



**BERKELEY LAB**

Bringing Science Solutions to the World



U.S. DEPARTMENT OF  
**ENERGY**

Office of Science

# Welcome to Berkeley Lab

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User Engagement Group Lead

NERSC

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# Welcome to Berkeley Lab!

- On behalf of your on-site hosts, we are glad you are here today!
- Please feel free to ask me (Rebecca), Seleste, Helen, Charles, Rollin, or Dan any Berkeley-specific questions
  - We can also help with NERSC account support & general support



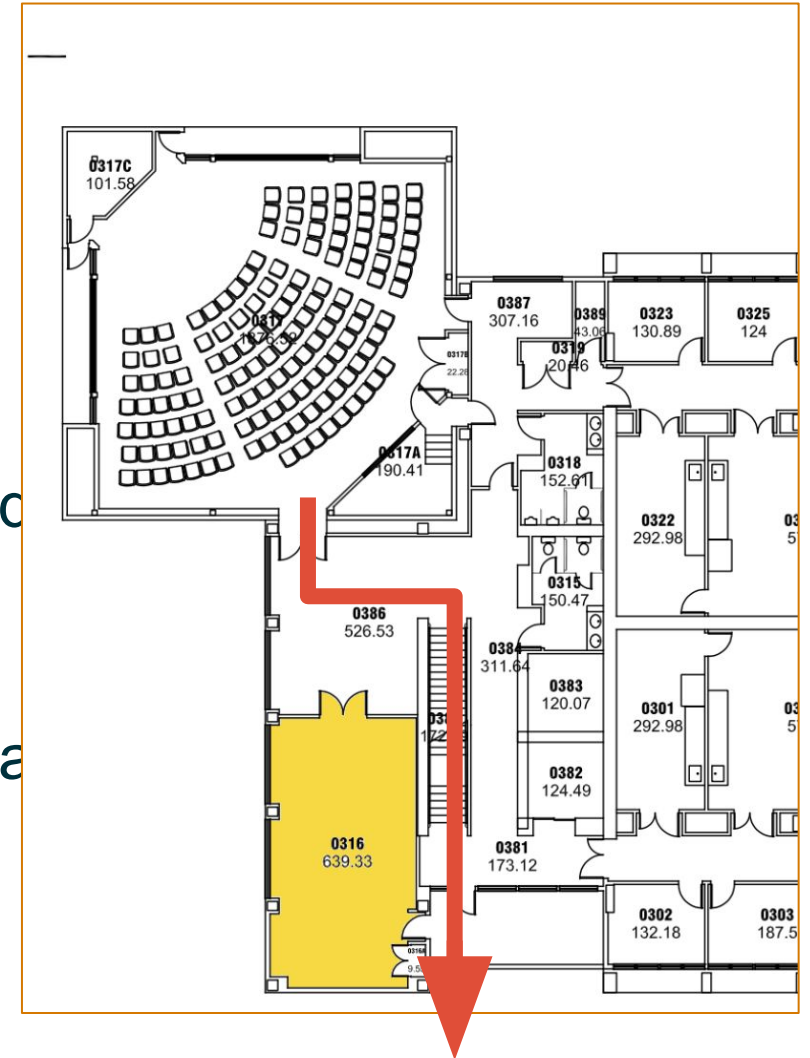
# Safety & Logistics

- Fire safety
- Seismic safety
- Restrooms
- Recycling

# Fire Safety

In the event of a fire:

- Horn/strobes will activate.
- **Evacuate immediately** through the auditorium exits, downstairs and through the front door.
- If possible without delaying your evacuation, take personal belongings such as your wallet, keys and coat. You may not be able to return.
- Follow instructions of Building Emergency Team members who will direct you to the Assembly Area between Buildings 66 and 62 (where the buses dropped you off)
- An additional Assembly Area is located behind the building.



