

## BERKELEY CLIMATE MAP -- Institutes/Centers/Labs ADDRESSING MULTIPLE TOPICS - FALL 2025

Send your adds and edits to <a href="mailto:bruceriordan@berkeley.edu">bruceriordan@berkeley.edu</a>

This BCCN map spotlights institutes and centers on the campus that are regularly addressing multiple topics.

| First | Last  | Affiliation<br>(primary) | Summary  | Selected Projects/Reports/Classes                       |
|-------|---|--------------------------|--|---|
|       | Bakar Labs for Energy and Materials                 | Campuswide               | David Schaffer, Executive Director.  |   |
|       |   |                          | Jeremy Alberga, COO  |   |
|       |   |                          | Shilpi Kumar, Director of Partnerships   |   |
|       |   |                          | Alexis Bell, Associate Director  |   |
|       |   |                          | Located at the <u>Bakar ClimatEnginuity Hub(link is external)</u> , our programming will serve as a nexus for excellence in climate and energy innovation and entrepreneurship, lowering the barriers to the translation of impactful discoveries into companies that can create scalable solutions for societal problems. BCH will mirror the lifescience focused Bakar BioEnginuity Hub, and will build on the success of QB3, a multicampus UC institute focused on scientific innovation and entrepreneurship. |   |
|       | Bakar Institute of Digital Materials for the Planet | CDSS                     | Christian Borgs, Director  | ChatGPT-based Assistants Redefine Research              |
|       | iviaterials for the Planet                          |                          | Omar Yaghi, Co-Director and Chief Scientist  | Landscape in Groundbreaking ACS Central Science Article |
|       |   |                          | The Bakar Institute of Digital Materials for the Planet (BIDMaP) aims to speed up the development of reticular chemistry and modular structures for achieving cost-efficient, easily deployable ultra-porous   |   |

| First | Last                                  | Affiliation<br>(primary) | Summary  | Selected Projects/Reports/Classes |
|-------|---------------------------------------|--------------------------|--|-----------------------------------|
|       |                                       | (primary)                | metal-organic frameworks (MOFs) and covalent organic frameworks (COFs).  These programs will help limit and address the impacts of climate change and extend to downstream technologies like conversion of CO2 to clean fuels, biodegradable polymers, enzymes, and pharmaceuticals. BIDMaP brings together top computation and machine learning experts with chemistry and other physical science researchers to exploit the vast potential these reticular structures have in achieving clean air, clean energy, and clean water.  |                                   |
|       | Beahrs Environmental Learning Program | RCNR                     | Director, Mio Katayama Owens  The Beahrs Environmental Leadership Program (Beahrs ELP) is a rigorous, unique learning experience that transforms mid-career environmental professionals into exceptional leaders. Through exposure to innovative approaches and case studies, ELP participants develop the skills necessary to tackle complex and dynamic environmental issues.  Established in 2000 with seed funding from Berkeley alumni Carolyn and Richard Beahrs, this three-week intensive interdisciplinary training includes workshops taught by award-winning Berkeley faculty members from the Rausser College of Natural Resources, Haas School of Business, and School of Environmental Design, as well as the departments of Environmental Science, Policy, and Management and Agricultural and Resource Economics.  Participants in the Beahrs ELP receive Berkeley's certificate in Sustainable Environmental Management, as well as lifetime membership in an alumni network comprising of 731 members from over 114 countries. |                                   |

| First | Last  | Affiliation | Summary   | Selected Projects/Reports/Classes   |
|-------|---|-------------|---|---|
|       |   | (primary)   |   |   |
|       | Berkeley Al Research Climate Initiative (BCI) | CDSS        | Medhini Narasimhan , Co-Organizer                                     | Project: Coral Reef Restoration The PCL is wearling with a goral reef restoration             |
|       | <u>Climate initiative (BCI)</u>               |             |   | The BCI is working with a coral reef restoration non-profit to create machine learning models |
|       |   |             | Ritwik Gupta, Co-Organizer  | that can create proxy estimates of coral reef   |
|       |   |             |   | health through the creation of better depth   |
|       |   |             | The Berkeley AI Research Climate Initiative unites AI and climate-    | estimation, object detection and tracking, and  |
|       |   |             | related researchers to iteratively create, maintain, and evaluate     | regression models that work underwater.   |
|       |   |             | meaningful benchmarks that bridge these communities.                  | These models are deployed in real-time  |
|       |   |             | As a community of scientists, we aim to create better data, methods,  | inference, low power settings.  |
|       |   |             | and models that enable us as a society to better take care of our     |   |
|       |   |             | planet and the limited resources on it. However, machine learning is  | The Fate of Snow  |
|       |   |             | increasingly disconnected from large scale societal issues. We aim to | BCI is launching a benchmark paired with an   |
|       |   |             | build a bridge to the largest problem facing us today — climate       | international prize competition focused on the  |
|       |   |             | change.   | 'Fate of Snow' in partnership with Lawrence   |
|       |   |             |   | Berkeley National Laboratory and industrial   |
|       |   |             |   | partners. The Fate of Snow project will aim to  |
|       |   |             |   | model and predict the partitioning of snow  |
|       |   |             |   | over basin-scales in high-altitude complex  |
|       |   |             |   | terrain. By combining a range of remote   |
|       |   |             |   | sensing, in-situ, and simulated data sources, we aim to create a multifaceted benchmark of    |
|       |   |             |   | estimates of observational constraints on the   |
|       |   |             |   | major fluxes of water including   |
|       |   |             |   | evapotranspiration, snow sublimation,   |
|       |   |             |   | infiltration and runoff.  |
|       |   |             |   |   |
|       |   |             |   |   |
|       | Berkeley Atmospheric                          | Campuswide  | Kristie Boering, Director   |   |
|       | Sciences Center                               |             | The Berkeley Atmospheric Sciences Center (BASC) is the hub for UC     |   |
|       |   |             | Berkeley's research on the science of the atmosphere, its             |   |
|       |   |             | interactions with Earth systems, and the future of Earth's climate.   |   |
|       | Berkeley Center for                           | Campuswide  | Megan Arnett, Executive Director                                      |   |
|       | Green Chemistry                               |             |   |   |
|       |   |             | The mission of the Berkeley Center for Green Chemistry is to bring    |   |
|       |   |             | about a generational transformation toward the design and use of      |   |
|       |   |             | inherently safer chemicals and materials. Embedding the principles    |   |
|       |   |             | of green chemistry into science, markets and public policy will       |   |
|       |   |             | provide the foundation for safeguarding human health and              |   |

| First | Last   | Affiliation (primary)  | Summary   | Selected Projects/Reports/Classes   |
|-------|--|------------------------|---|---|
|       |  | W 77                   | ecosystems and provide a cornerstone for a sustainable, clean energy economy. BCGC collaborates with public and private organizations, offering training and technical advice, advocating for safer products and informed policies, the placement of graduates in the workforce, and informal instruction.  |   |
|       | Berkeley Earth                                 | Campuswide             | Richard Muller, Director  Berkeley Earth is an independent U.S. non-profit organization focused on environmental data science and analysis.  Our continued mission and responsibility is to deliver and communicate accessible environmental data and analysis to the broadest possible audience.   | Detailed info on GHGs and other data by country  Global Temperature Report 2023  November 2023 Update   |
|       | Berkeley Economy and Society Initiative (BESI) | L&S Social<br>Sciences | Paul Pierson Director  New center at Berkeley supported by Social Science Matrix, housed in Letters and Science and funded by the Hewlett Foundation.  The Berkeley Economy and Society Initiative (BESI) champions next-generation thinking about markets, governance, and the social preconditions for developing and sustaining genuine prosperity.  In advancing a new agenda for multidisciplinary research and informed policy conversation, we stress the need to explore enduring inequalities of resources and power that frequently impede social progress.  Climate is one of 3 key themes for new BESI. Jonas Meckling leads this work. | The Climate Seminar at BESI – Spring 2024  A \$10M seed grant from the Hewlett Foundation will support a new hub for research and teaching focused on the intersection of economics and government. |

