

# Research subject and associated LBNL entity

**Subject**     **accelerator physics**

**Type**            **National User Facilities**

Advanced Light Source (ALS)

<http://www.als.lbl.gov/>

**Type**            **Scientific Divisions**

Advanced Light Source (ALS)

<http://www.als.lbl.gov/>

Accelerator and Fusion Research

Center for Beam Physics

<http://www-afrd.lbl.gov/cbp.html>

Engineering

Electronics, Software & Instrumentation Engineering

<http://engineering.lbl.gov/org/esie/>

**Subject**     **accelerators**

**Type**            **Scientific Divisions**

Accelerator & Fusion Research

Superconducting magnets

<http://www-afrd.lbl.gov/super.html>

Accelerator & Fusion Research Division

Fusion Energy Research

<http://www-afrd.lbl.gov/fusion.html>

Accelerator and Fusion Research

Laser Optics and Accelerator Systems Integrated Studies

<http://www-afrd.lbl.gov/loasis.html>

Physics

Energy Frontier

<http://www.lbl.gov/LBL-Programs/physics/research/frontier/atlas.html>

Engineering

Mechanical Engineering

<http://engineering.lbl.gov/org/me/index.html>

Engineering  
Electronics, Software & Instrumentation Engineering  
<http://engineering.lbl.gov/org/esie/>

**Subject**    **actinide science**

**Type**        **Scientific Divisions**

Chemical Sciences  
Seaborg Center: Actinide Science  
<http://actinide.lbl.gov/gtsc/>

**Subject**    **advanced instrumentation design**

**Type**        **Scientific Divisions**

Environmental Energy Technologies  
Atmospheric Sciences  
<http://eetd.lbl.gov/r-atmospheric.html>

**Subject**    **advanced light source accelerator**

**Type**        **Scientific Divisions**

Accelerator and Fusion Research  
Advanced light source accelerator physics  
<http://www-afrd.lbl.gov/als.html>

Engineering  
Mechanical Engineering  
<http://engineering.lbl.gov/org/me/index.html>

Engineering  
Electronics, Software & Instrumentation Engineering  
<http://engineering.lbl.gov/org/esie/>

**Subject**    **agricultural systems**

**Type**        **Scientific Divisions**

Environmental Energy Technologies  
Indoor and Outdoor Environmental Quality  
<http://eetd.lbl.gov/r-indoor.html>

**Subject**    **air pollutants**

**Type**      **Scientific Divisions**

Environmental Energy Technologies  
Indoor and Outdoor Environmental Quality  
<http://eetd.lbl.gov/r-indoor.html>

**Subject**      **air pollution**

**Type**      **Scientific Divisions**

Environmental Energy Technologies  
Atmospheric Sciences  
<http://eetd.lbl.gov/r-atmospheric.html>

Environmental Energy Technologies  
Energy Analysis  
<http://eetd.lbl.gov/r-ea.html>

**Subject**      **air quality**

**Type**      **Scientific Divisions**

Environmental Energy Technologies  
Indoor and Outdoor Environmental Quality  
<http://eetd.lbl.gov/r-indoor.html>

Environmental Energy Technologies  
Atmospheric Sciences  
<http://eetd.lbl.gov/r-atmospheric.html>

**Subject**      **air ventilation**

**Type**      **Scientific Divisions**

Environmental Energy Technologies  
Indoor and Outdoor Environmental Quality  
<http://eetd.lbl.gov/r-indoor.html>

**Subject**      **airflow**

**Type**      **Scientific Divisions**

Environmental Energy Technologies  
Indoor and Outdoor Environmental Quality  
<http://eetd.lbl.gov/r-indoor.html>

**Subject**     **algorithmic design**

**Type**             **Scientific Divisions**

Computational Research  
High Performance Computing Research Department  
<https://hpcrd.lbl.gov/>

**Subject**     **alternative syntheses**

**Type**             **Scientific Divisions**

Chemical Sciences  
Catalytic Science  
<http://www.lbl.gov/LBL-Programs/CSD/research/catalytic-science/index.html>

**Subject**     **Alzheimer's disease**

**Type**             **Scientific Divisions**

Life Sciences  
Radiotracer Development & Imaging Technology  
[http://www.lbl.gov/lrd/Research/Radiochemistry\\_Instrumentation.htm](http://www.lbl.gov/lrd/Research/Radiochemistry_Instrumentation.htm)

**Subject**     **appliance energy use**

**Type**             **Scientific Divisions**

Environmental Energy Technologies  
Energy Analysis  
<http://eetd.lbl.gov/r-ea.html>

**Subject**     **artificial photosynthesis**

**Type**             **Scientific Divisions**

Materials Sciences  
Helios Solar Energy Research Center  
<http://www.lbl.gov/LBL-Programs/helios-serc/html/overview.html>  
  
Physical Biosciences  
Solar Energy Research Center  
<http://www.lbl.gov/LBL-Programs/helios-serc/index.html>

**Type**      **Strategic Directions**

Soft X-Ray science for discovery  
Advanced Light Source, Accelerator and Fusion Research Division  
[http://www.lbl.gov/LBL-Programs/sp\\_xray.html](http://www.lbl.gov/LBL-Programs/sp_xray.html)

**Subject**      **astrophysics**

**Type**      **Scientific Divisions**

Physics  
Particle Data Group  
<http://www.lbl.gov/LBL-Programs/physics/research/pdg.html>

Nuclear Science  
88-Inch Cyclotron Operations  
<http://www.lbl.gov/nsd/programs/88-inch.html>

**Subject**      **astrophysics theory**

**Type**      **Scientific Divisions**

Physics  
Dark Energy & Dark Matter  
<http://www.lbl.gov/LBL-Programs/physics/research/dark-energy/supernova-cosmo.html>

**Subject**      **atmospheric aerosols**

**Type**      **Scientific Divisions**

Environmental Energy Technologies  
Indoor and Outdoor Environmental Quality  
<http://eetd.lbl.gov/r-indoor.html>

Environmental Energy Technologies  
Atmospheric Sciences  
<http://eetd.lbl.gov/r-atmospheric.html>

**Subject**      **atmospheric chemistry**

**Type**      **Scientific Divisions**

Environmental Energy Technologies  
Atmospheric Sciences  
<http://eetd.lbl.gov/r-atmospheric.html>

Chemical Sciences  
Chemical Physics  
<http://www.lbl.gov/csd/research/chemical-physics/index.html>

**Subject**    **atmospheric modelling**

**Type**        **Scientific Divisions**

Environmental Energy Technologies  
Atmospheric Sciences  
<http://eetd.lbl.gov/r-atmospheric.html>

**Subject**    **atmospheric science**

**Type**        **Scientific Divisions**

Earth Sciences  
Geochemistry  
<http://esd.lbl.gov/GEO/>

Environmental Energy Technologies  
Atmospheric Sciences  
<http://eetd.lbl.gov/r-atmospheric.html>

Earth Sciences  
Climate Sciences  
<http://esd.lbl.gov/CSD/>

**Subject**    **atmospheric technology**

**Type**        **Scientific Divisions**

Environmental Energy Technologies  
Atmospheric Sciences  
<http://eetd.lbl.gov/r-atmospheric.html>

**Subject**    **atomic force microscopy**

**Type**        **Scientific Divisions**

Physical Biosciences  
Molecular Machines  
[http://pbd.lbl.gov/PBD\\_web\\_site/web\\_site/html/science/molecular\\_machines.html](http://pbd.lbl.gov/PBD_web_site/web_site/html/science/molecular_machines.html)

Physical Biosciences  
Advanced Imaging  
[http://pbd.lbl.gov/PBD\\_web\\_site/web\\_site/html/science/advanced\\_imaging.html](http://pbd.lbl.gov/PBD_web_site/web_site/html/science/advanced_imaging.html)

**Subject**    **atomic physics**

**Type**        **National User Facilities**

Advanced Light Source (ALS)

<http://www.als.lbl.gov/>

**Type**        **Scientific Divisions**

Chemical Sciences

Atomic, Molecular and Optical Sciences

<http://www.lbl.gov/LBL-Programs/CSD/research/AMOS/index.html>

Advanced Light Source (ALS)

<http://www.als.lbl.gov/>

**Subject**    **atomic science**

**Type**        **Scientific Divisions**

Chemical Sciences

Atomic, Molecular and Optical Sciences

<http://www.lbl.gov/LBL-Programs/CSD/research/AMOS/index.html>

**Subject**    **bacteria**

**Type**        **Scientific Divisions**

Physical Biosciences

Virtual Institute of Microbial Stress and Survival (VIMSS)

<http://vimss.lbl.gov/>

**Subject**    **baryon acoustic oscillations**

**Type**        **Scientific Divisions**

Physics

Dark Energy & Dark Matter

<http://www.lbl.gov/LBL-Programs/physics/research/dark-energy/supernova-cosmo.html>

**Subject**    **batteries**

**Type**      **Scientific Divisions**

Environmental Energy Technologies  
Advanced Energy Technologies  
<http://eetd.lbl.gov/r-aet.html>

**Subject**      **beam equipment**

**Type**      **National User Facilities**

Advanced Light Source (ALS)  
  
<http://www.als.lbl.gov/>

**Type**      **Scientific Divisions**

Engineering  
Mechanical Engineering  
<http://engineering.lbl.gov/org/me/index.html>  
  
Advanced Light Source (ALS)  
  
<http://www.als.lbl.gov/>

**Subject**      **beam generators**

**Type**      **Scientific Divisions**

Accelerator & Fusion Research  
Ion Beam Technology  
<http://www-afrd.lbl.gov/ibt.html>

**Subject**      **beam physics**

**Type**      **Scientific Divisions**

Chemical Sciences  
Atomic, Molecular and Optical Sciences  
<http://www.lbl.gov/LBL-Programs/CSD/research/AMOS/index.html>  
  
Engineering  
Mechanical Engineering  
<http://engineering.lbl.gov/org/me/index.html>

Materials Sciences

Scattering and Instrumentation Sciences

[http://www.lbl.gov/msd/programs/3si/si\\_intro.html](http://www.lbl.gov/msd/programs/3si/si_intro.html)

Chemical Sciences

Chemical Physics

<http://www.lbl.gov/csd/research/chemical-physics/index.html>

Accelerator & Fusion Research Division

Fusion Energy Research

<http://www-afrd.lbl.gov/fusion.html>

Accelerator and Fusion Research

Center for Beam Physics

<http://www-afrd.lbl.gov/cbp.html>

Accelerator & Fusion Research

Ion Beam Technology

<http://www-afrd.lbl.gov/ibt.html>

**Subject**    **beam science**

**Type**        **Scientific Divisions**

Nuclear Science

88-Inch Cyclotron Operations

<http://www.lbl.gov/nsd/programs/88-inch.html>

**Subject**    **beamlines**

**Type**        **National User Facilities**

Advanced Light Source (ALS)