# Seismic Safety

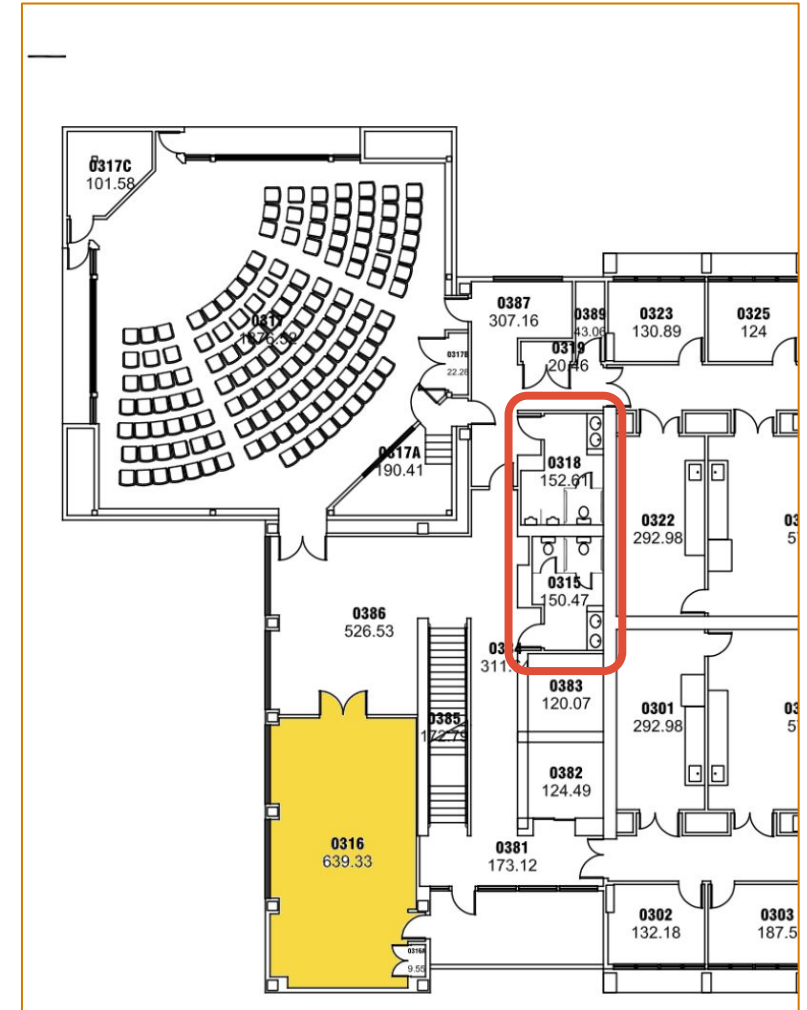


In the event of an earthquake, please:

- **Drop, Cover, and Hold On** to something solid until the shaking stops.
- If there is nothing to duck under, take shelter next to a solid wall, or **squat down in place, and cover your head with your arms.**
- If in the NERSC machine room, move away from the computer racks, but stay within the blue “moat”.
- Once shaking has stopped, evacuate as just described.

# Restrooms

- Restrooms are outside the door to the Auditorium.
- Restrooms in other buildings are clearly marked.



# Recycling

Sustainable Berkeley Lab ([sbl.lbl.gov](https://sbl.lbl.gov)) requests we sort trash into:

- Compostable
- Paper
- Landfill
- Other recycling

Please help us minimize waste going to the landfill by correctly disposing of food, beverage, and other waste.

Learn more at <https://sbl.lbl.gov/wasteguide/>



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# Intro to National Labs

(with a focus on Berkeley Lab)



# 17 Department of Energy (DOE) National Laboratories

## Office of Science Laboratories

- 1 Ames Laboratory  
Ames, Iowa
- 2 Argonne National Laboratory  
Argonne, Illinois
- 3 Brookhaven National Laboratory  
Upton, New York
- 4 Fermi National Accelerator Laboratory  
Batavia, Illinois
- 5 Lawrence Berkeley National Laboratory  
Berkeley, California
- 6 Oak Ridge National Laboratory  
Oak Ridge, Tennessee
- 7 Pacific Northwest National Laboratory  
Richland, Washington
- 8 Princeton Plasma Physics Laboratory  
Princeton, New Jersey
- 9 SLAC National Accelerator Laboratory  
Menlo Park, California
- 10 Thomas Jefferson National Accelerator Facility  
Newport News, Virginia

