BERKELEY LAB COMMUNITY ADVISORY GROUP Carol Burns

Deputy Lab Director for Research Chief Research Officer

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BERKELEY LAB

January 24, 2022

CAROL'S BACKGROUND



THE BERKELEY LAB OF THE FUTURE WHAT THE NATION WILL NEED FROM THE LAB

- Scientific solutions addressing national priorities: Energy, health, resilience, the environment, and the economy
- Discovery Science
- Unique scientific capabilities and facilities
 - National user facilities
 - Advanced instrumentation
- Managed, large research teams
- Important technologies with long, risky R&D paths
- Response to national emergencies
- And perhaps most importantly: A diverse group of highly trained, creative individuals committed to working together in teams on these grand national challenges





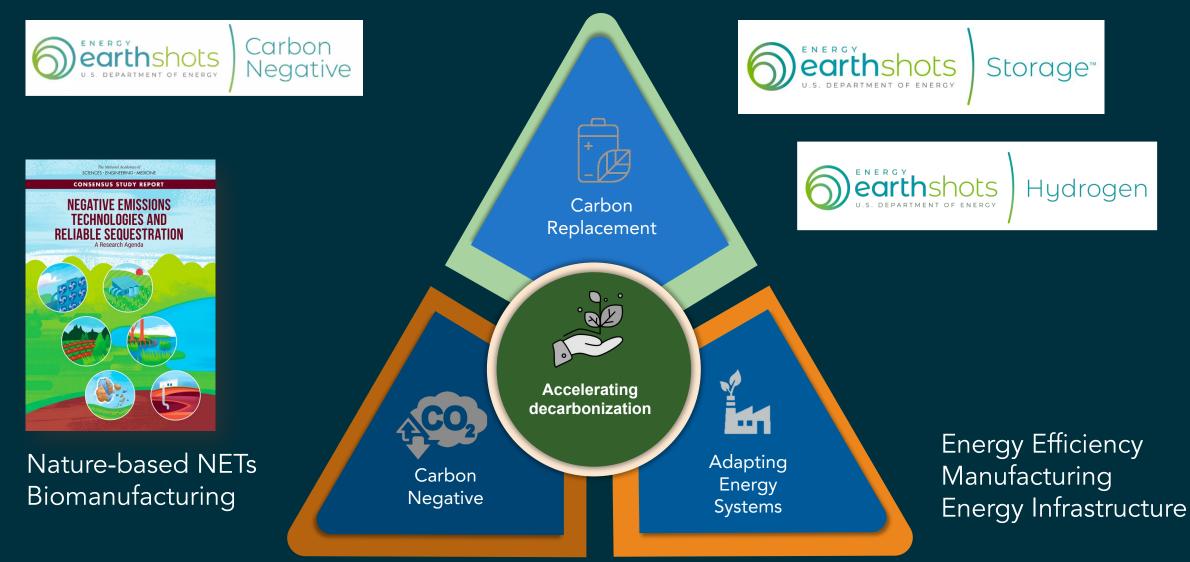


STRATEGIC PRIORITIES TO SHAPE THE FUTURE OF THE LABORATORY



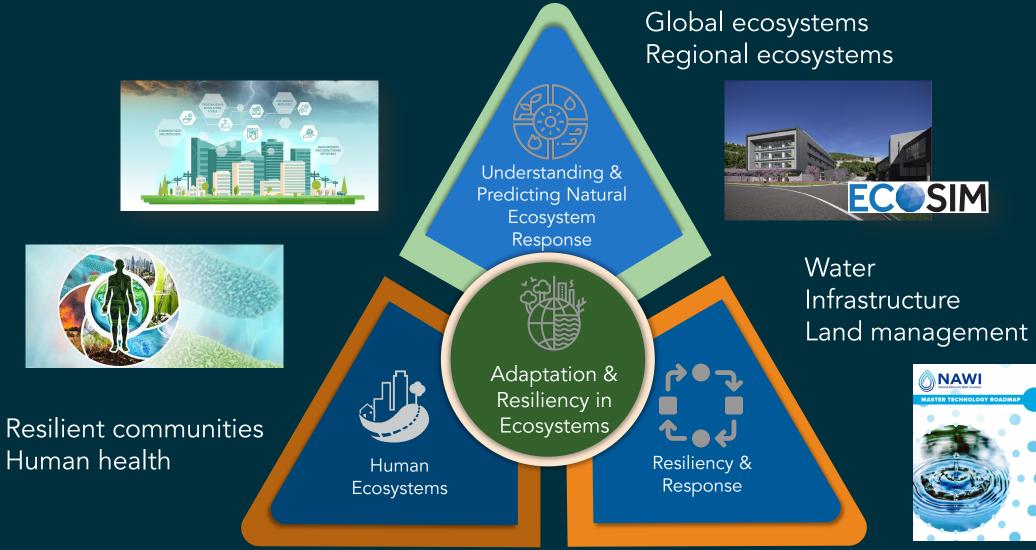


Laboratory Capabilities are Well Aligned with Administration Priorities



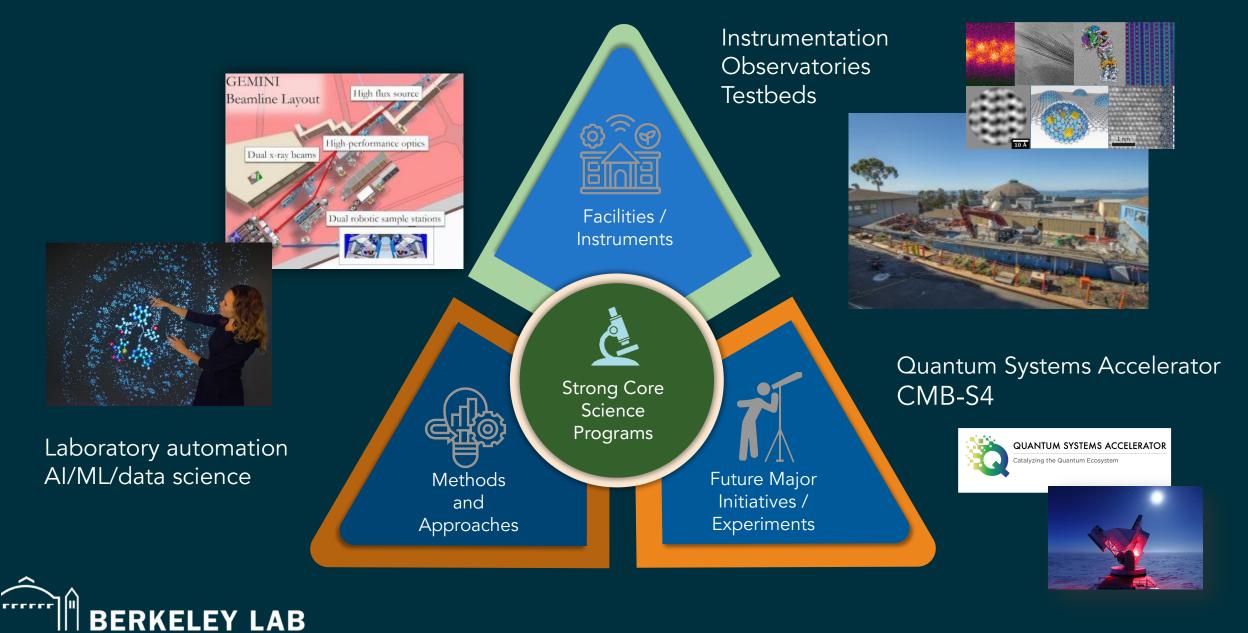


Laboratory Capabilities are Well Aligned with Administration Priorities





And Create the Way We Will Do Science in the Future



STATE PRIORITIES / UC PRIORITIES



UC Wildfire Virtual Symposium

WILDFIRE IMPACTS ON SOCIETY



September 22, 2021 • 8:00 am to 12:00 pm

REGISTER in advance for this webinar This is the 3rd symposium in a series hosted by University of California Research and Innovation





Overview of California Climate-Resilient Communities

The State of California and its communities face an unprecedented climate emergency as climate change has become an undeniable reality. Unprecedented cascading disasters, from extreme drought and heat to explosive wildfires, sweeping landslides, and more, are now expected each year rather than being distinct, infrequent events. The impacts have intensified, resulting in loss of life and property and disruptions to the electrical grid, transportation systems, quality-of-life, and much more. Furthermore, the impacts extend beyond California, as wildfire