<http://www.als.lbl.gov/>

**Type**        **Scientific Divisions**

Physical Biosciences

Genome Research

[http://pbd.lbl.gov/PBD\\_web\\_site/web\\_site/html/science/genome\\_research.html](http://pbd.lbl.gov/PBD_web_site/web_site/html/science/genome_research.html)

Physical Biosciences

Berkeley Center for Structural Biology

[http://bcsb.als.lbl.gov/wiki/index.php/Main\\_Page](http://bcsb.als.lbl.gov/wiki/index.php/Main_Page)

Advanced Light Source (ALS)

<http://www.als.lbl.gov/>

Life Sciences  
Technology Centers  
[http://www.lbl.gov/lrd/Research/Technology\\_Centers.html](http://www.lbl.gov/lrd/Research/Technology_Centers.html)

**Subject**    **biochemistry**

**Type**        **Scientific Divisions**

Physical Biosciences  
Computational & Theoretical Biology  
[http://pbd.lbl.gov/PBD\\_web\\_site/web\\_site/html/science/computational\\_theoretical\\_biology.html](http://pbd.lbl.gov/PBD_web_site/web_site/html/science/computational_theoretical_biology.html)

Genomics (complements the US DOE Joint Genome Institute)

<http://www.lbl.gov/gsd/>

Life Sciences  
Radiotracer Development & Imaging Technology  
[http://www.lbl.gov/lrd/Research/Radiochemistry\\_Instrumentation.htm](http://www.lbl.gov/lrd/Research/Radiochemistry_Instrumentation.htm)

**Subject**    **bioenergy**

**Type**        **National User Facilities**

Joint Genome Institute

<http://www.jgi.doe.gov/>

**Subject**    **bioengineering**

**Type**        **Scientific Divisions**

Life Sciences  
Technology Centers  
[http://www.lbl.gov/lrd/Research/Technology\\_Centers.html](http://www.lbl.gov/lrd/Research/Technology_Centers.html)

**Subject**    **biofuels**

**Type**        **Scientific Divisions**

Earth Sciences  
Ecology  
<http://esd.lbl.gov/departments/ecology/>

Physical Biosciences  
Solar Energy Research Center  
<http://www.lbl.gov/LBL-Programs/helios-serc/index.html>

Life Sciences

Bioenergy/GTL & Structural Biology

<http://www.lbl.gov/lrd/Research/Bioenergy.html>

Physical Biosciences

Joint BioEnergy Institute

<http://www.jbei.org/>

**Type**      **Strategic Directions**

Biological sciences for energy research

[http://www.lbl.gov/LBL-Programs/sp\\_biosci.html](http://www.lbl.gov/LBL-Programs/sp_biosci.html)

**Subject**      **biogeochemistry**

**Type**      **Strategic Directions**

Biological sciences for energy research

[http://www.lbl.gov/LBL-Programs/sp\\_biosci.html](http://www.lbl.gov/LBL-Programs/sp_biosci.html)

**Subject**      **bioinformatics**

**Type**      **Scientific Divisions**

Computational Research

Biological Data Management and Technology Center (BDMTC)

<http://crd.lbl.gov/html/BDMTC/index.html>

Life Sciences

Cancer & DNA Damage Responses

[http://www.lbl.gov/lrd/Research/cancer\\_and\\_radiation.html](http://www.lbl.gov/lrd/Research/cancer_and_radiation.html)

Computational Research

Biological Data Management and Technology Center (BDMTC)

<http://crd.lbl.gov/html/BDMTC/index.html>

**Subject**      **bioinstrumentation**

**Type**      **Scientific Divisions**

Engineering

Electronics, Software & Instrumentation Engineering

<http://engineering.lbl.gov/org/esie/>

**Subject**      **biology**

**Type**      **National User Facilities**

Advanced Light Source (ALS)

<http://www.als.lbl.gov/>

**Type**      **Scientific Divisions**

Advanced Light Source (ALS)

<http://www.als.lbl.gov/>

**Subject**    **biomass**

**Type**      **National User Facilities**

Joint Genome Institute

<http://www.jgi.doe.gov/>

**Type**      **Scientific Divisions**

Materials Sciences

Helios Solar Energy Research Center

<http://www.lbl.gov/LBL-Programs/helios-serc/html/overview.html>

Physical Biosciences

Joint BioEnergy Institute

<http://www.jbei.org/>

**Subject**    **biomedical imaging**

**Type**      **Scientific Divisions**

Life Sciences

Biomedical Isotope Facility

[http://www.lbl.gov/lis/Research/Research\\_Resources.html](http://www.lbl.gov/lis/Research/Research_Resources.html)

**Subject**    **biomimetic/bioinspired functional**

**Type**      **Scientific Divisions**

Materials Sciences  
Materials Discovery, Design and Synthesis  
[http://www.lbl.gov/msd/programs/1md/md\\_intro.html](http://www.lbl.gov/msd/programs/1md/md_intro.html)

**Subject**    **biomolecular materials**

**Type**        **Scientific Divisions**

Materials Sciences  
Materials Discovery, Design and Synthesis  
[http://www.lbl.gov/msd/programs/1md/md\\_intro.html](http://www.lbl.gov/msd/programs/1md/md_intro.html)

Materials Sciences  
Scattering and Instrumentation Sciences  
[http://www.lbl.gov/msd/programs/3si/si\\_intro.html](http://www.lbl.gov/msd/programs/3si/si_intro.html)

**Subject**    **bioremediation**

**Type**        **Scientific Divisions**

Life Sciences  
Bioenergy/GTL & Structural Biology  
<http://www.lbl.gov/lrd/Research/Bioenergy.html>

**Subject**    **biosynthetic pathways**

**Type**        **Scientific Divisions**

Environmental Energy Technologies  
Advanced Energy Technologies  
<http://eetd.lbl.gov/r-aet.html>

**Subject**    **bolometer arrays**

**Type**        **Scientific Divisions**

Physics  
Dark Energy & Dark Matter  
<http://www.lbl.gov/LBL-Programs/physics/research/dark-energy/supernova-cosmo.html>

**Subject**    **botany**

**Type**        **Scientific Divisions**

Physical Biosciences  
Joint BioEnergy Institute  
<http://www.jbei.org/>

**Subject**    **b-quark**

**Type**        **Scientific Divisions**

Physics  
Quark & Lepton Flavor Physics  
Quark & Lepton Flavor Physics

**Subject**    **breast cancer detection**

**Type**        **Scientific Divisions**

Life Sciences  
Cancer & DNA Damage Responses  
[http://www.lbl.gov/lcd/Research/cancer\\_and\\_radiation.html](http://www.lbl.gov/lcd/Research/cancer_and_radiation.html)

**Subject**    **building construction**

**Type**        **Scientific Divisions**

Environmental Energy Technologies  
Buildings Energy Efficiency  
<http://eetd.lbl.gov/r-bldgsee.html>

**Subject**    **building design**

**Type**        **Scientific Divisions**

Environmental Energy Technologies  
Buildings Energy Efficiency  
<http://eetd.lbl.gov/r-bldgsee.html>

**Subject**    **building energy use**

**Type**        **Scientific Divisions**

Environmental Energy Technologies  
Energy Analysis  
<http://eetd.lbl.gov/r-ea.html>

**Subject**     **building heating**

**Type**             **Scientific Divisions**

Environmental Energy Technologies  
Indoor and Outdoor Environmental Quality  
<http://eetd.lbl.gov/r-indoor.html>

**Subject**     **building materials**

**Type**             **Scientific Divisions**

Environmental Energy Technologies  
Buildings Energy Efficiency  
<http://eetd.lbl.gov/r-bldgsee.html>

**Subject**     **cameras**

**Type**             **Scientific Divisions**

Physics  
Dark Energy & Dark Matter  
<http://www.lbl.gov/LBL-Programs/physics/research/dark-energy/supernova-cosmo.html>

**Subject**     **cancer biology**

**Type**             **Scientific Divisions**

Life Sciences  
Cancer & DNA Damage Responses  
[http://www.lbl.gov/lcd/Research/cancer\\_and\\_radiation.html](http://www.lbl.gov/lcd/Research/cancer_and_radiation.html)

**Subject**     **cancer detection**

**Type**             **Scientific Divisions**

Life Sciences  
Cancer & DNA Damage Responses  
[http://www.lbl.gov/lcd/Research/cancer\\_and\\_radiation.html](http://www.lbl.gov/lcd/Research/cancer_and_radiation.html)

**Subject**     **cancer therapy**

**Type**      **Strategic Directions**

Soft X-Ray science for discovery  
Advanced Light Source, Accelerator and Fusion Research Division  
[http://www.lbl.gov/LBL-Programs/sp\\_xray.html](http://www.lbl.gov/LBL-Programs/sp_xray.html)

**Subject**      **carbon sequestration**

**Type**      **Scientific Divisions**

Life Sciences  
Bioenergy/GTL & Structural Biology  
<http://www.lbl.gov/lcd/Research/Bioenergy.html>

**Subject**      **carbon capture**

**Type**      **Scientific Divisions**

Environmental Energy Technologies  
Advanced Energy Technologies  
<http://eetd.lbl.gov/r-aet.html>

**Subject**      **carbon cycle**

**Type**      **Scientific Divisions**

Earth Sciences  
Ecology  
<http://esd.lbl.gov/departments/ecology/>  
  
Earth Sciences  
Climate Sciences  
<http://esd.lbl.gov/CSD/>

**Subject**      **carbon emissions**

**Type**      **Scientific Divisions**

Environmental Energy Technologies  
Energy Analysis  
<http://eetd.lbl.gov/r-ea.html>  
  
Earth Sciences  
Climate Sciences  
<http://esd.lbl.gov/CSD/>

**Subject** carbon flows

**Type** Scientific Divisions

Environmental Energy Technologies  
Energy Analysis  
<http://eetd.lbl.gov/r-ea.html>

**Subject** carbon storage

**Type** Strategic Directions

Climate change and environmental science  
  
[http://www.lbl.gov/LBL-Programs/sp\\_climate.html](http://www.lbl.gov/LBL-Programs/sp_climate.html)

**Subject** carbon-neutral transportation fuels

**Type** Scientific Divisions

Materials Sciences  
Helios Solar Energy Research Center  
<http://www.lbl.gov/LBL-Programs/helios-serc/html/overview.html>