| First | Last   | Affiliation (primary) | Summary   | Selected Projects/Reports/Classes  |
|-------|--|-----------------------|---|--|
|       | Berkeley Haas Entrepreneurship Program                         | Haas                  | Rhonda Shrader, Executive Director  The mission of the Berkeley-Haas Entrepreneurship Program is to integrate entrepreneurial thinking into the Haas student experience and to assist Haas and Berkeley students in launching new ventures. The program gives students multidisciplinary experiential learning opportunities, seed funding for selected startups, and connections to the greater Berkeley and Bay Area entrepreneurial ecosystems.  The program targets students interested in:  • learning about entrepreneurship,  • starting a company,  • working on venture capital careers, or  • integrating entrepreneurial thinking into corporate environments. | In addition to a wide range of courses, many featuring the Lean Launchpad methodology, the Berkeley-Haas Entrepreneurship Program offers opportunities to get exposure, acquire skills and gain real-world experience in startups. We offer multidisciplinary hackathons and pitch-a-thons, mentoring from industry experts, startup seed funding, competitions, accelerators, internships and events with Berkeley's extensive entrepreneurial network. |
|       | Berkeley Institute for Data Science (BIDS)                     | CDSS                  | Ashish Sahni, Executive Director  BIDS is a central hub of data-intensive research, open source software, and data science training programs.  BIDS' programs and initiatives are designed to facilitate collaboration across an increasingly diverse and active data science community of domain experts from the life, social, and physical sciences, as well as methodological experts from computer science, statistics, and applied mathematics.   |  |
|       | Berkeley Inter-<br>Disciplinary Migration<br>Initiative (BIMI) | Campuswide            | Harpreet Mangat, Executive Director  We are a partnership of faculty, researchers and students who investigate human mobility, immigrants' integration and the ways migration transforms societies around the world.  | Mapping Spatial Inequality: The New Geography of Poverty and Immigration  Disaster and Migration: Inequalities in Climate Migration (SS Matrix Panel video)  Currently working to build non-citizenship faculty cluster hire   |
|       | Berkeley Sensor and<br>Actuator Center                         | Engineering           | John Candelaria, Executive Director  This Industry/University Cooperative Research Center (I/UCRC) is devoted to interdisciplinary engineering research on micro- and   | BSAC Technology Seminar: The Climate Crisis is Here and Now, Damages Are Accelerating and BSAC's Skillsets Can Help.   |

| First | Last             | Affiliation | Summary   | Selected Projects/Reports/Classes  |
|-------|------------------|-------------|---|--|
|       |                  | (primary)   | nano-scale sensors, moving mechanical elements, microfluidics, materials, and processes that take advantage of progress made in integrated-circuit, biological, and polymer technologies.  BSAC includes a multi-disciplinary research team of 100+ graduate students and post-doctoral researchers led by more than ten BSAC Directors from the engineering faculties of electrical, mechanical, and bio engineering at UC Berkeley and UC Davis.  |  |
|       | Berkeley Skydeck | Campuswide  | Caroline Winnett, Executive Director Sibyl Chen, General Manager  SkyDeck offers all the benefits of a traditional accelerator along with the vast resources of the world's number one ranked public university. Formed as a partnership between Berkeley's Haas School of Business, the College of Engineering, and the Office of the Vice Chancellor for Research, SkyDeck offers a powerful environment for startups to grow and launch. The robust and vibrant ecosystem includes a deep network of advisors, industry partners, and accredited investors.  Venture Capital: We facilitate intros and help build relationships with our extensive network of top tier VCs and investors.  Mentorship: Our 480 advisors and mentors actively coach and advise our founders on everything from product development to customer acquisition to go-to-market strategy to fundraising and beyond.  Access to Talent: We help connect the intellectual firepower of UC Berkeley to our startups, matching hundreds of students, MBAs, and postdocs to intern and work for our startups. We also match faculty to advisory boards.  Customer Development: We have strong relationships with hundreds of businesses and enterprises that are often early adopters of our startups' technology, and we facilitate key introductions to | New Climate Track launched in 2023 with funding from the UCOP Climate Action I&E program |

| First | Last  | Affiliation (primary) | Summary  | Selected Projects/Reports/Classes  |
|-------|---|-----------------------|--|--|
|       |   |                       | executives from countless companies across our vast network of Berkeley alums.   |  |
|       | Big Ideas                                     | Campuswide            | Phillip Denny, Director  Big Ideas is an innovation ecosystem that provides training, networks, recognition and funding to interdisciplinary teams of UC Berkeley students who have transformative solutions to real-world problems.  Open to graduate and undergraduate students, the program offers up to \$20,000, skill-building workshops and online resources, networking opportunities, and extensive feedback from a 1,500-strong judge and mentor network. Applications due December 6th, 2023! | Big Ideas is now featuring a Climate Change and Sustainability Track with funding from the 2023 UCOP Climate Action I&E program  Solutions may focus on several areas, including but not limited to: (1) clean, renewable energy technology; (2) land/watershed management; (3) climate change adaptation; (4) habitat restoration and/or maintenance; (5) Resource reduction/waste prevention (6) solutions addressing vulnerable communities in California affected by climate change; (7) programs or installations that spread awareness about climate change impacts in California. |
|       | Blum Center for Developing Economies          | Campuswide            | The Blum Center for Developing Economies leverages the talent, enthusiasm, and energy of the <u>University of California, Berkeley</u> community to address the grand challenge of global poverty. Our interdisciplinary problem-solving approach draws on students and faculty dedicated to facing this challenge through innovative initiatives, education, and research.  | 2023 UCOP Climate Action I&E funding to deploy Master of Development Engineering students to serve as I&E Climate Action Fellows, supporting projects in communities most vulnerable to climate change.  |
|       | California Institute for Energy & Environment | Campuswide            | Carl Blumstein, Executive Director.  As part of the CITRIS Climate initiative, CIEE blends the expertise of world-class researchers from across the UC and around the country to ensure steady progress toward California's pace-setting energy goals.  CIEE's projects span an ambitious scope of topics, with a common thread: to intelligently apply cutting-edge technologies in service to society. From managing extensive studies on California's climate   | Oakland Eco-Block is a key project.  "Eight Key Challenges for California's Energy Future."  Involve the Youth: CIEE Postdoctoral Scholar Dr. Miriam Aczel recently co-published a commentary in Elementa: Science of the Anthropocene that highlights the potential benefits of youth-oriented citizen science research in informing climate change research.   |

