taressa Fraze  Family and Community Medicine  Role of value-based care contracts in facilitating virtual primary care


Orlando Harris  Community Health Systems
Kelsey Holt  Family and Community Medicine  Improving measurement of contraceptive autonomy to advance reproductive health, rights, and well-being

Li-Wen Huang  Medicine  Understanding How to Optimize the Teleoncology Experience for Cognitively Impaired Patients

Jennifer James  Institute for Health and Aging  Community engaged research on aging, health, and incarceration: barriers, facilitators, and implementation strategies

Solmaz Manuel  Anesthesia and Perioperative Care  Uncovering Language-Based Disparities in Perioperative Pain Assessment and Management

Elphege Nora  Cardiovascular Research Institute  How does DNA looping regulate gene activity?

Aksharananda Rambachan  Medicine  Racial, Ethnic, and Language-Based Disparities in the Inpatient Assessment and Management of Acute and Chronic Pain
Shannon Smith-Bernardin  Social and Behavioral Sciences  Evaluation of paramedic decision making in triage and transport of adults with acute uncomplicated alcohol intoxication to the emergency department versus sobering center

Heather Badamo  Art history  Arts of Encounter: St. George in the Global Middle Ages & Coptic Arts of Memory


John Harter  Entomology  Exploring Entanglement in Quantum Spin Liquids
Morgan Raven  
Gelogy  
*Organic Sulfur and the Search for Early and Extraterrestrial Life*

Terrell Winder  
Sociology  
*Understanding Financial Literacy and Perceptions of Education  
Debt Among U.S. College-Bound Students and their Parents*

Hangping Xu  
Eastern  
*Broken Bodies as Agents: Disability Aesthetics and Politics in Modern Chinese Culture and Literature*
UC Santa Cruz

Filippo Gianferrari  Literature  Training the Reader: Dante and the Rise of Vernacular Literacy

Euiseok Kim  Molecular, Cell, and Developmental Biology  Molecular Identities and Connectivity of Feedback and Feedforward Circuits in the Mammalian Cortex

Gueyon Kim  Economics  Black-White Differences in Intergenerational Occupational Mobility

Jacqueline Kimmey  Microbiology & Environmental Toxicology  Circadian response to Streptococcus pneumoniae infection
2021 University of California Hellman Fellows

Jaimie Morse  Sociology  
*Bodies of Evidence: Legibility, Medical Uncertainty, and the Knowledge Problem of ‘Rape Kits’*

Juan Pedroza  Sociology  
*Safety Net Access for Immigrant Families*

Justin Perez  Latin American & Latino Studies  
*LGBT Health Across the Americas Initiative*

Jason Samaha  Psychology  
*Neural Correlates of the Subjective Experience of Time*

Samuel Severance  Education  
*Creating Sustainable Buzz for Science Learning: Piloting an Elementary Project-Based Ecology Unit Supporting Native Bee Populations*