**Subject** cardiac nuclear imaging

**Type** Scientific Divisions

Life Sciences  
Radiotracer Development & Imaging Technology  
[http://www.lbl.gov/lrd/Research/Radiochemistry\\_Instrumentation.htm](http://www.lbl.gov/lrd/Research/Radiochemistry_Instrumentation.htm)

**Subject** cardiology

**Type** Scientific Divisions

Life Sciences  
Radiotracer Development & Imaging Technology  
[http://www.lbl.gov/lrd/Research/Radiochemistry\\_Instrumentation.htm](http://www.lbl.gov/lrd/Research/Radiochemistry_Instrumentation.htm)

**Subject** catalysis

**Type**      **Scientific Divisions**

Materials Sciences

Materials Discovery, Design and Synthesis

[http://www.lbl.gov/msd/programs/1md/md\\_intro.html](http://www.lbl.gov/msd/programs/1md/md_intro.html)

Chemical Sciences

Catalytic Science

<http://www.lbl.gov/LBL-Programs/CSD/research/catalytic-science/index.html>

**Type**      **Strategic Directions**

Soft X-Ray science for discovery

Advanced Light Source, Accelerator and Fusion Research Division

[http://www.lbl.gov/LBL-Programs/sp\\_xray.html](http://www.lbl.gov/LBL-Programs/sp_xray.html)

**Subject**      **cell-cell recognition in the immune s**

**Type**      **Scientific Divisions**

Physical Biosciences

Computational & Theoretical Biology

[http://pbd.lbl.gov/PBD\\_web\\_site/web\\_site/html/science/computational\\_theoretical\\_biology.html](http://pbd.lbl.gov/PBD_web_site/web_site/html/science/computational_theoretical_biology.html)

**Subject**      **cellular processes**

**Type**      **Scientific Divisions**

Physical Biosciences

Molecular Machines

[http://pbd.lbl.gov/PBD\\_web\\_site/web\\_site/html/science/molecular\\_machines.html](http://pbd.lbl.gov/PBD_web_site/web_site/html/science/molecular_machines.html)

**Subject**      **charge-coupled devices**

**Type**      **Scientific Divisions**

Physics

Dark Energy & Dark Matter

<http://www.lbl.gov/LBL-Programs/physics/research/dark-energy/supernova-cosmo.html>

**Subject**      **chemical dynamics**

**Type**      **National User Facilities**

Advanced Light Source (ALS)

<http://www.als.lbl.gov/>

**Type**      **Scientific Divisions**

Advanced Light Source (ALS)

<http://www.als.lbl.gov/>

**Subject**      **chemical ecology**

**Type**      **Scientific Divisions**

Earth Sciences

Ecology

<http://esd.lbl.gov/departments/ecology/>

**Subject**      **chemical energy**

**Type**      **Scientific Divisions**

Chemical Sciences

Catalytic Science

<http://www.lbl.gov/LBL-Programs/CSD/research/catalytic-science/index.html>

**Subject**      **chemical modelling**

**Type**      **Scientific Divisions**

Chemical Sciences

Chemical Physics

<http://www.lbl.gov/csd/research/chemical-physics/index.html>

**Subject**      **chemical physics**

**Type**      **Scientific Divisions**

Chemical Sciences

Chemical Physics

<http://www.lbl.gov/csd/research/chemical-physics/index.html>

Chemical Sciences

Atomic, Molecular and Optical Sciences

<http://www.lbl.gov/LBL-Programs/CSD/research/AMOS/index.html>

**Subject**      **chemical simulation**

**Type**            **Scientific Divisions**

Chemical Sciences

Catalytic Science

<http://www.lbl.gov/LBL-Programs/CSD/research/catalytic-science/index.html>

**Subject**      **chemical synthesis**

**Type**            **Scientific Divisions**

Chemical Sciences

Catalytic Science

<http://www.lbl.gov/LBL-Programs/CSD/research/catalytic-science/index.html>

**Subject**      **chemical transformation**

**Type**            **Scientific Divisions**

Environmental Energy Technologies

Indoor and Outdoor Environmental Quality

<http://eetd.lbl.gov/r-indoor.html>

**Subject**      **chemical transport**

**Type**            **Scientific Divisions**

Environmental Energy Technologies

Indoor and Outdoor Environmental Quality

<http://eetd.lbl.gov/r-indoor.html>

**Subject**      **chemistry**

**Type**            **National User Facilities**

Advanced Light Source (ALS)

<http://www.als.lbl.gov/>

**Type**            **Scientific Divisions**

Advanced Light Source (ALS)

<http://www.als.lbl.gov/>

**Subject**      **clean energy generation**

**Type**            **National User Facilities**

Joint Genome Institute

<http://www.jgi.doe.gov/>

**Type**            **Scientific Divisions**

Genomics (complements the US DOE Joint Genome Institute)

<http://www.lbl.gov/gsd/>

**Subject**      **climate change**

**Type**            **Scientific Divisions**

Environmental Energy Technologies

Atmospheric Sciences

<http://eetd.lbl.gov/r-atmospheric.html>

Environmental Energy Technologies

Energy Analysis

<http://eetd.lbl.gov/r-ea.html>

Physical Biosciences

GTL@Berkeley Lab

<http://pbd.lbl.gov/gtl/default.htm>

Earth Sciences

Ecology

<http://esd.lbl.gov/departments/ecology/>

Environmental Energy Technologies

Atmospheric Sciences

<http://eetd.lbl.gov/r-atmospheric.html>

**Type**            **Strategic Directions**

Biological sciences for energy research

[http://www.lbl.gov/LBL-Programs/sp\\_biosci.html](http://www.lbl.gov/LBL-Programs/sp_biosci.html)

**Subject** climate change forcing

**Type** Scientific Divisions

Earth Sciences

Climate Sciences

<http://esd.lbl.gov/CSD/>

**Subject** climate change mitigation

**Type** Scientific Divisions

Earth Sciences

Climate Sciences

<http://esd.lbl.gov/CSD/>

**Subject** climate change modelling

**Type** Scientific Divisions

Earth Sciences

Climate Sciences

<http://esd.lbl.gov/CSD/>

**Subject** climate modelling

**Type** Scientific Divisions

Environmental Energy Technologies

Energy Analysis

<http://eetd.lbl.gov/r-ea.html>

Earth Sciences

Geochemistry

<http://esd.lbl.gov/GEO/>

**Type** Strategic Directions

Climate change and environmental science

[http://www.lbl.gov/LBL-Programs/sp\\_climate.html](http://www.lbl.gov/LBL-Programs/sp_climate.html)

**Subject** climate predictions

**Type**      **Scientific Divisions**

Earth Sciences  
Climate Sciences  
<http://esd.lbl.gov/CSD/>

**Subject**      **climate science**

**Type**      **Scientific Divisions**

Earth Sciences  
Climate Sciences  
<http://esd.lbl.gov/CSD/>

**Subject**      **cloning**

**Type**      **Scientific Divisions**

Physical Biosciences  
Genome Research  
[http://pbd.lbl.gov/PBD\\_web\\_site/web\\_site/html/science/genome\\_research.html](http://pbd.lbl.gov/PBD_web_site/web_site/html/science/genome_research.html)

**Subject**      **cognition**

**Type**      **Scientific Divisions**

Life Sciences  
Radiotracer Development & Imaging Technology  
[http://www.lbl.gov/lrd/Research/Radiochemistry\\_Instrumentation.htm](http://www.lbl.gov/lrd/Research/Radiochemistry_Instrumentation.htm)

**Subject**      **collaboration technology**

**Type**      **National User Facilities**

Computational Research  
Advanced Computing for Science (ACS)  
<http://acs.lbl.gov/>

**Type**      **Scientific Divisions**

Computational Research  
Biological Data Management and Technology Center (BDMTC)  
<http://crd.lbl.gov/html/BDMTC/index.html>

Computational Research  
High Performance Computing Research Department  
<https://hpcrd.lbl.gov/>

**Subject**    **combinatorial nanoscience**

**Type**        **National User Facilities**

Materials Sciences  
Molecular Foundry  
<http://foundry.lbl.gov/about/index.html>

**Type**        **Scientific Divisions**

Materials Sciences  
Molecular Foundry  
<http://foundry.lbl.gov/about/index.html>

**Subject**    **combustion chemistry**

**Type**        **Scientific Divisions**

Chemical Sciences  
Chemical Physics  
<http://www.lbl.gov/csd/research/chemical-physics/index.html>

**Subject**    **combustion technologies**

**Type**        **Scientific Divisions**

Environmental Energy Technologies  
Advanced Energy Technologies  
<http://eetd.lbl.gov/r-aet.html>

**Subject**    **communications networking**

**Type**        **National User Facilities**

Computational Research  
Energy Sciences Network (ESnet)  
<http://www.es.net/>

**Type**        **Scientific Divisions**

Computational Research  
Energy Sciences Network (ESnet)  
<http://www.es.net/>

**Subject**    **communications services**

**Type**        **National User Facilities**

National Energy Research Scientific Computing Center (NERSC)  
  
<http://www.nersc.gov/about/mission.php>

**Type**        **Scientific Divisions**

National Energy Research Scientific Computing Center (NERSC)  
  
<http://www.nersc.gov/about/mission.php>

**Subject**    **complex biological interactions**

**Type**        **Scientific Divisions**

Physical Biosciences  
Systems Biology  
[http://pbd.lbl.gov/PBD\\_web\\_site/web\\_site/html/science/systems\\_biology.html](http://pbd.lbl.gov/PBD_web_site/web_site/html/science/systems_biology.html)

**Subject**    **computational analysis**

**Type**        **Scientific Divisions**

Genomics (complements the US DOE Joint Genome Institute)  
  
<http://www.lbl.gov/gsd/>

**Subject**    **computational biology**

**Type**        **Scientific Divisions**

Physical Biosciences  
Computational & Theoretical Biology  
[http://pbd.lbl.gov/PBD\\_web\\_site/web\\_site/html/science/computational\\_theoretical\\_biology.html](http://pbd.lbl.gov/PBD_web_site/web_site/html/science/computational_theoretical_biology.html)

**Subject**    **computational genomics**

**Type**      **National User Facilities**

Joint Genome Institute

<http://www.jgi.doe.gov/>

**Type**      **Scientific Divisions**

Genomics (complements the US DOE Joint Genome Institute)