| First | Last   | Affiliation (primary) | Summary  | Selected Projects/Reports/Classes   |
|-------|--|-----------------------|--|---|
|       |  | (primary)             | vulnerability to developing smart energy solutions and deploying them in the field, CIEE brings together researchers, inventors and stakeholders to accomplish what none of us could do alone.   | Projects range from new devices like the low-cost anemometer, Hamilton sensor and smart thermostat, to advanced systems like the micro-PMU for electric power distribution, the Berkeley Tree Database and the XBOS building management platform. Through field tests with its diverse partners, CIEE nurtures these innovations to wide-scale use beyond the Golden State. |
|       | California-China Climate Institute           | Law                   | Fan Dai, Executive Director. Established to spur further climate action through joint research, training and dialogue in California and China. Informs national policy makers, fosters dialogue and cooperation, and promotes the implementation of climate solutions at all levels.   |   |
|       | Center for Effective<br>Global Action (CEGA) | Campuswide            | Carson Christiano, Executive Director  Joshua Blumenstock, Faculty Co-Director  Edward Miguel, Faculty Co-Director  CEGA's mission is to improve the lives of people living in poverty by generating key insights for policymakers backed by rigorous and transparent research. CEGA is a hub for research, training, and innovation headquartered at Berkeley. We generate insights that leaders can use to improve policies, programs, and people's lives. Our academic network includes more than 150 faculty, 65 scholars from low- and middle-income countries, and hundreds of graduate students—from across academic disciplines and across the globe—that produce rigorous evidence about what works to expand education, health, and economic opportunities for people living in poverty. | Measuring Development 2023: Mitigating the Risks and Impacts of Climate Change (9 <sup>th</sup> annual conference with World Bank, Univ. of Chicago and others)  How does Measurement Contribute to a Habitable Planet for All?  Kenya Analytical Program on Forced Displacement  Syrian Refugee Life Study   |

| Center for Environmental Design Research's (CEDR) mission is to foster research in environmental planning and design. Its goal is to increase the factual content of these disciplines and to promote systematic approaches to decision-making within them. The scope of environmental planning and design is broad, ranging from the  |  |
|--|--|
| environments of people within buildings, to region-wide ecosystems.  | David Wooley and team at the Goldman have  |
| Center for Environmental Public Policy  Goldman  David Wooley , Executive Director  The Center for Environmental Public Policy (CEPP) at the Goldman School of Public Policy (GSPP) takes an integrated approach to solving environmental problems. By synthesizing scientific, economic, technical, social, financial, and political understanding, CEPP collaborates to support the creation and implementation of public policies based on exacting analytical standards that carefully define problems and match them with the most impactful solutions. CEPP's primary focus is on climate change, the key environmental challenge of our time. | David Wooley and team at the Goldman have released 2035 and Beyond: Abundant, Affordable Offshore Wind Can Accelerate Our Clean Electricity Future. The new report, from GridLab, Berkeley, and Energy Innovation, shows that over 4,000 gigawatts of offshore wind potential is available along the U.S. coastline, including the Great Lakes, which could greatly complement onshore solar and wind to help achieve a 95% clean electricity grid by 2050.  Overall 2035 – All 3 reports  California 100 Releases First Round of Policy and Scenario Reports Focused on State's Infrastructure Future  Lead author: The Future of Energy, Environment and Natural Resources for the California 100 Project  CEPP Awarded a California 100 Grant to Evaluate Energy, Environment, and Natural Resources in California's Future  Berkeley Carbon Trading Project  UCOP \$100M Climate Action LOI lead – January 2023 - Keeping California Climate |

| First | Last   | Affiliation (primary) | Summary   | Selected Projects/Reports/Classes   |
|-------|--|-----------------------|---|---|
|       | Center for Law, Energy and Environment           | Law                   | Daniel Farber, Faculty Director Louise Bedsworth, Executive Director  The Center for Law, Energy, & the Environment (CLEE) believes solving our most pressing environmental challenges requires actionable research, training, and engagement to accelerate the implementation of solutions.  Our four key research areas are:  Climate and Energy  Water  Oceans  Land Use           | Looking Forward: A Guide to Climate Risk Scenario Analysis Design for California's Insurance Regulator  Climate Policy Fact Sheet Series  CLEE's EV Equity Initiative seeks to build locally tailored, community driven, and replicable approaches to the development of electric vehicle and mobility infrastructure in underserved communities in California and the US. Over the course of this multi-year effort, we will establish partnerships with local governments and stakeholders to advance equitable EV planning processes; conduct mapping exercises to identify highest-priority charger locations based on a range of locally appropriate factors; develop implementation roadmaps, guidebooks, and other resources; propose policy and legislative solutions as appropriate; and support implementation efforts wherever possible. |
|       | Center for Resource Efficient Communities (CREC) | CED                   | CREC is dedicated to supporting California's climate change and resource efficiency goals through interdisciplinary research, public communication, and professional outreach.  CREC conducts cutting edge of climate change mitigation, energy efficiency, and water efficiency. Though focused on California, our work has implications for resource efficient planning everywhere. | Feasibility Study for Zero Carbon Buildings and Communities In Collaboration with UC-Berkeley Department of Civil and Environmental Engineering; Fehr and Peers; Resource Refocus; Energy Solutions; City of Richmond, CA  Phase I of this project assesses the feasibility of building-scale transportation, water, solid waste and operational energy management strategies to supplement existing zero net energy (ZNE) goals to achieve zero carbon   |

| Selected Projects/Reports/Classes   |
|---|
|   |
| building in California. For each of six building types (single-family residential, multi-family residential, large office, strip mall, school, and warehouse), the research team quantified the potential for each identified building-scale strategy to reduce greenhouse gas (GHG) emissions below anticipated future baseline levels and then assembled those strategies as graphical "wedges" in a dynamic spreadsheet tool that can quantify zero carbon building potential for any location in California. Phase II will extend this analysis to include community-scale energy, transportation, water and waste strategies, as potentially implemented in Richmond, CA, to analyze the feasibility of zero carbon communities in California. |
| Evaluation of Transformative Climate Communities Program Investments In Collaboration with <u>UCLA Luskin Center for</u> Innovation and the <u>California Strategic Growth</u> Council  |
| CREC is partnering with the UCLA Luskin Center for Innovation to conduct evaluation of the State of California's landmark Transformative Climate Communities (TCC) program investments in Fresno, Ontario and Watts (Los Angeles). CREC collaborated in the development of the Evaluation Plan that will guide evaluation of these and future rounds of TCC investments, and will continue collaborating with UCLA to conduct a seven- year evaluation of the impacts of these  |
|   |

| First | Last                            | Affiliation | Summary   | Selected Projects/Reports/Classes  |
|-------|---------------------------------|-------------|---|--|
|       |                                 | (primary)   |   | health, and social well being of the initial three communities receiving TCC monies.   |
|       | Center for Responsible Business | Haas        | Robert Strand, Executive Director  The Center connects students, businesses, and faculty to mobilize the positive potential of business to create a more responsible, resilient, and sustainable society. Building on more than a decade of research, teaching, and engaging with business, we educate and provoke thoughtful debate. The Center encourages sustainability-minded research and its application in the marketplace of commerce and ideas  We use the words "sustainable" and "sustainability" in the broadest sense to include social, environmental, and economic considerations. This allows us to explore a wide array of issues, while retaining the flexibility to focus resources and attention for maximum impact. Our current focus areas are human rights and business, sustainable innovation, and sustainable food. | Events Join the CRB at one of our upcoming events to hear from top minds in corporate responsibility and sustainability.   |
|       | Center for Security in Politics | Goldman     | Janet Napolitano, Founder and Faculty Director  Adrienne Fulk, Executive Director  The Center for Security in Politics (CSP) supports research, curriculum, and convenings that bring students, academics, and leading political practitioners together to address critical global risks, to translate research and analysis into actionable solutions for policymakers, thought leaders and elected officials, and to train a diverse generation of security professionals for careers in public service.  Research areas include Institutional Resilience, Climate Change and Cybersecurity and Emergent Technologies.  | UCOP Letter of Intent – January 2023 Designing Climate Resilience: Wargaming, Simulations, and Modeling for the State of California Seed (Decline)  Napolitano is a member of the Climate Migration Council  Napolitano put UC on a path to 100 percent reliance on clean electricity across all campuses and medical centers by 2025, the same year the university aims to achieve systemwide carbon neutrality. In 2017, she also spearheaded the formation of the |

