



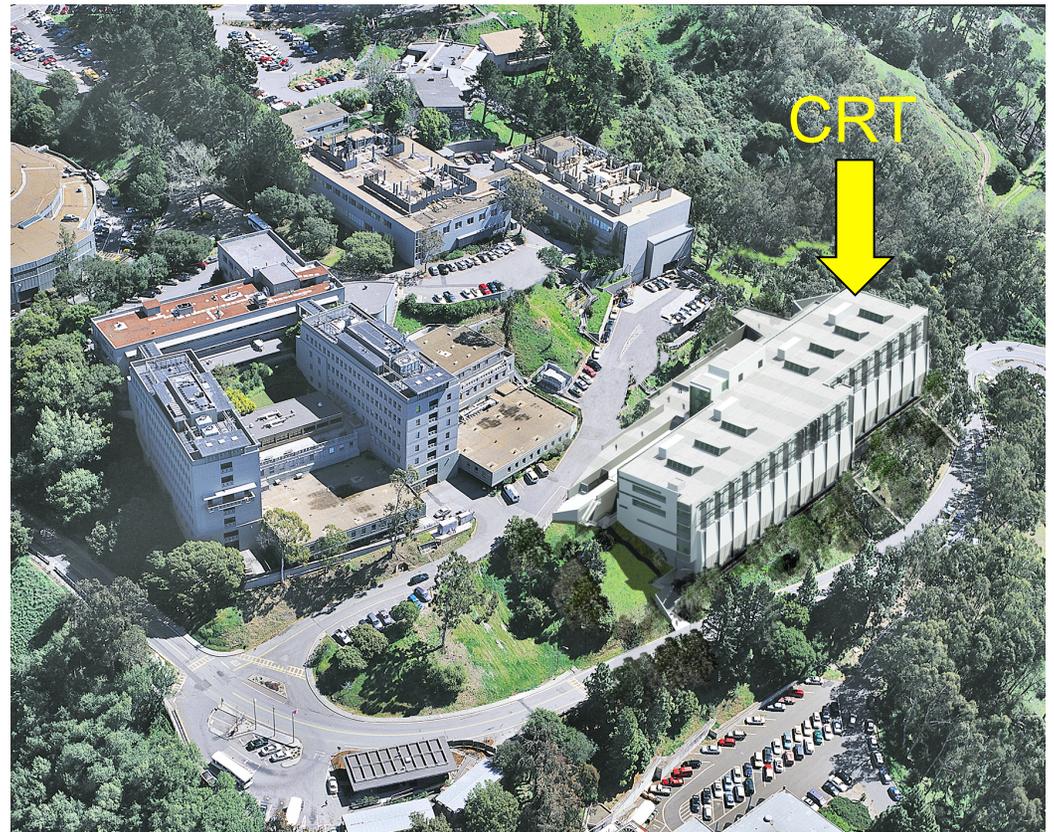
Computational Research and Theory Facility (CRT)

Howard Walter
NERSC Deputy Director



CRT Facility

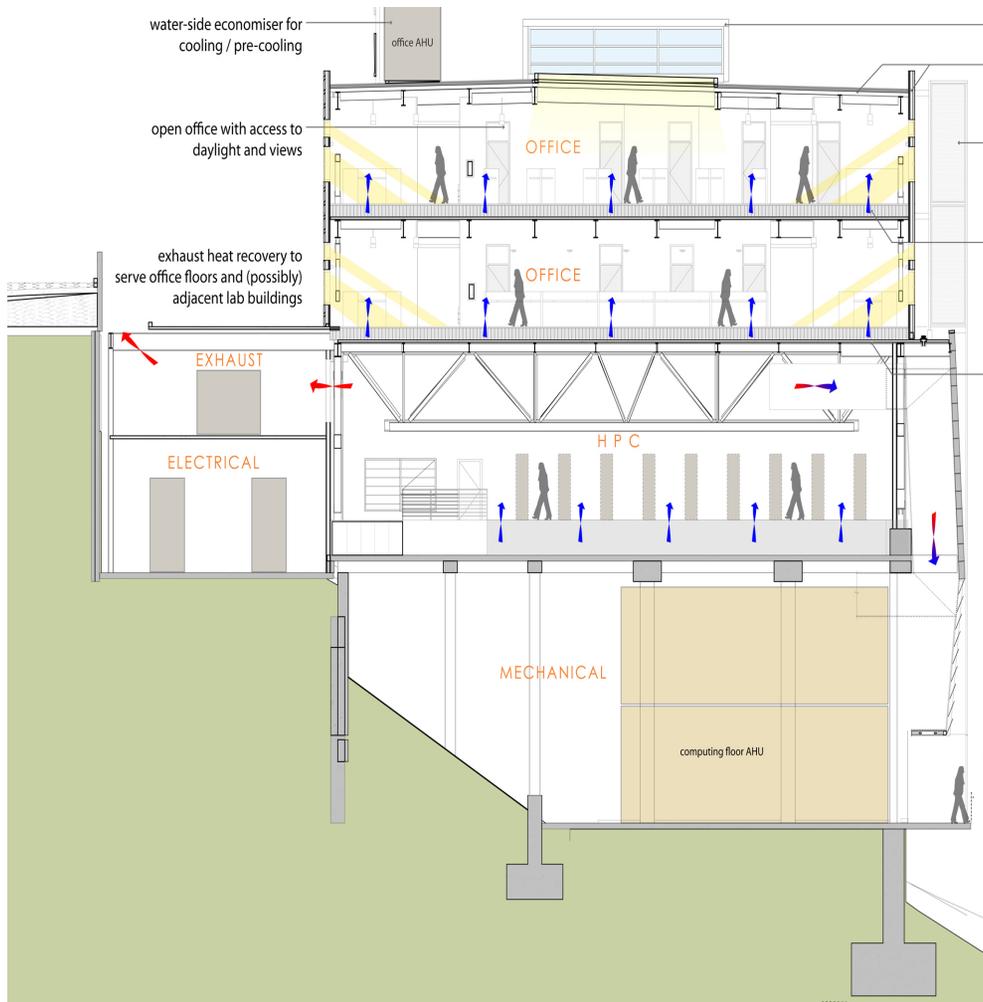
- Four story, 140,000 GSF
 - Two 20,000 SF office floors
~300 offices
 - 28,000 SF HPC floor
 - Mechanical floor
- \$145M Project Budget
- Occupancy planned for Fall 2014
- 12.5MW power
- Exascale capable
- HPC plans:
 - N6 (Hopper) remains at the OSF
 - N7 installed at the OSF → CRT
 - N8 installed in the CRT





CRT Energy Efficiency

Building Section



- LBNL's location & the CRT design enables
 - Power Usage Effectiveness (PUE): 1.1
- Air cooling
 - 75°F air year round without chillers
- Liquid cooling
 - 74°F water year round without chillers
 - 65°F water using chillers for 560 hours/year (6%)
- Computer room exhaust heat used to heat office floors
- LEED Gold



View from above Chu Road



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