## Other DOE Laboratories

- 1 Idaho National Laboratory  
Idaho Falls, Idaho
- 2 National Energy Technology Laboratory  
Morgantown, West Virginia  
Pittsburgh, Pennsylvania  
Albany, Oregon
- 3 National Renewable Energy Laboratory  
Golden, Colorado
- 4 Savannah River National Laboratory  
Aiken, South Carolina

## NNSA Laboratories

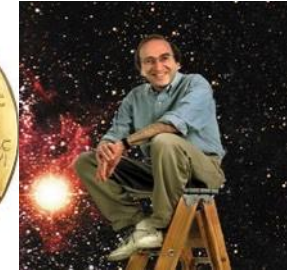
- 1 Lawrence Livermore National Laboratory  
Livermore, California
- 2 Los Alamos National Laboratory  
Los Alamos, New Mexico
- 3 Sandia National Laboratory  
Albuquerque, New Mexico  
Livermore, California



**Mission: to ensure America's security & prosperity by addressing its energy, environmental & nuclear challenges through transformative science and technology solutions.**

# Why National Laboratories?

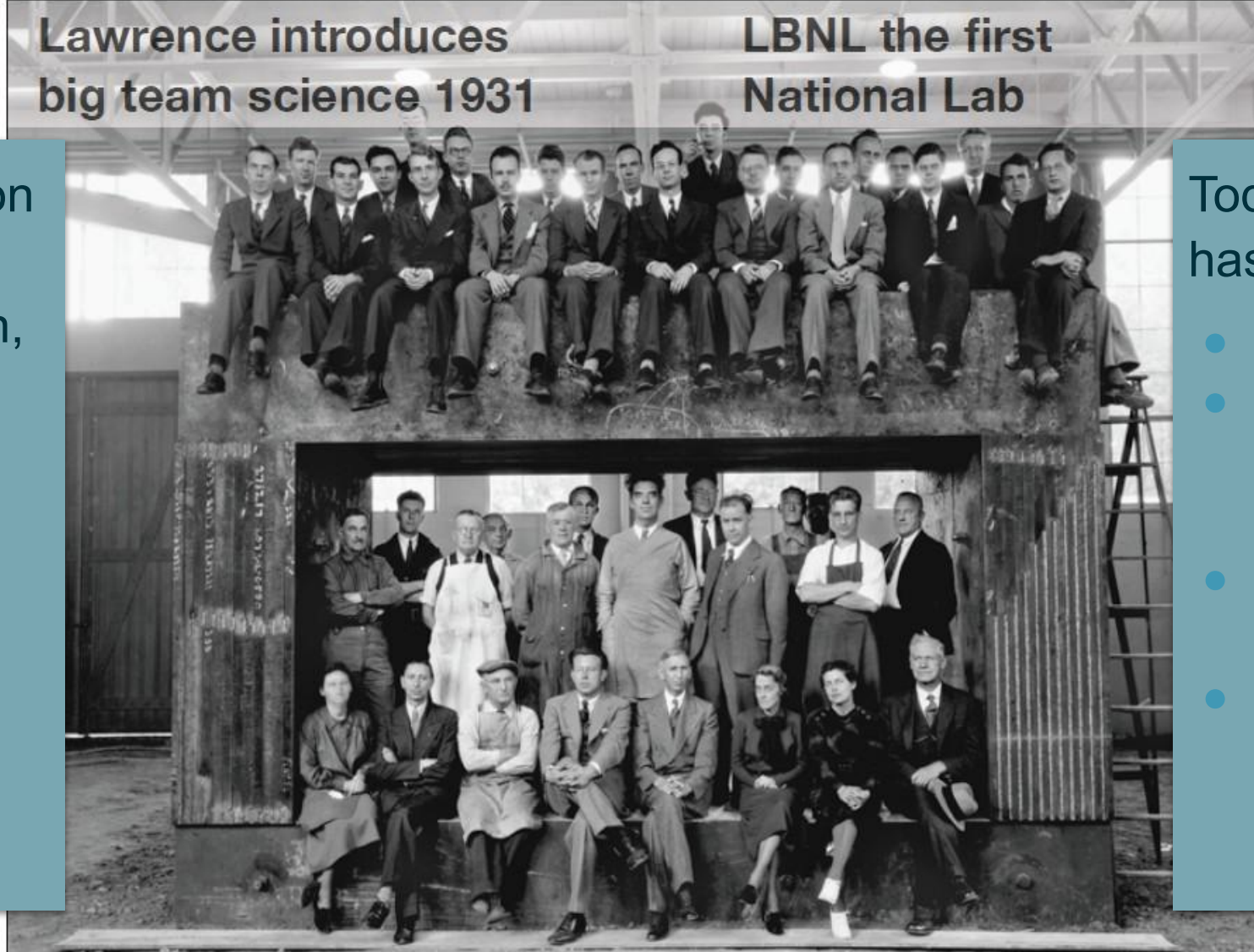
- Discovery science
- Scientific solutions addressing national challenges, especially energy
- Unique scientific capabilities
  - User facilities
- Managed, large research teams
- Important technologies with long, risky R&D paths
- A diverse group of highly trained, creative, & committed scientists & engineers.