| First | Last                             | Affiliation (primary) | Summary  | Selected Projects/Reports/Classes   |
|-------|----------------------------------|-----------------------|--|---|
|       |                                  | W //                  | Climate change is fundamentally a risk that is redefining politics in the United States and across the globe. From climate-induced migration to food, water and weather security, the earth's evolving temperature is changing the nature of policymaking and politics. CSP scholars analyze these risks and develop proposals for understanding and mitigating them at the global, national, and state levels.  | University Climate Change Coalition, or UC3. This group of 18 leading North American research universities and systems are working to help local communities achieve their climate goals and accelerate the transition to a low-carbon future.  |
|       | CITRIS and the Banatao Institute | Campuswide            | Alexandre Bayen, Director  Carl Blumstein, Executive Director, CITRIS Climate  CITRIS and the Banatao Institute is a University of California research center focused on creating IT solutions that generate social and economic benefits for everyone.  CITRIS Climate is a key initiative. The CITRIS Climate initiative supports the goal of carbon neutrality at the UC system level and beyond, with attention to issues of climate justice and equity to reduce the effects that are disproportionately experienced by underrepresented and underserved communities.  CITRIS Climate also facilitates collaborations across UC campuses and other CITRIS initiatives to advance the knowledge and technology needed to support global and individual climate adaptation and mitigation. Through cross-disciplinary, IT-driven approaches of climate mitigation and adaptation applied to xs, sea level rise, hurricanes, heat waves and other related hazards, CITRIS Climate aims to promote resilient communities and sustainable infrastructure through a more inclusive and diverse STEM workforce.  CITRIS Innovation Hub  The CITRIS Innovation Hub fosters interdisciplinary innovation in the interest of society, expands on-ramps for next-generation talent and promotes greater workforce inclusion. | Preparing for a warming world: CITRIS at the vanguard of climate tech research  CITRIS Seed Grants awarded Dec 2023 — includes projects on soil carbon and resilient building materials to address heat  CITRIS Foundry awarded \$\$ from 2023 UCOP  Climate Action I&E program to create a "climate action acceleration fund" that will support previous recipients of the CITRIS Seed Funding Program for climate action projects that are ready to advance to the next stage of commercialization. |
|       |                                  |                       | <u>CITRIS Foundry</u>  |   |

| First | Last                       | Affiliation (primary) | Summary  | Selected Projects/Reports/Classes   |
|-------|----------------------------|-----------------------|--|---|
|       |                            | (primary)             | The Foundry is the University's deep tech innovation hub created in 2013 to help UC entrepreneurs build companies that make a significant impact on the world. The Foundry provides access to design, manufacturing, and business development tools, along with a community of entrepreneurs and experts to transform entrepreneurial teams into founders.  Ron Zakay Interim Director   |   |
|       | Cleantech to Market (C2M)  | Haas                  | Brian Steel, Co-Director Ana Martinez, Associate Director  Cleantech to Market (C2M)—Inspiring Climate Tech Leadership—is a partnership between graduate students, startups, and industry professionals to help accelerate the commercialization of leading cleantech solutions. In the process, C2M also develops the next generation of innovative cleantech leaders.  Startups involved in — low-carbon energy, green chemistry, food, and water technologies covering both mitigation and adaptation — are invited to apply into the C2M program at the beginning of each year. C2M then handpicks interdisciplinary teams of UC Berkeley grad students to help entrepreneurs identify the most viable initial markets, prospective customers and partners, funding sources, and related strategies. | C2M's 2023 Climate Tech Summit featured 8 companies that are forging new paths to develop critical climate and energy solutions  Rare earth elements  Waste heat to Green H  Residential energy finance  Heavy-duty batteries  Carbon sequestration  Energy-efficient Desalination  Emission-free generator  Water purification |
|       | Climate and Society Center | Campuswide            | Clair Brown, Founder. Housed at the IRLE. The Climate and Society Center brings together UC Berkeley faculty and students with California Environmental Justice activists and lawmakers, to undertake critical research on specific policy goals that will support California's transformation to renewable energy with zero-carbon emissions for all communities. Central to the Climate and Society Center's mission is ensuring that policy recommendations are grounded in data-based, rigorous research and are community- informed. Our vision is that research combined with political action will speed up reducing pollution and improving climate resiliency and health of EJ and indigenous communities, along with reducing California's greenhouse gas emissions.                           |   |

| First | Last  | Affiliation (primary) | Summary   | Selected Projects/Reports/Classes  |
|-------|---|-----------------------|---|--|
|       |   | (12                   | Housed at the Institute for Research on Labor and Employment (IRLE) Founder, Clair Brown, 12-15 member advisory group   |  |
|       | Climate Equity and Environmental Justice Roundtable | Campuswide            | Multidisciplinary group of scholars focuses on advancing research on climate change and its impacts on marginalized, racialized, and underrepresented groups. CEEJ brings faculty and students together across disciplinary boundaries and incentivizes faculty engagement and student training around real-world problems where integrated thinking is needed most.  Roundtable activities foster a community of shared practice through   | Watch: Climate Justice and the Question of Reparations (YouTube)  The Quest for Environmental and Climate Justice – Robert Bullard talk at Brower Center November 1, 2023.  Christopher Schell: "Ecological and  |
|       |   |                       | seminars, symposia, team-building lunches and retreats, co-creation of curriculum, and convening special events with leaders from within UC Berkeley together with external experts and practitioners. Core Faculty — Christopher Schell, Sunaura Taylor, Zoe Hamstead, Charisma Acey, Cesunica Ivey, Daniel Aldana Cohen, Maya Carrasquillo, Elizabeth Hoover, Layla Kwong, Jonas Meckling, Megan Mills-Novoa, Scott Moura, Peter Nelson, Ajay Pillarisetti, Danielle Zoe Rivera, Page Weber | evolutionary consequences of systemic racism in urban environments,"  Why Warblers Flock to Wealthier Neighborhoods  The Katherine S. and James K. Lau Graduate Fellowship in Climate Equity was established in 2021 to support doctoral students pursuing   |
|       |   |                       | Advisory Council — Rachel Morello-Frosch, David Ackerly, Kristina Hill, Dan Kammen, Laura Enriquez, Tyrone Hayes, Daniel Rodriguez, Mark Stacey  Affiliates — 30 individuals (see CEEJ website)   | climate equity and/or environmental justice research with an emphasis on ameliorating the impacts of climate change on vulnerable populations and addressing root causes of inequality. Recipients of this fellowship, as well as others in the research groups of CEEJ Roundtable faculty, also participate in CEEJ Roundtable activities |
|       | Climate Futures Lab                                 | RCNR                  | Meg Mills-Novoa, Director Carol Tapia, Research Manager Climate Futures Lab is a hub of social science research on the impact and equity of climate change responses Research: After Adaptation, Decarbonizing Adaptation, Hydropower Development and Climate Change, Deforestation Frontiers   | After Adaptation  Decarbonizing Adaptation  How can the great imperatives of decarbonization and adaptation be more productively combined to deliver holistic climate action at the needed speed and scale? How can conjoined green investments to transform the built environment tackle  |