<http://www.lbl.gov/gsd/>

**Subject**      **computational geomechanics**

**Type**      **Scientific Divisions**

Earth Sciences

Geophysics

<http://esd.lbl.gov/GG/>

**Subject**      **computational geophysics**

**Type**      **Scientific Divisions**

Earth Sciences

Geophysics

<http://esd.lbl.gov/GG/>

**Subject**      **computational geoscience**

**Type**      **Scientific Divisions**

Earth Sciences

General department

<http://esd.lbl.gov/home/>

**Subject**      **computational methodologies**

**Type**      **Scientific Divisions**

Computational Research

High Performance Computing Research Department

<https://hpcrd.lbl.gov/>

**Subject**      **computational modelling**

**Type**            **Scientific Divisions**

Genomics (complements the US DOE Joint Genome Institute)

<http://www.lbl.gov/gsd/>

Earth Sciences

General department

<http://esd.lbl.gov/home/>

Life Sciences

Cancer & DNA Damage Responses

[http://www.lbl.gov/lcd/Research/cancer\\_and\\_radiation.html](http://www.lbl.gov/lcd/Research/cancer_and_radiation.html)

**Subject**      **computational science**

**Type**            **Scientific Divisions**

Computational Research

High Performance Computing Research Department

<https://hpcrd.lbl.gov/>

Physical Biosciences

Systems Biology

[http://pbd.lbl.gov/PBD\\_web\\_site/web\\_site/html/science/systems\\_biology.html](http://pbd.lbl.gov/PBD_web_site/web_site/html/science/systems_biology.html)

**Subject**      **computational science of scale**

**Type**            **National User Facilities**

National Energy Research Scientific Computing Center (NERSC)

<http://www.nersc.gov/about/mission.php>

**Type**            **Scientific Divisions**

National Energy Research Scientific Computing Center (NERSC)

<http://www.nersc.gov/about/mission.php>

**Subject**      **computational tools**

**Type**            **Scientific Divisions**

Physical Biosciences  
Computational Crystallography Initiative (CCI)  
<http://cci.lbl.gov/>

**Subject**    **computational visualization**

**Type**        **Strategic Directions**

Computational science and networking  
  
[http://www.lbl.gov/LBL-Programs/sp\\_compsci.html](http://www.lbl.gov/LBL-Programs/sp_compsci.html)

**Subject**    **computer infrastructure**

**Type**        **Scientific Divisions**

Computational Research  
High Performance Computing Research Department  
<https://hpcrd.lbl.gov/>

**Subject**    **computer networking**

**Type**        **National User Facilities**

Computational Research  
Energy Sciences Network (ESnet)  
<http://www.es.net/>

**Type**        **Scientific Divisions**

Computational Research  
Energy Sciences Network (ESnet)  
<http://www.es.net/>

**Subject**    **computer security**

**Type**        **National User Facilities**

Computational Research  
Advanced Computing for Science (ACS)  
<http://acs.lbl.gov/>

**Subject**    **computer simulation**

**Type**      **Scientific Divisions**

Computational Research  
High Performance Computing Research Department  
<https://hpcrd.lbl.gov/>

**Subject**      **computer systems architecture**

**Type**      **Scientific Divisions**

Computational Research  
High Performance Computing Research Department  
<https://hpcrd.lbl.gov/>

**Subject**      **computer visualization**

**Type**      **Scientific Divisions**

Computational Research  
High Performance Computing Research Department  
<https://hpcrd.lbl.gov/>

**Subject**      **condensed matter physics**

**Type**      **Scientific Divisions**

Materials Sciences  
Condensed Matter and Materials Physics  
[http://www.lbl.gov/msd/programs/2cm/cm\\_intro.html](http://www.lbl.gov/msd/programs/2cm/cm_intro.html)  
Materials Sciences  
Scattering and Instrumentation Sciences  
[http://www.lbl.gov/msd/programs/3si/si\\_intro.html](http://www.lbl.gov/msd/programs/3si/si_intro.html)

**Subject**      **conformal field theory**

**Type**      **Scientific Divisions**

Physics  
Theoretical Physics  
<http://www.lbl.gov/LBL-Programs/physics/research/theory.html>

**Subject**      **contaminant hydrology**

**Type**      **Scientific Divisions**

Earth Sciences  
Hydrogeology  
<http://esd.lbl.gov/departments/hydrogeology/>

**Subject**      **cool roofing materials**

**Type**      **Scientific Divisions**

Environmental Energy Technologies  
Buildings Energy Efficiency  
<http://eetd.lbl.gov/r-bldgsee.html>

**Subject**      **cosmic expansion**

**Type**      **Scientific Divisions**

Physics  
Dark Energy & Dark Matter  
<http://www.lbl.gov/LBL-Programs/physics/research/dark-energy/supernova-cosmo.html>

**Subject**      **cosmic microwave background radia**

**Type**      **Scientific Divisions**

Nuclear Science  
Institute for Nuclear and Particle Astrophysics (INPA)  
<http://www.lbl.gov/nsd/programs/INPA.html>

**Subject**      **cosmology**

**Type**      **Scientific Divisions**

Physics  
Theoretical Physics  
<http://www.lbl.gov/LBL-Programs/physics/research/theory.html>

Physics  
Dark Energy & Dark Matter  
<http://www.lbl.gov/LBL-Programs/physics/research/dark-energy/supernova-cosmo.html>

**Type**      **Strategic Directions**

Matter and force in the universe

[http://www.lbl.gov/LBL-Programs/sp\\_matter.html](http://www.lbl.gov/LBL-Programs/sp_matter.html)

**Subject** cryo-electron microscopy

**Type** Scientific Divisions

Physical Biosciences

Advanced Imaging

[http://pbd.lbl.gov/PBD\\_web\\_site/web\\_site/html/science/advanced\\_imaging.html](http://pbd.lbl.gov/PBD_web_site/web_site/html/science/advanced_imaging.html)

Physical Biosciences

Molecular Machines

[http://pbd.lbl.gov/PBD\\_web\\_site/web\\_site/html/science/molecular\\_machines.html](http://pbd.lbl.gov/PBD_web_site/web_site/html/science/molecular_machines.html)

**Subject** crystallography

**Type** National User Facilities

Advanced Light Source (ALS)

<http://www.als.lbl.gov/>

**Type** Scientific Divisions

Physical Biosciences

Computational Crystallography Initiative (CCI)

<http://cci.lbl.gov/>

Advanced Light Source (ALS)

<http://www.als.lbl.gov/>

**Subject** cyberinfrastructure

**Type** National User Facilities

Computational Research

Advanced Computing for Science (ACS)

<http://acs.lbl.gov/>

**Subject** cyclotron

**Type** Scientific Divisions

Engineering  
Electronics, Software & Instrumentation Engineering  
<http://engineering.lbl.gov/org/esie/>

**Subject**    **dark energy**

**Type**        **Scientific Divisions**

Physics  
Dark Energy & Dark Matter  
<http://www.lbl.gov/LBL-Programs/physics/research/dark-energy/supernova-cosmo.html>

**Type**        **Strategic Directions**

Matter and force in the universe  
  
[http://www.lbl.gov/LBL-Programs/sp\\_matter.html](http://www.lbl.gov/LBL-Programs/sp_matter.html)

**Subject**    **dark energy mapping**

**Type**        **Scientific Divisions**

Physics  
Dark Energy & Dark Matter  
<http://www.lbl.gov/LBL-Programs/physics/research/dark-energy/supernova-cosmo.html>

**Subject**    **data analysis**

**Type**        **Scientific Divisions**

Computational Research  
Biological Data Management and Technology Center (BDMTC)  
<http://crd.lbl.gov/html/BDMTC/index.html>  
  
Physics  
Particle Data Group  
<http://www.lbl.gov/LBL-Programs/physics/research/pdg.html>

**Subject**    **data management**

**Type**        **Scientific Divisions**

Life Sciences  
Genome Dynamics  
[http://www.lbl.gov/lcd/Research/Genome\\_Dynamics.html](http://www.lbl.gov/lcd/Research/Genome_Dynamics.html)

Computational Research  
High Performance Computing Research Department  
<https://hpcrd.lbl.gov/>

Computational Research  
Biological Data Management and Technology Center (BDMTC)  
<http://crd.lbl.gov/html/BDMTC/index.html>

**Subject**    **data services**

**Type**        **National User Facilities**

National Energy Research Scientific Computing Center (NERSC)  
  
<http://www.nersc.gov/about/mission.php>

**Type**        **Scientific Divisions**

National Energy Research Scientific Computing Center (NERSC)  
  
<http://www.nersc.gov/about/mission.php>

**Subject**    **data sources**

**Type**        **Scientific Divisions**

Physics  
Particle Data Group  
<http://www.lbl.gov/LBL-Programs/physics/research/pdg.html>

**Subject**    **data storage**

**Type**        **Scientific Divisions**

Computational Research  
High Performance Computing Research Department  
<https://hpcrd.lbl.gov/>

**Subject**    **dense nuclear matter**

**Type**        **Scientific Divisions**

Nuclear Science  
Relativistic Nuclear Collisions  
<http://www.lbl.gov/nsd/programs/RNC.html>

**Subject** detectors

**Type** Scientific Divisions

Physics

Energy Frontier

<http://www.lbl.gov/LBL-Programs/physics/research/frontier/atlas.html>

Physics

Detector R&D

<http://www.lbl.gov/LBL-Programs/physics/research/detector.html>

**Subject** distributed computing

**Type** National User Facilities

Computational Research

Advanced Computing for Science (ACS)

<http://acs.lbl.gov/>

**Subject** DNA repair

**Type** Scientific Divisions

Life Sciences

Cancer & DNA Damage Responses

[http://www.lbl.gov/lcd/Research/cancer\\_and\\_radiation.html](http://www.lbl.gov/lcd/Research/cancer_and_radiation.html)

**Subject** drug design

**Type** Scientific Divisions

Physical Biosciences

Berkeley Center for Structural Biology

[http://bcsb.als.lbl.gov/wiki/index.php/Main\\_Page](http://bcsb.als.lbl.gov/wiki/index.php/Main_Page)

**Subject** earth sciences

**Type** National User Facilities

Advanced Light Source (ALS)

<http://www.als.lbl.gov/>

**Type**      **Scientific Divisions**

Advanced Light Source (ALS)

<http://www.als.lbl.gov/>

**Subject**      **ecoinformatics**

**Type**      **National User Facilities**

Computational Research

Advanced Computing for Science (ACS)

<http://acs.lbl.gov/>

**Subject**      **ecosystems**

**Type**      **Scientific Divisions**

Earth Sciences

Climate Sciences

<http://esd.lbl.gov/CSD/>

**Subject**      **electricity**

**Type**      **Strategic Directions**

Soft X-Ray science for discovery

Advanced Light Source, Accelerator and Fusion Research Division

[http://www.lbl.gov/LBL-Programs/sp\\_xray.html](http://www.lbl.gov/LBL-Programs/sp_xray.html)