# Berkeley Lab Transforms Science

Lawrence introduces  
big team science 1931

LBL the first  
National Lab



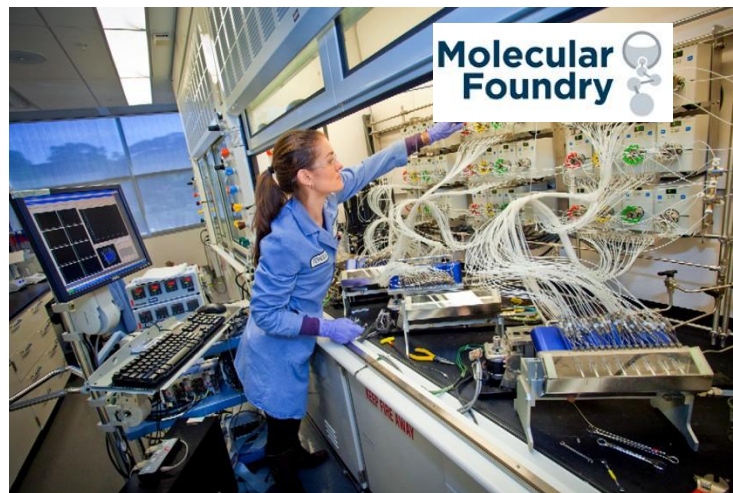
Radiation Lab staff on the magnet yoke for the 60-inch cyclotron, 1939, including:

- E. O. Lawrence
- Edwin McMillan
- Glenn Seaborg
- Luis Alvarez
- J. Robert Oppenheimer
- Robert R. Wilson

Today, Berkeley Lab has:

- ~4000 employees
- >14,000 researchers using our facilities
- >\$1B annual budget
- 16 associated Nobel prizes

# Berkeley Lab Hosts 5 Major Scientific User Facilities



# NERSC: The Most Widely Used Facility in DOE

- 9,000+ users, 1,000+ projects
  - Users from all 50 states + international
  - 25% new users every year; 50% of users < 3 years
- 2,000+ publications/year
- Celebrating 50 years in 2024!



# Computing Sciences Area: 2 Facilities, 2 Research Divisions

- **NERSC** is the primary scientific computing facility for the Office of Science in the U.S. Department of Energy
- **ESnet** provides the high-bandwidth, reliable connections that link scientists at national laboratories, universities and other research institutions
- **Applied Mathematics and Computational Research Division** conducts research and development in mathematical modeling and simulation, algorithm design, computer system architecture, and high-performance software implementation
- **Scientific Data Division** transforms data-driven discovery and understanding through the development and application of novel data science methods, technologies, and infrastructures with scientific partners

# Berkeley Lab Welcomes You!

More Berkeley Lab dignitaries & staff will welcome you this week, including

- Michael Witherell, Director of Berkeley Lab
- Carol Burns, Deputy Director for Research
- Jonathan Carter, Associate Lab Director, Computing Sciences Area
- Sudip Dosanjh, NERSC Division Director
- Stefan Wild, Applied Mathematics & Computational Research Division Director
- Lavanya Ramakrishnan, Scientific Data Division (Acting) Director
- Richard Gerber, NERSC HPC Department Head