| First | Last                   | Affiliation          | Summary   | Selected Projects/Reports/Classes  |
|-------|------------------------|----------------------|---|--|
|       |                        | (primary)            |   |  |
|       |                        | (primary)            |   | climate vulnerabilities exacerbated by racial inequality and enduring colonialism? We are beginning a project that looks at the opportunities and pitfalls of linking these imperatives at the concrete project level (with a focus on both technical dimensions and political contestations), emerging financial mechanisms that could combine these imperatives, how questions of equity and power pervade these new struggles, and how trillions of dollars in investment in decarbonization and adaptation are an essential opportunity to define new paradigms for transcending and replacing neoliberal climate governance. Daniel Aldana Cohen and Meg Mills-Novoa are leading the project, in collaboration with Kate Cullen. The project is a partnership between Climate Futures Lab and Aldana Cohen's (SC)2.  Hydropower Development |
|       | Climate Journalism Lab | Journalism<br>School | Through the Berkeley Climate Journalism Lab, UC Berkeley seeks to reinvent climate journalism, tapping the collective brainpower of the world's leading public research university — some 300 researchers located in more than 20 programs across the campus — who are confronting the problem of climate change.  We're working to shift popular narratives from passive despair to active hope and possibility. We're building an engaged, informed, and change-oriented community for fact-based, inspired climate journalism across the UC Berkeley campus and beyond.  The program includes several components: an introductory course in climate reporting and second-year interdisciplinary thesis seminar for students at Berkeley Journalism, opportunities for research and | Climate Equity Reporting Project   |

| First | Last                               | Affiliation (primary) | Summary  | Selected Projects/Reports/Classes  |
|-------|------------------------------------|-----------------------|--|--|
|       |                                    |                       | publishing, and a speaker series and other public programming for the Bay Area community.  |  |
|       | Critical Environmental Justice Lab | Campuswide            | Michael Mascarenhas (coordinator) The CEJ Lab's purpose is to provide a space for students and faculty to cultivate a deeper understanding of the social and environmental relations that articulate at the conjuncture of environmental justice and systemic racism.  The goal is to advance this critical perspective to help shape members' theoretical and methodological approaches to research and teaching.  Michael Mascarenhas (coordinator) with PhD students in ERG and ESPM  Part of Berkeley Center for Race and Gender   |  |
|       | Disaster Lab (D-Lab)               | Engineering           | The D Lab Develops and Validates Practical Innovations for Disaster Preparation, Response, and Recovery. Thomas Azwell, Director.  | UCOP Climate Action I&E funding is helping DLab to grow and iterate the innovation support pipeline, increase research and entrepreneurship advisory support for UC Berkeley innovators, expand access to field- based pilots, comprehensive evaluations, and facilitate participation with industry partners. |
|       | Energy and Resources Group (ERG)   | RCNR                  | ERG is a collaborative community of graduate students, core faculty, nearly 200 affiliated faculty and researchers across the campus, and over 600 alumni across the globe. Our students work across disciplines and departments to create potentially transformative knowledge for the planet. ERG is a world-renowned program with a 50-year history of outstanding research, education and outreach to government, industry, and civil society at the state, national and international levels.  The ERG model combines a rigorous core curriculum, a shared learning environment, and the freedom to access the entire Berkeley fac- | Research at ERG  9 labs and initiatives  |

| First | Last                         | Affiliation (primary) | Summary   | Selected Projects/Reports/Classes  |
|-------|------------------------------|-----------------------|---|--|
|       |                              | (6)                   | ulty. The core curriculum provides students with relevant analytical tools from ecology, economics, engineering and the social sciences. ERG research is strongly evidence-based and hypothesis-driven; its interdisciplinary culture equally encourages student- and faculty-led research.   |  |
|       |                              |                       | <ul> <li>ERG Programs include:</li> <li>Master of Science (M.S.)</li> <li>Master of Arts (M.A.)</li> <li>Doctor of Philosophy (Ph.D.)</li> <li>Undergraduate Minor in Energy and Resources</li> <li>Sustainability Summer Minor or Certificate</li> </ul>   |  |
|       |                              |                       | Diversity, Equity and Inclusion at ERG  Includes Renewable and Appropriate Energy Technology (RAEL), Dan Kammen Founding Director   |  |
|       | Energy Biosciences Institute | Campuswide            | John Coates, Director  The Energy & Biosciences Institute provides industrial sponsors access to world-class, collaborative research facilities across the energy, chemical, material sciences, data sciences, engineering, and agriculture sectors.  Sponsorship opens access to our partner network of 7,500 faculty and principal investigators, and 100,000 student, postdoctoral, and professional researchers. Our team will help you to establish the most effective collaborative networks. | Research Overview: We direct and facilitate collaborative, cross-disciplinary research that leads to sustainable real-world solutions across the supply chain. Sponsors and researchers benefit from the inevitable synergies of such collaborations.  The EBI's broad core research focuses on not only today's energy issues, but also those of the future generations, and the incremental steps in between. Every day, EBI researchers work to devise practical energy strategies and products that sequester carbon and shift the energy landscape while continuing to meet society's energy demands. |
|       |                              |                       |   | The EBI's work focuses on three energy themes: diverse sources, unifying storage, and utilization.   |

| First | Last   | Affiliation<br>(primary) | Summary   | Selected Projects/Reports/Classes  |
|-------|--|--------------------------|---|--|
|       |  | (ринагу)                 |   |  |
|       | Energy Institute at Haas                                       | Haas                     | Andrew Campbell, Executive Director   | Energy Institute Blog  |
|       |  |                          | To support current and future energy sector leaders in making important decisions, the Energy Institute's approach is to focus on business and policy challenges:   | The Energy Institute Working Paper Series presents new research on energy and environmental topics authored by our faculty affiliates and graduate students. |
|       |  |                          | Train the business and policy leaders of tomorrow on market, policy, and technology commercialization challenges in the energy industry.  Produce research and analysis backed by rigorous empirical evidence and the frontiers of economic research so that energy and environmental policy and business decisions are based on sound economic and business principles.  |  |
|       | Eric and Wendy Schmidt Center for Data Science and Environment | RCNR, CDSS               | Kevin Koy, Executive Director  Launched in 2022, the Eric and Wendy Schmidt Center for Data Science and Environment (DSE) is a partnership between Berkeley's Department of Environmental Science, Policy, and Management and the Division of Computing, Data Science, and Society with the financial support of Eric and Wendy Schmidt.  |  |
|       |  |                          | The DSE combines the power of computing and environmental science with open science principles and a commitment to inclusivity—all towards the purpose of building tangible, replicable, and accessible solutions to problems compromising the health of our environment. The DSE aims to co-create these solutions in direct partnership with those who hold the knowledge and expertise of their local needs and environmental context. |  |
|       |  |                          | <ul> <li>The DSE's Climate Resilience Program follows these core beliefs:</li> <li>The climate crisis is the pressing environmental issue of our generation</li> <li>Climate impacts are being seen all around us, right now - it is no longer a future risk issue</li> </ul>   |  |

| First | Last                           | Affiliation | Summary  | Selected Projects/Reports/Classes   |
|-------|--------------------------------|-------------|--|---|
|       |                                | (primary)   | <ul> <li>Most vulnerable communities are often least resourced to prepare / mitigate</li> <li>Often the same actions can simultaneously increase community and ecosystem resilience to climate impacts and reduce contributions to climate change</li> <li>The most effective way to have meaningful impact through data science is to understand the real problems people are facing, which can be accomplished through relationship building and active listening</li> <li>The role of DSE is to bring solutions all the way to the community that needs them by asking about areas of need, building tools to respond to that need, and iterating on those tools through a feedback relationship</li> </ul> |   |
|       | Geospatial Innovation Facility | RCNR        | Nancy Thomas, Executive Director  The Geospatial Innovation Facility at RCNR provides leadership and training across a broad array of integrated mapping technologies. Our goal is to help people better understand the changing world through the analysis and visualization of spatial data. We develop engaging applications that leverage and build upon state-of-the-art geospatial and web technologies, and provide opportunities for researchers to learn how they can use spatial data to answer critical questions.  | Key GIF Climate Project — Cal-Adapt: Exploring California's Climate Change Research Cal-Adapt (http://cal-adapt.org) has been developed for the State of California o showcase the wealth of innovative climate change research being produced by the scientific community in California, as documented in the 2009 California Climate Adaptation Strategy.  Through a combination of locally relevant information, visualization tools, and access to primary data, Cal-Adapt allows users to investigate how the climate is projected to change in their area of interest, and gives them tools to plan for these changes.  The site has been developed by the GIF with funding and advisory oversight by the California Energy Commission's Public Interest Energy Research (PIER) Program, and advisory support from Google.org. Learn more about |