**Subject**      **electricity markets**

**Type**      **Scientific Divisions**

Environmental Energy Technologies

Energy Analysis

<http://eetd.lbl.gov/r-ea.html>

**Subject**      **electricity transmission**

**Type**      **Scientific Divisions**

Environmental Energy Technologies  
Buildings Energy Efficiency  
<http://eetd.lbl.gov/r-bldgsee.html>

**Subject**     **electrochemistry**

**Type**             **Scientific Divisions**

Chemical Sciences  
Atomic, Molecular and Optical Sciences  
<http://www.lbl.gov/LBL-Programs/CSD/research/AMOS/index.html>

Materials Sciences  
Materials Discovery, Design and Synthesis  
[http://www.lbl.gov/msd/programs/1md/md\\_intro.html](http://www.lbl.gov/msd/programs/1md/md_intro.html)

**Subject**     **electron microscopy**

**Type**             **National User Facilities**

Materials Sciences  
National Center for Electron Microscopy  
<http://ncem.lbl.gov/frames/center.htm>

**Type**             **Scientific Divisions**

Materials Sciences  
National Center for Electron Microscopy  
<http://ncem.lbl.gov/frames/center.htm>

Chemical Sciences  
Catalytic Science  
<http://www.lbl.gov/LBL-Programs/CSD/research/catalytic-science/index.html>

Life Sciences  
Technology Centers  
[http://www.lbl.gov/lsc/Research/Technology\\_Centers.html](http://www.lbl.gov/lsc/Research/Technology_Centers.html)

**Subject**     **electron tomography**

**Type**             **Scientific Divisions**

Life Sciences  
Bioenergy/GTL & Structural Biology  
<http://www.lbl.gov/lsc/Research/Bioenergy.html>

**Subject**     **electronic systems**

**Type**      **Scientific Divisions**

Engineering  
Electronics, Software & Instrumentation Engineering  
<http://engineering.lbl.gov/org/esie/>

**Subject**      **electroweak symmetry breaking**

**Type**      **Scientific Divisions**

Physics  
Theoretical Physics  
<https://www.lbl.gov/LBL-Programs/physics/research/theory.html>

**Subject**      **emerging technology**

**Type**      **Scientific Divisions**

Computational Research  
High Performance Computing Research Department  
<https://hpcrd.lbl.gov/>

**Subject**      **emissions**

**Type**      **Scientific Divisions**

Environmental Energy Technologies  
Atmospheric Sciences  
<http://eetd.lbl.gov/r-atmospheric.html>

**Subject**      **energy**

**Type**      **Scientific Divisions**

Engineering  
Mechanical Engineering  
<http://engineering.lbl.gov/org/me/index.html>

**Subject**      **energy bioscience**

**Type**      **Strategic Directions**

[http://www.lbl.gov/LBL-Programs/sp\\_biosci.html](http://www.lbl.gov/LBL-Programs/sp_biosci.html)

**Subject**    **energy consumption**

**Type**        **Scientific Divisions**

Environmental Energy Technologies  
Washington, DC, Projects Office  
<http://eetd.lbl.gov/eetd-org-dc.html>

**Subject**    **energy conversion**

**Type**        **Scientific Divisions**

Materials Sciences  
Condensed Matter and Materials Physics  
[http://www.lbl.gov/msd/programs/2cm/cm\\_intro.html](http://www.lbl.gov/msd/programs/2cm/cm_intro.html)

**Subject**    **energy demand**

**Type**        **Scientific Divisions**

Earth Sciences  
Climate Sciences  
<http://esd.lbl.gov/CSD/>

**Subject**    **energy distribution**

**Type**        **Scientific Divisions**

Environmental Energy Technologies  
Energy Analysis  
<http://eetd.lbl.gov/r-ea.html>

**Subject**    **energy efficiency**

**Type**        **Scientific Divisions**

Environmental Energy Technologies  
Advanced Energy Technologies  
<http://eetd.lbl.gov/r-aet.html>

Environmental Energy Technologies  
Indoor and Outdoor Environmental Quality  
<http://eetd.lbl.gov/r-indoor.html>

Chemical Sciences  
Catalytic Science  
<http://www.lbl.gov/LBL-Programs/CSD/research/catalytic-science/index.html>

Environmental Energy Technologies  
Buildings Energy Efficiency  
<http://eetd.lbl.gov/r-bldgsee.html>

Environmental Energy Technologies  
Washington, DC, Projects Office  
<http://eetd.lbl.gov/eetd-org-dc.html>

Environmental Energy Technologies  
Energy Analysis  
<http://eetd.lbl.gov/r-ea.html>

Materials Sciences  
Helios Solar Energy Research Center  
<http://www.lbl.gov/LBL-Programs/helios-serc/html/overview.html>

**Type**      **Strategic Directions**

Energy efficiency and sustainable energy  
  
[http://www.lbl.gov/LBL-Programs/sp\\_energy.html](http://www.lbl.gov/LBL-Programs/sp_energy.html)

**Subject**      **energy efficient technologies**

**Type**      **Scientific Divisions**

Environmental Energy Technologies  
Buildings Energy Efficiency  
<http://eetd.lbl.gov/r-bldgsee.html>

**Subject**      **energy end use**

**Type**      **Scientific Divisions**

Environmental Energy Technologies  
Energy Analysis  
<http://eetd.lbl.gov/r-ea.html>

**Subject**      **energy harvesting**

**Type**      **Scientific Divisions**

Physical Biosciences

Synthetic Biology

[http://pbd.lbl.gov/PBD\\_web\\_site/web\\_site/html/science/synthetic\\_biology.html](http://pbd.lbl.gov/PBD_web_site/web_site/html/science/synthetic_biology.html)

**Subject**      **energy policy**

**Type**      **Scientific Divisions**

Environmental Energy Technologies

Energy Analysis

<http://eetd.lbl.gov/r-ea.html>

**Subject**      **energy production**

**Type**      **Scientific Divisions**

Chemical Sciences

Catalytic Science

<http://www.lbl.gov/LBL-Programs/CSD/research/catalytic-science/index.html>

Life Sciences

Bioenergy/GTL & Structural Biology

<http://www.lbl.gov/lcd/Research/Bioenergy.html>

Physical Biosciences

Joint BioEnergy Institute

<http://www.jbei.org/>

Physical Biosciences

Solar Energy Research Center

<http://www.lbl.gov/LBL-Programs/helios-serc/index.html>

Physical Biosciences

GTL@Berkeley Lab

<http://pbd.lbl.gov/gtl/default.htm>

Materials Sciences

Helios Solar Energy Research Center

<http://www.lbl.gov/LBL-Programs/helios-serc/html/overview.html>

**Subject**      **energy reservoir engineering**

**Type**      **Scientific Divisions**

Earth Sciences  
Hydrogeology  
<http://esd.lbl.gov/departments/hydrogeology/>

**Subject** energy simulation

**Type** Scientific Divisions

Environmental Energy Technologies  
Buildings Energy Efficiency  
<http://eetd.lbl.gov/r-bldgsee.html>

**Subject** energy standards

**Type** Scientific Divisions

Environmental Energy Technologies  
Energy Analysis  
<http://eetd.lbl.gov/r-ea.html>

**Subject** energy storage

**Type** Scientific Divisions

Chemical Sciences  
Catalytic Science  
<http://www.lbl.gov/LBL-Programs/CSD/research/catalytic-science/index.html>

**Subject** energy transmission

**Type** Scientific Divisions

Environmental Energy Technologies  
Energy Analysis  
<http://eetd.lbl.gov/r-ea.html>

**Subject** engineering

**Type** National User Facilities

Advanced Light Source (ALS)  
<http://www.als.lbl.gov/>

**Type**      **Scientific Divisions**

Advanced Light Source (ALS)

<http://www.als.lbl.gov/>

Physics

Dark Energy & Dark Matter

<http://www.lbl.gov/LBL-Programs/physics/research/dark-energy/supernova-cosmo.html>

Nuclear Science

Low energy nuclear physics

<http://www.lbl.gov/nsd/programs/LENP.html>

Physical Biosciences

Joint BioEnergy Institute

<http://www.jbei.org/>

**Subject**      **engineering business services**

**Type**      **Scientific Divisions**

Engineering

Operations

<http://engineering.lbl.gov/org/ops.html>

**Subject**      **environment**

**Type**      **Scientific Divisions**

Engineering

Operations

<http://engineering.lbl.gov/org/ops.html>

**Subject**      **environmental bioremediation**

**Type**      **Scientific Divisions**

Physical Biosciences

Synthetic Biology

[http://pbd.lbl.gov/PBD\\_web\\_site/web\\_site/html/science/synthetic\\_biology.html](http://pbd.lbl.gov/PBD_web_site/web_site/html/science/synthetic_biology.html)

Earth Sciences

Ecology

<http://esd.lbl.gov/departments/ecology/>

**Subject**      **environmental characterization**

**Type**      **National User Facilities**

Joint Genome Institute

<http://www.jgi.doe.gov/>

**Type**      **Scientific Divisions**

Genomics (complements the US DOE Joint Genome Institute)

<http://www.lbl.gov/gsd/>

**Subject**      **environmental cleanup**

**Type**      **National User Facilities**

Joint Genome Institute

<http://www.jgi.doe.gov/>

**Type**      **Scientific Divisions**

Genomics (complements the US DOE Joint Genome Institute)

<http://www.lbl.gov/gsd/>

Physical Biosciences

GTL@Berkeley Lab

<http://pbd.lbl.gov/gtl/default.htm>

**Subject**      **environmental contamination**

**Type**      **Scientific Divisions**

Physical Biosciences

Virtual Institute of Microbial Stress and Survival (VIMSS)

<http://vimss.lbl.gov/>

**Subject**      **environmental impact**

**Type**      **Scientific Divisions**

Environmental Energy Technologies  
Advanced Energy Technologies  
<http://eetd.lbl.gov/r-aet.html>

**Subject** **environmental policy**

**Type** **Scientific Divisions**

Environmental Energy Technologies  
Energy Analysis  
<http://eetd.lbl.gov/r-ea.html>

**Subject** **environmental processes modelling**

**Type** **Strategic Directions**

Climate change and environmental science  
  
[http://www.lbl.gov/LBL-Programs/sp\\_climate.html](http://www.lbl.gov/LBL-Programs/sp_climate.html)