smoke, for example, stretches across the U.S., resulting in health hazards and airline disruptions While climate mitigation efforts and disaster recovery must continue, efforts now must turn toward developing and implementing climate resilience strategies to protect Californians' lives, livelihoods, and property.

Therefore, the vision is to achieve and support *California Climate-Resilient Communities* – urban, suburban, and rural – in an equitable and just manner.

As the research arm of the State, the University of California



REGIONAL PARTNERSHIPS





CalFlexHub





WORKFORCE DEVELOPMENT

Excited by **science** and wondering where to go next?

At Berkeley Lab, there are many people who can help you learn more about scientific research and envision a future career in STEM. Three teams work closely together to prepare you for your next steps:

K-12 • Workforce Development & Education (WD&E) • Career Pathways



K-12

Our pre-college programs aim to expand the awareness of Berkeley

WD&E

We facilitate internship programs which promote equal access to

Career Pathways

We integrate graduate students, postdocs, and early-career scientists. Our programs



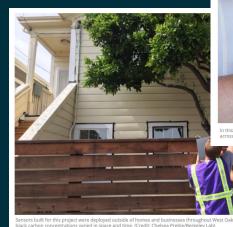
PLACE BASED PARTNERSHIPS (Community Engaged Research)





"What I've learned is that every community is unique, and that as we consider how these investments flow, that there are place-based strategies that we've got to craft in partnership with communities," Granholm told reporters at the offices of Brooklyn community organization Uprose. "What's good here is not going to be necessarily good in Houston or in Louisiana or in Oakland."

Making the Invisible Visible: New Sensor Network Reveals Telltale Patterns in Neighborhood Air Quality Berkeley Lab deploys custom-built sensors for 100 days and nights to track black carbon pollution





n this video, Berkeley Lab researchers show how they created a technology that did not exist to monitor local air pr across time and space. (Credit: Marilyn Chung/Berkeley Lab)



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