| First | Last                | Affiliation<br>(primary) | Summary  | Selected Projects/Reports/Classes   |
|-------|---------------------|--------------------------|--|---|
|       |                     | (primary)                |  | the development of Cal-Adapt in a highlight article published in the June 2011 issue of PE&RS.  |
|       | Global Policy Lab   | Campuswide               | Josh Blumenstock, Principal Investigator  Intelligent and rational management of climate change requires that we balance the costs and benefits of planetary-scale policies. We focus on understanding the effects of climate change on societies around the world, the largest critical unknown in the design of global climate policy.   | Global Policy Lab papers on Migration  Social and Economic Impacts of Climate  Potential Extreme Population Displacement in the Tropics Under Non-Extreme Warming  Non Linear Permanent Migration Response to Climatic Variations But Minimal Response to Disasters |
|       | Human Rights Center | Law                      | Betsy Popken, Executive Director. Our Climate Justice Program addresses the human impacts of climate change.  As the climate changes, the prevalence and ferocity of extreme weather events — severe heat waves, torrential rains, alarming floods, extensive droughts, and destructive wildfires — are increasing. Such events drastically affect peoples' lives — their health, livelihood, housing, access to food and water, and personal security.  We listen to understand the perspectives and needs of people most at risk due to climate change, especially when those risks are being overlooked by policymakers.  Our research results in recommendations to create new laws and policies, news articles, health and technology interventions, and industry guidance to better protect the human rights of people in affected communities.  Alexey Berlind, Events and Operations | Climate Impact of AI Data Centers  Climate Wildfires  Labor Force in New Orleans After Katrina  |

| First | Last                            | Affiliation (primary) | Summary   | Selected Projects/Reports/Classes   |
|-------|---------------------------------|-----------------------|---|---|
|       |                                 |                       | Alan Iijima, Development Manager  |   |
|       | India Energy and Climate Center | Goldman               | Shruti Deorah, Executive Director  The India Center strives to 'meet the moment', given the opportune timing of several factors – cost effectiveness of clean energy, global attention to the climate crisis, and the impetus to drastically reduce emissions in the next decade. The Center aims to engage with policymakers on issues at the intersection of the clean energy transition, energy security, industrial competitiveness, political economy, and an equitable transition.  This will be done through policy analysis and strategic dialogue, translating scientific research and policy insights into accessible collaboration, and information for policymakers. This will also entail capacity building through virtual and in-person executive education, strategic US-India Dialogue, and mentorship of UC Berkeley students interested in the Center. |   |
|       | Innovative Genomics Institute   | Campuswide            | Jennifer Doudna, Founder and Chair of the IGI Governance Board  Brad Ringeisen, Executive Director  | CRISPR for Climate Change  Disease Resistant Crops  |
|       |                                 |                       | The Innovative Genomics Institute believes in the potential of genome engineering to solve some of humanity's greatest problems. The IGI is composed of diverse researchers at Berkeley and at UCSF. Together, our scientists have powerful combined expertise. They conduct world-class research, driven by the real possibility to use genome engineering to treat human diseases and end hunger. In addition to our scientific efforts, the IGI is committed to advancing public understanding of genome engineering, providing resources for the broader community, and guiding the ethical use of these technologies.  | Precision Microbiome Editing  2023 UCOP Proposal: Lab to Land California: Biotechnology for Accelerated Conservation and Climate Resilience  Grant: Technology Enabled Biological Carbon Capture and Sequestration- \$21M, 8/2022 |

| First | Last                                | Affiliation (primary) | Summary  | Selected Projects/Reports/Classes  |
|-------|-------------------------------------|-----------------------|--|--|
|       |                                     |                       | Climate and Sustainable Agriculture Program Climate change, crop diseases, and hunger are intimately intertwined problems. We are using genome engineering as a tool to address all three.  We are developing and deploying genome-editing technology to capture and sequester more greenhouse gases and to develop climate-friendly agricultural solutions for farmers in developing countries. Our focus is on those most vulnerable to a changing climate, and areas in agriculture that are underdeveloped by the commercial sector. | Funding kicks off a new era in climate research at the IGI. A gift of \$3 million dollars from an anonymous donor to the Innovative Genomics Institute is kick-starting the next generation of climate change research at IGI. To date, IGI's climate change work has mostly focused on using genome engineering to help agriculture adapt to a changing climate. Building on that strategy, this gift provides initial funding to a series of new IGI projects that are aimed at developing scalable nature-based solutions to mitigate climate change.  From California to Kenya: Sharing CRISPR Tools with African Scientists  IGI Scientists Make Progress In Protecting Rice From Drought  The Crop of the Future - Sorghum  Grant: Technology Enabled Biological Carbon Capture and Sequestration- \$21M, 8/2022 |
|       | Institute for South Asia<br>Studies | Campuswide            | Munis D. Faruqui, Director  Anirban Gupta-Nigam, Associate Director  One of the world's leading institutes for research and programs on South Asia, the ISAS works with faculty members, graduate students, community members, private institutions, and non-profit organizations to deepen understanding of the region and to create new generations of scholars of South Asia.   | In response to the cataclysmic climate change in the region, the Institute for South Asia Studies (ISAS) is developing a four-year program (2022-26) on the critical and urgent issue of climate change in South Asia. Interdisciplinary public conferences, a speaker series, collaborative workshops with organizations in South Asia, and open-access resources including interactive teaching tools will link the ISAS closely with one of UC Berkeley's Signature Initiatives on Environmental Change, Sustainability, and  |

| First | Last  | Affiliation                           | Summary   | Selected Projects/Reports/Classes  |
|-------|---|---------------------------------------|---|--|
|       |   | (primary)                             |   | Justice as part of the campus' Strategic Plan. Building on our interdisciplinary faculty strengths across the College of Letters & Science, the College of Environmental Design, the College of Engineering, the Rausser College of Natural Resource, and the Haas School of Business, the aim of the four-year program is to provide UC Berkeley faculty, staff, and students in-depth resources to develop area- based knowledge, research tools, language training, and opportunities to collaborate with leading institutions in South Asia. |
|       | Institute for Urban Infrastructure and Development (IURD) | College of<br>Environmental<br>Design | Kristina Hill, Program Director The Institute of Urban & Regional Development is an interdisciplinary academic and research unit dedicated to prioritizing justice in initiatives to understand, mitigate, and adapt to climate change.  As a research hub, IURD acts as a catalyst for public and private investments in adaptation and resilience, and foster new models of community-engaged research with tangible outcomes.  We seek outcomes that provide actionable insights for decision makers that increase environmental justice and social equity, and enhance the value and co-benefits of public investments over time. | IURD's Kristina Hill is working with Mark Stacey (Engineering) to support City of San Rafael and the Canal Alliance to address sea level rise in the Canal District. This includes translation of research information.  |
|       | Institute of European Studies                             | Campuswide                            | Jeroen Dewulf, Director, Institute of European Studies  | Several projects at IES involve climate change engaging academics at Berkeley and a French University. One project <u>"Après Moi, le Deluge"</u> – looking at floods after wildfires.  "We realized right away we had a really similar line of research topics and interests with floods as a common link," says Anna Serra-Llobet of the Social Science Matrix Center for Catastrophic Risk Management. With Douvinet   |