**Subject** **environmental protection**

**Type** **Scientific Divisions**

Environmental Energy Technologies  
Energy Analysis  
<http://eetd.lbl.gov/r-ea.html>

**Subject** **environmental remediation**

**Type** **Scientific Divisions**

Earth Sciences  
Hydrogeology  
<http://esd.lbl.gov/departments/hydrogeology/>

Physical Biosciences  
Systems Biology  
[http://pbd.lbl.gov/PBD\\_web\\_site/web\\_site/html/science/systems\\_biology.html](http://pbd.lbl.gov/PBD_web_site/web_site/html/science/systems_biology.html)

Environmental Energy Technologies  
Advanced Energy Technologies  
<http://eetd.lbl.gov/r-aet.html>

**Type** **Strategic Directions**

[http://www.lbl.gov/LBL-Programs/sp\\_climate.html](http://www.lbl.gov/LBL-Programs/sp_climate.html)

**Subject** environmental restoration

**Type** Scientific Divisions

Chemical Sciences

Seaborg Center: Actinide Science

<http://actinide.lbl.gov/gtsc/>

**Subject** environmental science

**Type** National User Facilities

Advanced Light Source (ALS)

<http://www.als.lbl.gov/>

**Type** Scientific Divisions

Advanced Light Source (ALS)

<http://www.als.lbl.gov/>

**Subject** environmental stockpile stewardshi

**Type** Scientific Divisions

Chemical Sciences

Seaborg Center: Actinide Science

<http://actinide.lbl.gov/gtsc/>

**Subject** environmental stress

**Type** Scientific Divisions

Life Sciences

Bioenergy/GTL & Structural Biology

<http://www.lbl.gov/lsc/Research/Bioenergy.html>

**Subject** environmental sustainability

**Type**      **Scientific Divisions**

Earth Sciences

Ecology

<http://esd.lbl.gov/departments/ecology/>

**Subject**      **envrionmental chemistry**

**Type**      **Scientific Divisions**

Chemical Sciences

Seaborg Center: Actinide Science

<http://actinide.lbl.gov/gtsc/>

Chemical Sciences

Seaborg Center: Actinide Science

<http://actinide.lbl.gov/gtsc/>

**Subject**      **enzymes**

**Type**      **Scientific Divisions**

Physical Biosciences

Joint BioEnergy Institute

<http://www.jbei.org/>

**Subject**      **epigenetics**

**Type**      **Scientific Divisions**

Life Sciences

Cancer & DNA Damage Responses

[http://www.lbl.gov/lcd/Research/cancer\\_and\\_radiation.html](http://www.lbl.gov/lcd/Research/cancer_and_radiation.html)

**Subject**      **evolutionary genomics**

**Type**      **Scientific Divisions**

Genomics (complements the US DOE Joint Genome Institute)

<http://www.lbl.gov/gsd/>

**Subject**      **exoplanets**

**Type**      **Scientific Divisions**

Physics

Dark Energy & Dark Matter

<http://www.lbl.gov/LBL-Programs/physics/research/dark-energy/supernova-cosmo.html>

**Subject**      **extreme ultraviolet radiation**

**Type**      **Scientific Divisions**

Materials Sciences

Center for X-Ray Optics

<http://www-cxro.lbl.gov/>

**Subject**      **ferroelectrics**

**Type**      **Scientific Divisions**

Materials Sciences

Materials Discovery, Design and Synthesis

[http://www.lbl.gov/msd/programs/1md/md\\_intro.html](http://www.lbl.gov/msd/programs/1md/md_intro.html)

**Subject**      **forestry**

**Type**      **Scientific Divisions**

Environmental Energy Technologies

Energy Analysis

<http://eetd.lbl.gov/r-ea.html>

**Subject**      **formal theory**

**Type**      **Scientific Divisions**

Physics

Theoretical Physics

<http://www.lbl.gov/LBL-Programs/physics/research/theory.html>

**Subject**      **fuel cells**

**Type**      **Scientific Divisions**

Environmental Energy Technologies  
Advanced Energy Technologies  
<http://eetd.lbl.gov/r-aet.html>

**Type**      **Strategic Directions**

Soft X-Ray science for discovery  
Advanced Light Source, Accelerator and Fusion Research Division  
[http://www.lbl.gov/LBL-Programs/sp\\_xray.html](http://www.lbl.gov/LBL-Programs/sp_xray.html)

**Subject**      **fuels**

**Type**      **Scientific Divisions**

Materials Sciences  
Helios Solar Energy Research Center  
<http://www.lbl.gov/LBL-Programs/helios-serc/html/overview.html>

**Subject**      **functional genomics**

**Type**      **Scientific Divisions**

Life Sciences  
Genome Dynamics  
[http://www.lbl.gov/lcd/Research/Genome\\_Dynamics.html](http://www.lbl.gov/lcd/Research/Genome_Dynamics.html)

**Subject**      **functional relationships in biology**

**Type**      **Scientific Divisions**

Life Sciences  
Bioenergy/GTL & Structural Biology  
<http://www.lbl.gov/lcd/Research/Bioenergy.html>

**Subject**      **fundamental symmetries**

**Type**      **Scientific Divisions**

Nuclear Science  
Low energy nuclear physics  
<http://www.lbl.gov/nsd/programs/LENP.html>

**Subject**      **fusion energy**

**Type**      **Scientific Divisions**

Accelerator & Fusion Research Division  
Fusion Energy Research  
<http://www-afrd.lbl.gov/fusion.html>

**Subject**      **gamma rays**

**Type**      **Scientific Divisions**

Engineering  
Electronics, Software & Instrumentation Engineering  
<http://engineering.lbl.gov/org/esie/>  
  
Nuclear Science  
Low energy nuclear physics  
<http://www.lbl.gov/nsd/programs/LENP.html>

**Subject**      **gamma-ray detector system**

**Type**      **Scientific Divisions**

Nuclear Science  
GRETINA  
<http://www.lbl.gov/nsd/programs/GRETINA.html>

**Subject**      **gene regulatory networks**

**Type**      **Scientific Divisions**

Life Sciences  
Bioenergy/GTL & Structural Biology  
<http://www.lbl.gov/lcd/Research/Bioenergy.html>

**Subject**      **gene structures**

**Type**      **Scientific Divisions**

Life Sciences  
Genome Dynamics  
[http://www.lbl.gov/lcd/Research/Genome\\_Dynamics.html](http://www.lbl.gov/lcd/Research/Genome_Dynamics.html)

**Subject**      **genetic analysis**

**Type**      **National User Facilities**

Joint Genome Institute

<http://www.jgi.doe.gov/>

**Type**      **Scientific Divisions**

Genomics (complements the US DOE Joint Genome Institute)

<http://www.lbl.gov/gsd/>

**Subject**    **genetic expression**

**Type**      **Scientific Divisions**

Physical Biosciences

Genome Research

[http://pbd.lbl.gov/PBD\\_web\\_site/web\\_site/html/science/genome\\_research.html](http://pbd.lbl.gov/PBD_web_site/web_site/html/science/genome_research.html)

**Subject**    **genetics**

**Type**      **Scientific Divisions**

Physical Biosciences

Computational & Theoretical Biology

[http://pbd.lbl.gov/PBD\\_web\\_site/web\\_site/html/science/computational\\_theoretical\\_biology.html](http://pbd.lbl.gov/PBD_web_site/web_site/html/science/computational_theoretical_biology.html)

Genomics (complements the US DOE Joint Genome Institute)

<http://www.lbl.gov/gsd/>

**Subject**    **genetics - biological pathways**

**Type**      **Scientific Divisions**

Life Sciences

Bioenergy/GTL & Structural Biology

<http://www.lbl.gov/lrd/Research/Bioenergy.html>

**Subject**    **genetics - molecular markers**

**Type**      **Scientific Divisions**

Life Sciences  
Cancer & DNA Damage Responses  
[http://www.lbl.gov/lrd/Research/cancer\\_and\\_radiation.html](http://www.lbl.gov/lrd/Research/cancer_and_radiation.html)

**Subject** genome annotation

**Type** Scientific Divisions

Life Sciences  
Bioenergy/GTL & Structural Biology  
<http://www.lbl.gov/lrd/Research/Bioenergy.html>

**Subject** genome biology

**Type** National User Facilities

Joint Genome Institute  
<http://www.jgi.doe.gov/>

**Type** Scientific Divisions

Genomics (complements the US DOE Joint Genome Institute)  
<http://www.lbl.gov/gsd/>

**Subject** genome maps

**Type** Scientific Divisions

Life Sciences  
Cancer & DNA Damage Responses  
[http://www.lbl.gov/lrd/Research/cancer\\_and\\_radiation.html](http://www.lbl.gov/lrd/Research/cancer_and_radiation.html)  
Life Sciences  
Genome Dynamics  
[http://www.lbl.gov/lrd/Research/Genome\\_Dynamics.html](http://www.lbl.gov/lrd/Research/Genome_Dynamics.html)

**Subject** genome sequence characterization

**Type** Scientific Divisions

Genomics (complements the US DOE Joint Genome Institute)  
<http://www.lbl.gov/gsd/>

**Subject** genome sequences analysis

**Type** Scientific Divisions

Genomics (complements the US DOE Joint Genome Institute)

<http://www.lbl.gov/gsd/>

**Subject** genomic analyses

**Type** Scientific Divisions

Life Sciences

Bioenergy/GTL & Structural Biology

<http://www.lbl.gov/lcd/Research/Bioenergy.html>

**Subject** genomic technologies

**Type** National User Facilities

Joint Genome Institute

<http://www.jgi.doe.gov/>

**Type** Scientific Divisions

Genomics (complements the US DOE Joint Genome Institute)

<http://www.lbl.gov/gsd/>

**Subject** genomics

**Type** National User Facilities

Joint Genome Institute

<http://www.jgi.doe.gov/>

**Type** Scientific Divisions

Engineering

Electronics, Software & Instrumentation Engineering

<http://engineering.lbl.gov/org/esie/>

Physical Biosciences

GTL@Berkeley Lab

<http://pbd.lbl.gov/gtl/default.htm>

Engineering

Mechanical Engineering

<http://engineering.lbl.gov/org/me/index.html>

**Subject**    **geostrophysics**

**Type**        **Scientific Divisions**

Nuclear Science

Institute for Nuclear and Particle Astrophysics (INPA)