| First | Last                               | Affiliation | Summary  | Selected Projects/Reports/Classes   |
|-------|------------------------------------|-------------|--|---|
|       |                                    | (primary)   |  | working in France, and Serra-Llobet located in the US, the France-Berkeley Fund (FBF) was the perfect opportunity for an international collaboration.   |
|       |                                    |             |  | The team was awarded a France-Berkeley Fund research grant in 2019, and the pair also involved Berkeley's John Radke, and Sarah Lindbergh (CED) as well as master students from the Environmental Planning Studio. The master students won a national student paper competition in 2021 for their work in the project, in particular for "thinking out of the box".   |
|       |                                    |             |  | A second FBF-funded project: How do city dwellers use electric vehicles in France and California, and what can the two regions learn from each other? Collaborators Ethan Elkind (Berkeley Law) and Yannick Perez (CentraleSupélec, Université Paris-Saclay) tackled these questions with dozens of participants at their FBF-funded international conference in June 2019. Based on those discussions, UC Berkeley Law's Center for Law, Energy and the Environment (CLEE) recently released the symposium brief Electric Vehicles and Global Urban Adoption: Policy Solutions from France and California. |
|       | Institute of International Studies | Campuswide  | Susan Hyde, Director  IIS represents an interdisciplinary arena of scholarship characterized by the analysis of connective and systemic dynamics in global politics and economics. International or global studies is distinct from area studies, which tends to focus on understanding individual countries, societies, or regions. International studies is primarily concerned with interactions among states and non-state actors across a |   |

| First | Last                        | Affiliation (primary) | Summary  | Selected Projects/Reports/Classes  |
|-------|-----------------------------|-----------------------|--|--|
|       |                             | (р , )                | multitude of arenas—from security and governance to economic and cultural exchange. It includes the study of cross border movements of people, ideas, money, goods, diseases, pollution, information as well as international institutions, international law, and global governance more generally. The addition of transnational problems that affect the world as a whole, esp. since the 1970s, has expanded the horizons of IIS, and includes phenomena that take place within the borders of one country but are studied across regions, such as migration, civil war, democracy, authoritarianism, humanitarian crises, human rights abuses, globalization, and climate change. |  |
|       | Latinxs and the Environment | RCNR                  | Leadership: Federico Castillo Lupe Gallegos Diaz  The Latinxs and the Environment Initiative is a 3 year old effort started at UC Berkeley that seeks to establish a comprehensive program designed to generate knowledge and encourage increased study and research on Latinxs and the environment—both in the U.S. and abroad with the coordinated participation of policy makers, community based organizations (CBOs) and the academic community.  Our initiative was started as a way of bringing together Latinx whose work, interest, and research focus on the environment. We seek to create a network and bridge policy, organizing, and research.                           | Spring 2023 Research Conference at Berkeley  |
|       | Lawrence Hall of Science    | Campuswide            | Rena Dorph, Director Craig Strang Associate Director  For over 50 years, The Lawrence Hall of Science has been at the forefront of science education. As part of UC Berkeley we work with scientists, engineers, and educators to design the most effective learning experiences. We strive to transform the world of STEM, infusing these fields with diverse perspectives and innovative minds.  LHS partners with school districts to support science learning. We can offer the following district-wide elementary, middle, and high   | California Environmental Literacy Initiative is the statewide initiative focused on K-12 environmental and climate literacy.  COVID-19 Outdoor Learning Initiative is a nationwide effort that Lawrence Hall of Science launched when schools shut down early in the pandemic. The initiative brings together the ideas that outdoor learning is a solution to the pandemic, good for kids' health and learning whether there is a pandemic or |

| First | Last  | Affiliation (primary) | Summary   | Selected Projects/Reports/Classes   |
|-------|---|-----------------------|---|---|
|       |   | (ріппату)             | school programs, either virtually or in-person: multi-session, interactive, hands-on and NGSS-aligned science lesson sequences; stand-alone interactive classroom workshops; interactive science shows; and teacher professional learning to support virtual or in-person NGSS instruction. Custom options are available, too.  | not, and that schools control huge amounts of land that can be turned into parklike climate mitigating spaces by decreasing their carbon footprint and by creating green, shaded places in communities. The website has a huge library of resources for schools to use in their efforts to address climate change through both their facilities and their teaching and learning.  We developed this middle school Ocean Science Curriculum Sequence: The ocean-climate connection and climate change. |
|       | Master of Business Administration + Master of Climate Solutions (MBA/MCS) | Haas, RCNR            | Master of Business Administration + Master of Climate Solutions MBA/MCS  Berkeley now offers a concurrent degree (a.k.a. "joint degree" or "dual degree") that combines the Master of Climate Solutions program from the Rausser College of Natural Resources, and one of the top MBA programs in the world through the Haas School of Business. MBA/MCS is a 2.5 year program, as opposed to spending 3 years if taken consecutively. Applications are open now for the first cohort.  |   |
|       | Masters of Climate Solutions  | RCNR                  | <u>Master of Climate Solutions — MCS</u> The Master of Climate Solutions empowers the next generation of climate and sustainability leaders with the skills and knowledge needed to enact real solutions and create change. The 10 month, in-person program translates fundamental science and groundbreaking discoveries, enabling professionals to learn how to evaluate technologies, develop just climate strategies, and remove barriers to implementing practical climate solutions. Applications open in September 2024. |   |
|       | Office of Sustainability<br>and Carbon Solutions                          | Campuswide            | Nathan Jandl, Director, Office of Sustainability and Carbon Solutions  The Office of Sustainability serves as a leader for sustainability initiatives on campus. Established in 2008, the Office of Sustainability  | Berkeley is committed to surpassing the carbon reduction mandates set by California state regulations by achieving at least a 90% reduction in total emissions (scopes 1,2, and   |

| First | Last            | Affiliation (primary) | Summary  | Selected Projects/Reports/Classes  |
|-------|-----------------|-----------------------|--|--|
|       |                 | (P. III of )          | has motivated concern for environmental stewardship to actualized improvements. Because of our efforts via education, outreach, and committees focused on promoting awareness and engagement, sustainability principles now inform campus choices pertaining to building projects, water and energy savings, transportation, food offerings, supply purchasing, and more.                                  | 3), relative to a 2019 baseline, by 2045. Berkeley's goals align with the 2023 update to the UC Sustainable Practices Policy, which has embraced more robust climate action targets. These revised goals emphasize direct emissions cuts and curtail reliance on carbon offsets.  Berkeley Clean Energy Campus  With target dates of 2028 for phase one and 2030 for phase two, Berkeley has a plan to replace their natural gas powered cogeneration plant with a new clean and green resilient energy system. This forward-thinking initiative will phase out fossil fuel use for powering, heating, and cooling campus. The new reproducible, scalable Berkeley Clean Energy Campus system will demonstrate state-of-the-art technologies and exemplify creative financing such that other campuses and public institutions can replicate Berkeley's model. For decades, Berkeley has led the world in climate solution technology and policy research. Now, the campus will begin transitioning to an energy system that sets the standard in sustainable, resilient infrastructure. |
|       | Opportunity Lab | Campuswide            | Hilary Hoynes, Faculty Director  The Opportunity Lab serves as the central research hub for UC Berkeley scholars conducting cutting-edge research on social and economic inequality in the United States. The O-Lab's mission is to build new insights into the causes and consequences of inequality, and to provide policymakers with evidence-based solutions promoting equity and opportunity for all. | How Climate Migration Will Reshape America (NYT Magazine 2020)  Climate & Society reports, events and more   |

| Last                             | Affiliation                          | Summary  | Selected Projects/Reports/Classes  |
|----------------------------------|--------------------------------------|--|--|
| Othering and Belonging Institute | Affiliation<br>(primary)  Campuswide | The Opportunity Lab's Climate and Society Initiative supports research to better understand how environmental conditions and externalities are affecting families and communities, while also examining the economic consequences of policies designed to combat or mitigate climate change and pollution.  Led by Professors Solomon Hsiang, Meredith Fowlie, and Reed Walker, the initiative uses data-driven approaches to study the social costs of greenhouse gas emissions, the cost-effectiveness and distributional consequences of resource management strategies, and inequalities in exposure to environmental harm.  Catherine Wolfram, Climate and Society Max Auffhammer, Climate and Society Meredith Fowlie, Climate and Society Michael Anderson, Climate and Society Sol Hsiang, Climate and Society  John a. powell, Director, Elsadig Elsheikh Director, Global Justice Program. Hossein Ayazi Global Justice Program  The Institute advances groundbreaking research, policy, and ideas that examine and remediate the processes of exclusion, marginalization, and structural inequality—what we call othering—in order to build a world based on inclusion, fairness, justice, and care for the earth—what we call belonging.  OBI Climate Justice Principles  The Othering & Belonging Institute's existing body of climate justice work includes our work on climate refugees, on housing justice, on community power-building, and more. Please see our website: https://belonging.berkeley.edu/climate-justice. | Climate Displacement and the Right to Stay – Tools and Tactics for Climate Justice (1 hour video event Nov 15)  Climate Migration is Here – Is Biden Ready?  Climate Refugees: Climate Crisis and Rights Denied — 88-page report  Moving Targets: An Analysis of Global Forced Migration  Climate Displacement and Resilience Database, Launch event panel and KPFA postevent interview. |

| First | Last  | Affiliation<br>(primary) | Summary  | Selected Projects/Reports/Classes   |
|-------|---|--------------------------|--|---|
|       | Possibility Lab                             | Goldman                  | Amy Lerman, Director  The Possibility Lab brings together public policy experts who are committed to evidence-based policymaking and who use quantitative, participatory, and experimental methods to understand the potential of new ideas to improve people's lives. Based at the University of California, our small-but-mighty team works with partners across the country to produce rigorous research that advances data-driven innovation for the public good.  | The Lab's Abundance Accelerator is currently working with California agencies and partners to advance community-engaged strategic planning for the state's climate future. Held statewide Abundance Accelerator Summitt March 2025. Holding a series of nine Catalyst Convenings in nine regions of the state on climate, land use and energy. First convenings in March 2025 in San Diego and Los Angeles. |
|       | Renewable and Appropriate Energy Lab (RAEL) | RCNR                     | Daniel Kammen, Director  The Renewable and Appropriate Energy Laboratory (RAEL) is a unique new research, development, project implementation, and community outreach facility based at the Energy and Resources Group and the Department of Nuclear Engineering. RAEL focuses on designing, testing, and disseminating renewable and appropriate energy systems. The laboratory's mission is to help these technologies realize their full potential to contribute to environmentally sustainable development in both industrialized and developing nations while also addressing the cultural context and range of potential social impacts of any new technology or resource management system. |   |
|       | Science at Cal                              | Campuswide               | Dione Rossiter, Director, Science at Cal  Science at Cal connects UC Berkeley Science, Technology, Engineering and Mathematics (STEM) researchers with diverse community groups of all ages and backgrounds, for science engagement and learning. Accessibility, inclusiveness, creativity and innovation are hallmarks of Science at Cal events, which reach tens of thousands of people annually.  |   |

| First | Last                                | Affiliation (primary)  | Summary  | Selected Projects/Reports/Classes  |
|-------|-------------------------------------|------------------------|--|--|
|       |                                     | (primary)              | Science at Cal was envisioned as a unifying effort to raise public awareness, understanding and appreciation of scientific research at Berkeley.  Throughout the year, Science at Cal presents ongoing, free outreach programs in STEM and other disciplines, helps promote other groups' related efforts, and creates new programs and initiatives at Berkeley and in the community. This broad scope of activities is made possible by Science at Cal's <a href="dynamic network">dynamic network</a> of campus alliances and valuable community partnerships.   |  |
|       | Social Science Matrix               | L&S Social<br>Sciences | Marion Fourcade, Executive Director, Social Science Matrix  Eva Seto, Associate Director, Social Science Matrix  Our purpose is captured in our name: we provide an organizational framework—a "matrix"—that supports cross-disciplinary research pursued by social scientists across the University of California, Berkeley campus and beyond.  Conducts workshops and other activities on climate change.  Developed an extensive directory of Berkeley social science researchers working on climate.   | Disaster and Displacement: Inequalities in Climate Migration (video)  The Labor of Fire: Wildlands Firefighting and Incarceration in California (video)  Advanced Workshop in Climate Change Economics (video) |
|       | Socio-Spatial Climate Collaborative | L&S Social<br>Sciences | Daniel Aldana Cohen, Director The Socio-Spatial Climate Collaborative (SC)², is a hub for critical social science research on the climate emergency. (SC)² is hosted by Berkeley's Social Science Matrix. (SC)² research investigates the intersections of the climate emergency, political economy, inequalities, and the built environment.  Our mission at (SC)2 is to tackle the biggest climate social science challenges that we can manage. We aim to conduct this research in collaboration with scholars across the country and world, and in constant dialogue with various publics — general readers, |  |

| First | Last  | Affiliation<br>(primary) | Summary  | Selected Projects/Reports/Classes   |
|-------|---|--------------------------|--|---|
|       |   | , ,                      | community groups, social movements, labor unions, elected politicians and their staff. We select projects and research methods with the goal of informing public debate — and action.  |   |
|       |   |                          | Daniel Aldana Cohen, Director  |   |
|       | Student Environmental Resources Collaborative | Campuswide               | Sharon Daraphonhdeth, Director   |   |
|       | (SERC)  |                          | Mission: SERC cultivates a collaborative space to strengthen the collective effectiveness of the sustainability community and provides resources for students to actualize their visions of a more equitable, socially just, and resilient future.   |   |
|       | Terner Center                                 | CED                      | Terner Center is working at the intersection of housing and climate, including work on the major reform of CEQA in 2025.   | Terner Center Blogs and reports on housing and climate:   |
|       |   |                          | The mission of the Terner Center for Housing Innovation is to formulate bold strategies to house families from all walks of life in vibrant, sustainable, and affordable homes and communities.  Established in 2015, the Terner Center has quickly become a leading voice in identifying, developing, and advancing innovative public and private sector solutions to the nation's most intractable housing challenges. | Role of new housing in reducing climate pollution How much can new housing contribute to state climate action Aligning housing with climate goals — importance of measuring VMT Building housing in walkable neighborhoods Good Housing Policy is Good Climate Policy |
|       | UC Museum of Paleontology                     | Campuswide               | Charles Marshall, Director Lisa White, Assistant Director Jessica Bean, UGC Chief Architect  The UCMP's mission is to promote the understanding of the history of life and the diversity of the Earth's biota through research, education, and outreach.   | White leads ACCESS Bay Area — Advancing Community College Education and Student Success — that brings together Community College instructors and students with engaging earth science labs (at LHS and at community college sites).                                   |

| First | Last | Affiliation | Summary | Selected Projects/Reports/Classes   |
|-------|------|-------------|---------|---|
|       |      | (primary)   |         |   |
|       |      |             |         | Bean directs the extensive online climate resource <u>Understanding Global Change</u> that was designed by UCMP. "Human activities and non-human processes interact to shape the world around us. Whether you are interested in formal education or self-guided exploration, use this website to explore the causes of and solutions to climate and environmental change, and to construct models that explain what drives global changes." |