<http://www.lbl.gov/nsd/programs/INPA.html>

**Subject**    **geochemical transport**

**Type**        **Scientific Divisions**

Earth Sciences

Geochemistry

<http://esd.lbl.gov/GEO/>

**Subject**    **geochemistry**

**Type**        **Scientific Divisions**

Earth Sciences

Geochemistry

<http://esd.lbl.gov/GEO/>

**Subject**    **geologic modeling**

**Type**        **Scientific Divisions**

Earth Sciences

Hydrogeology

<http://esd.lbl.gov/departments/hydrogeology/>

**Subject**    **geophysics**

**Type**        **Scientific Divisions**

Earth Sciences  
Geophysics  
<http://esd.lbl.gov/GG/>

**Subject** **geothermal energy**

**Type** **Scientific Divisions**

Earth Sciences  
Hydrogeology  
<http://esd.lbl.gov/departments/hydrogeology/>

**Subject** **global climate**

**Type** **Scientific Divisions**

Environmental Energy Technologies  
Atmospheric Sciences  
<http://eetd.lbl.gov/r-atmospheric.html>

**Subject** **global energy use**

**Type** **Scientific Divisions**

Environmental Energy Technologies  
Energy Analysis  
<http://eetd.lbl.gov/r-ea.html>

**Subject** **grand unification**

**Type** **Scientific Divisions**

Physics  
Theoretical Physics  
<http://www.lbl.gov/LBL-Programs/physics/research/theory.html>

**Subject** **gravitational weak lensing**

**Type** **Scientific Divisions**

Physics  
Dark Energy & Dark Matter  
<http://www.lbl.gov/LBL-Programs/physics/research/dark-energy/supernova-cosmo.html>

**Subject** green chemistry

**Type** Scientific Divisions

Chemical Sciences

Catalytic Science

<http://www.lbl.gov/LBL-Programs/CSD/research/catalytic-science/index.html>

**Type** Strategic Directions

Soft X-Ray science for discovery

Advanced Light Source, Accelerator and Fusion Research Division

[http://www.lbl.gov/LBL-Programs/sp\\_xray.html](http://www.lbl.gov/LBL-Programs/sp_xray.html)

**Subject** green house gases

**Type** Scientific Divisions

Environmental Energy Technologies

Energy Analysis

<http://eetd.lbl.gov/r-ea.html>

**Subject** grid computing

**Type** National User Facilities

Computational Research

Advanced Computing for Science (ACS)

<http://acs.lbl.gov/>

**Subject** health

**Type** Scientific Divisions

Engineering

Operations

<http://engineering.lbl.gov/org/ops.html>

**Subject** health and productivity

**Type** Scientific Divisions

Environmental Energy Technologies  
Indoor and Outdoor Environmental Quality  
<http://eetd.lbl.gov/r-indoor.html>

**Subject**    **health and safety**

**Type**        **Scientific Divisions**

Environmental Energy Technologies  
Buildings Energy Efficiency  
<http://eetd.lbl.gov/r-bldgsee.html>

Environmental Energy Technologies  
Indoor and Outdoor Environmental Quality  
<http://eetd.lbl.gov/r-indoor.html>

**Subject**    **health risk assessments**

**Type**        **Scientific Divisions**

Environmental Energy Technologies  
Indoor and Outdoor Environmental Quality  
<http://eetd.lbl.gov/r-indoor.html>

**Subject**    **heart disease**

**Type**        **Scientific Divisions**

Life Sciences  
Radiotracer Development & Imaging Technology  
[http://www.lbl.gov/lrd/Research/Radiochemistry\\_Instrumentation.htm](http://www.lbl.gov/lrd/Research/Radiochemistry_Instrumentation.htm)

**Subject**    **heat islands**

**Type**        **Scientific Divisions**

Environmental Energy Technologies  
Buildings Energy Efficiency  
<http://eetd.lbl.gov/r-bldgsee.html>

**Subject**    **heavy element chemistry**

**Type**        **Scientific Divisions**

Chemical Sciences  
Seaborg Center: Actinide Science  
<http://actinide.lbl.gov/gtsc/>

**Subject**    **heavy element studies**

**Type**        **Scientific Divisions**

Nuclear Science  
88-Inch Cyclotron Operations  
<http://www.lbl.gov/nsd/programs/88-inch.html>

**Subject**    **heavy ion fusion**

**Type**        **Scientific Divisions**

Engineering  
Mechanical Engineering  
<http://engineering.lbl.gov/org/me/index.html>

**Subject**    **heavy ions**

**Type**        **Scientific Divisions**

Accelerator & Fusion Research Division  
Fusion Energy Research  
<http://www-afrd.lbl.gov/fusion.html>

**Subject**    **heterogeneous catalysis**

**Type**        **Scientific Divisions**

Physical Biosciences  
Computational & Theoretical Biology  
[http://pbd.lbl.gov/PBD\\_web\\_site/web\\_site/html/science/computational\\_theoretical\\_biology.html](http://pbd.lbl.gov/PBD_web_site/web_site/html/science/computational_theoretical_biology.html)

**Subject**    **high energy neutrinos**

**Type**        **Scientific Divisions**

Nuclear Science  
Institute for Nuclear and Particle Astrophysics (INPA)  
<http://www.lbl.gov/nsd/programs/INPA.html>

**Subject**    **high energy nuclear collisions**

**Type**        **Scientific Divisions**

Nuclear Science  
    Relativistic Nuclear Collisions  
        <http://www.lbl.gov/nsd/programs/RNC.html>

**Subject**    **high energy particle collisions**

**Type**        **Scientific Divisions**

Physics  
    Energy Frontier  
        <http://www.lbl.gov/LBL-Programs/physics/research/frontier/atlas.html>

**Subject**    **high energy physics**

**Type**        **Scientific Divisions**

Engineering  
    Mechanical Engineering  
        <http://engineering.lbl.gov/org/me/index.html>

**Subject**    **high performance computing**

**Type**        **National User Facilities**

National Energy Research Scientific Computing Center (NERSC)  
  
    <http://www.nersc.gov/about/mission.php>

**Type**        **Scientific Divisions**

Accelerator and Fusion Research  
    Center for Beam Physics  
        <http://www-afrod.lbl.gov/cbp.html>  
  
National Energy Research Scientific Computing Center (NERSC)  
  
    <http://www.nersc.gov/about/mission.php>

**Type**        **Strategic Directions**

Computational science and networking

[http://www.lbl.gov/LBL-Programs/sp\\_compsci.html](http://www.lbl.gov/LBL-Programs/sp_compsci.html)

**Subject** **high speed Internet networks**

**Type** **National User Facilities**

Computational Research  
Energy Sciences Network (ESnet)  
<http://www.es.net/>

**Type** **Scientific Divisions**

Computational Research  
Energy Sciences Network (ESnet)  
<http://www.es.net/>

**Subject** **high speed network**

**Type** **Strategic Directions**

Computational science and networking  
  
[http://www.lbl.gov/LBL-Programs/sp\\_compsci.html](http://www.lbl.gov/LBL-Programs/sp_compsci.html)

**Subject** **high throughput discovery**

**Type** **Scientific Divisions**

Life Sciences  
Radiotracer Development & Imaging Technology  
[http://www.lbl.gov/lrd/Research/Radiochemistry\\_Instrumentation.htm](http://www.lbl.gov/lrd/Research/Radiochemistry_Instrumentation.htm)

**Subject** **high-energy heavy-ion physics**

**Type** **Scientific Divisions**

Nuclear Science  
Nuclear theory  
<http://www.lbl.gov/nsd/programs/theory.html>

**Subject** **high-throughput analysis**

**Type**      **Scientific Divisions**

Life Sciences  
Bioenergy/GTL & Structural Biology  
<http://www.lbl.gov/lrd/Research/Bioenergy.html>

**Subject**      **high-throughput protein expression**

**Type**      **Scientific Divisions**

Physical Biosciences  
Joint BioEnergy Institute  
<http://www.jbei.org/>

**Subject**      **high-throughput sequencing**

**Type**      **Scientific Divisions**

Genomics (complements the US DOE Joint Genome Institute)  
  
<http://www.lbl.gov/gsd/>

**Subject**      **high-throughput structure determin**

**Type**      **Scientific Divisions**

Physical Biosciences  
Computational Crystallography Initiative (CCI)  
<http://cci.lbl.gov/>

**Subject**      **high-throughput technologies**

**Type**      **Scientific Divisions**

Physical Biosciences  
GTL@Berkeley Lab  
<http://pbd.lbl.gov/gtl/default.htm>

**Subject**      **histologic molecular imaging**

**Type**      **Scientific Divisions**

Life Sciences

Cancer & DNA Damage Responses

[http://www.lbl.gov/lrd/Research/cancer\\_and\\_radiation.html](http://www.lbl.gov/lrd/Research/cancer_and_radiation.html)

**Subject**    **hydrocarbon fuels**

**Type**        **Scientific Divisions**

Environmental Energy Technologies

Advanced Energy Technologies

<http://eetd.lbl.gov/r-aet.html>

**Subject**    **hydroecology**

**Type**        **Scientific Divisions**

Earth Sciences

Ecology

<http://esd.lbl.gov/departments/ecology/>

**Subject**    **hydrogeology**

**Type**        **Scientific Divisions**

Earth Sciences

Hydrogeology

<http://esd.lbl.gov/departments/hydrogeology/>

**Subject**    **hydrogeophysics**

**Type**        **Scientific Divisions**

Earth Sciences

Geophysics

<http://esd.lbl.gov/GG/>

**Subject**    **hydrology**

**Type**        **Scientific Divisions**

Earth Sciences

Hydrogeology

<http://esd.lbl.gov/departments/hydrogeology/>

**Subject**    **imagers**

**Type**        **Scientific Divisions**

Physics

Dark Energy & Dark Matter

<http://www.lbl.gov/LBL-Programs/physics/research/dark-energy/supernova-cosmo.html>

**Subject**    **imaging**

**Type**        **National User Facilities**

Materials Sciences

Molecular Foundry

<http://foundry.lbl.gov/about/index.html>

**Type**        **Scientific Divisions**

Genomics (complements the US DOE Joint Genome Institute)

<http://www.lbl.gov/gsd/>

Chemical Sciences

Chemical Physics

<http://www.lbl.gov/csd/research/chemical-physics/index.html>

Physical Biosciences

Joint BioEnergy Institute

<http://www.jbei.org/>

Life Sciences

Radiotracer Development & Imaging Technology

[http://www.lbl.gov/lrd/Research/Radiochemistry\\_Instrumentation.htm](http://www.lbl.gov/lrd/Research/Radiochemistry_Instrumentation.htm)

Physical Biosciences

National Center for X-Ray Tomography

<http://pbd.lbl.gov/ncxt/default.htm>

Physical Biosciences

Computational & Theoretical Biology

[http://pbd.lbl.gov/PBD\\_web\\_site/web\\_site/html/science/computational\\_theoretical\\_biology.html](http://pbd.lbl.gov/PBD_web_site/web_site/html/science/computational_theoretical_biology.html)

Life Sciences

Cancer & DNA Damage Responses

[http://www.lbl.gov/lrd/Research/cancer\\_and\\_radiation.html](http://www.lbl.gov/lrd/Research/cancer_and_radiation.html)

Materials Sciences

Molecular Foundry

<http://foundry.lbl.gov/about/index.html>

**Subject** indoor air quality

**Type** Scientific Divisions

Environmental Energy Technologies  
Indoor and Outdoor Environmental Quality  
<http://eetd.lbl.gov/r-indoor.html>

**Subject** industrial fermentation

**Type** Scientific Divisions

Physical Biosciences  
Synthetic Biology  
[http://pbd.lbl.gov/PBD\\_web\\_site/web\\_site/html/science/synthetic\\_biology.html](http://pbd.lbl.gov/PBD_web_site/web_site/html/science/synthetic_biology.html)

**Subject** informatics

**Type** National User Facilities

Joint Genome Institute  
  
<http://www.jgi.doe.gov/>

**Type** Scientific Divisions

Life Sciences  
Genome Dynamics  
[http://www.lbl.gov/lrd/Research/Genome\\_Dynamics.html](http://www.lbl.gov/lrd/Research/Genome_Dynamics.html)  
  
Engineering  
Electronics, Software & Instrumentation Engineering  
<http://engineering.lbl.gov/org/esie/>  
  
Genomics (complements the US DOE Joint Genome Institute)  
  
<http://www.lbl.gov/gsd/>

**Subject** information science

**Type** National User Facilities

National Energy Research Scientific Computing Center (NERSC)  
  
<http://www.nersc.gov/about/mission.php>

**Type**      **Scientific Divisions**

National Energy Research Scientific Computing Center (NERSC)

<http://www.nersc.gov/about/mission.php>

**Subject**      **instrumentation**

**Type**      **Scientific Divisions**

Physical Biosciences

Joint BioEnergy Institute

<http://www.jbei.org/>

Physics

Dark Energy & Dark Matter

<http://www.lbl.gov/LBL-Programs/physics/research/dark-energy/supernova-cosmo.html>

Nuclear Science

Low energy nuclear physics

<http://www.lbl.gov/nsd/programs/LENP.html>

**Subject**      **integrated circuits**

**Type**      **Scientific Divisions**

Engineering

Electronics, Software & Instrumentation Engineering

<http://engineering.lbl.gov/org/esie/>

**Subject**      **intercellular communication**

**Type**      **Scientific Divisions**

Physical Biosciences

Synthetic Biology

[http://pbd.lbl.gov/PBD\\_web\\_site/web\\_site/html/science/synthetic\\_biology.html](http://pbd.lbl.gov/PBD_web_site/web_site/html/science/synthetic_biology.html)

**Subject**      **interdisciplinary science**

**Type**      **National User Facilities**

National Energy Research Scientific Computing Center (NERSC)

<http://www.nersc.gov/about/mission.php>

**Type**      **Scientific Divisions**

National Energy Research Scientific Computing Center (NERSC)

<http://www.nersc.gov/about/mission.php>

**Subject**      **interstellar chemistry**

**Type**      **Scientific Divisions**

Chemical Sciences

Chemical Physics

<http://www.lbl.gov/csd/research/chemical-physics/index.html>

**Subject**      **ion beams**

**Type**      **Scientific Divisions**

Engineering

Electronics, Software & Instrumentation Engineering

<http://engineering.lbl.gov/org/esie/>

Accelerator & Fusion Research

Ion Beam Technology

<http://www-afrd.lbl.gov/ibt.html>

Engineering

Mechanical Engineering

<http://engineering.lbl.gov/org/me/index.html>

**Subject**      **ion sources**

**Type**      **Scientific Divisions**

Accelerator & Fusion Research

Ion Beam Technology

<http://www-afrd.lbl.gov/ibt.html>

**Subject**      **isotope geochemistry**

**Type**      **Scientific Divisions**

Earth Sciences

Geochemistry

<http://esd.lbl.gov/GEO/>

**Subject**    **land use**

**Type**        **Scientific Divisions**

Environmental Energy Technologies  
Energy Analysis  
<http://eetd.lbl.gov/r-ea.html>

**Subject**    **Large Hadron Collider**

**Type**        **Scientific Divisions**

Physics  
Energy Frontier  
<http://www.lbl.gov/LBL-Programs/physics/research/frontier/atlas.html>

**Subject**    **large scale computing**

**Type**        **National User Facilities**

Computational Research  
Advanced Computing for Science (ACS)  
<http://acs.lbl.gov/>

**Subject**    **lasers**

**Type**        **Scientific Divisions**

Accelerator and Fusion Research  
Laser Optics and Accelerator Systems Integrated Studies  
<http://www-afrd.lbl.gov/loasis.html>

Chemical Sciences  
Chemical Physics  
<http://www.lbl.gov/csd/research/chemical-physics/index.html>

Chemical Sciences  
Seaborg Center: Actinide Science  
<http://actinide.lbl.gov/gtsc/>

Engineering  
Electronics, Software & Instrumentation Engineering  
<http://engineering.lbl.gov/org/esie/>

Environmental Energy Technologies  
Advanced Energy Technologies  
<http://eetd.lbl.gov/r-aet.html>

**Subject**     **lepton flavor**

**Type**             **Scientific Divisions**

Physics  
    Quark & Lepton Flavor Physics  
        Quark & Lepton Flavor Physics

**Subject**     **lighting**

**Type**             **Scientific Divisions**

Environmental Energy Technologies  
    Buildings Energy Efficiency  
        <http://eetd.lbl.gov/r-bldgsee.html>

**Subject**     **lighting efficiency**

**Type**             **Scientific Divisions**

Environmental Energy Technologies  
    Buildings Energy Efficiency  
        <http://eetd.lbl.gov/r-bldgsee.html>

**Subject**     **low emission combustion**

**Type**             **Scientific Divisions**

Environmental Energy Technologies  
    Advanced Energy Technologies  
        <http://eetd.lbl.gov/r-aet.html>

**Subject**     **luminous galaxies**

**Type**             **Scientific Divisions**

Physics  
    Dark Energy & Dark Matter  
        <http://www.lbl.gov/LBL-Programs/physics/research/dark-energy/supernova-cosmo.html>

**Subject**     **macromolecular analysis**

**Type**      **Scientific Divisions**

Physical Biosciences

Advanced Imaging

[http://pbd.lbl.gov/PBD\\_web\\_site/web\\_site/html/science/advanced\\_imaging.html](http://pbd.lbl.gov/PBD_web_site/web_site/html/science/advanced_imaging.html)

**Subject**      **macromolecular protein crystallogra**

**Type**      **Scientific Divisions**

Physical Biosciences

Berkeley Center for Structural Biology

[http://bcsb.als.lbl.gov/wiki/index.php/Main\\_Page](http://bcsb.als.lbl.gov/wiki/index.php/Main_Page)

**Subject**      **magnetic soft x-ray microscopy**

**Type**      **Scientific Divisions**

Materials Sciences

Center for X-Ray Optics

<http://www-cxro.lbl.gov/>

**Subject**      **magnets**

**Type**      **National User Facilities**

Advanced Light Source (ALS)

<http://www.als.lbl.gov/>

**Type**      **Scientific Divisions**

Materials Sciences

Condensed Matter and Materials Physics

[http://www.lbl.gov/msd/programs/2cm/cm\\_intro.html](http://www.lbl.gov/msd/programs/2cm/cm_intro.html)

Advanced Light Source (ALS)

<http://www.als.lbl.gov/>

Materials Sciences

Materials Discovery, Design and Synthesis

[http://www.lbl.gov/msd/programs/1md/md\\_intro.html](http://www.lbl.gov/msd/programs/1md/md_intro.html)

Engineering  
Mechanical Engineering  
<http://engineering.lbl.gov/org/me/index.html>

Accelerator & Fusion Research  
Superconducting magnets  
<http://www-afrod.lbl.gov/super.html>

**Subject**    **malaria**

**Type**        **National User Facilities**

Advanced Light Source (ALS)  
  
<http://www.als.lbl.gov/>

**Type**        **Scientific Divisions**

Advanced Light Source (ALS)  
  
<http://www.als.lbl.gov/>

**Subject**    **marine geochemistry**

**Type**        **Scientific Divisions**

Earth Sciences  
Geochemistry  
<http://esd.lbl.gov/GEO/>

**Subject**    **mask defect analysis**

**Type**        **Scientific Divisions**

Materials Sciences  
Center for X-Ray Optics  
<http://www-cxro.lbl.gov/>

**Subject**    **mass spectrometry**

**Type**        **Scientific Divisions**

Life Sciences  
Resources  
[http://www.lbl.gov/lrd/Research/Research\\_Resources.html](http://www.lbl.gov/lrd/Research/Research_Resources.html)

**Subject** materials chemistry

**Type** Scientific Divisions

Materials Sciences

Materials Discovery, Design and Synthesis

[http://www.lbl.gov/msd/programs/1md/md\\_intro.html](http://www.lbl.gov/msd/programs/1md/md_intro.html)

**Subject** materials phase transformations

**Type** National User Facilities

Materials Sciences

National Center for Electron Microscopy

<http://ncem.lbl.gov/frames/center.htm>

**Type** Scientific Divisions

Materials Sciences

National Center for Electron Microscopy

<http://ncem.lbl.gov/frames/center.htm>

**Subject** materials science

**Type** National User Facilities

Advanced Light Source (ALS)

<http://www.als.lbl.gov/>

**Type** Scientific Divisions

Advanced Light Source (ALS)

<http://www.als.lbl.gov/>

**Subject** materials science behavior

**Type** Scientific Divisions

Materials Sciences

Condensed Matter and Materials Physics

[http://www.lbl.gov/msd/programs/2cm/cm\\_intro.html](http://www.lbl.gov/msd/programs/2cm/cm_intro.html)

**Subject**     **mathematical physics**

**Type**             **Scientific Divisions**

Life Sciences

    Radiotracer Development & Imaging Technology

[http://www.lbl.gov/lrd/Research/Radiochemistry\\_Instrumentation.htm](http://www.lbl.gov/lrd/Research/Radiochemistry_Instrumentation.htm)

**Subject**     **mathematics**

**Type**             **Scientific Divisions**

Computational Research

    High Performance Computing Research Department

<https://hpcrd.lbl.gov/>

Physical Biosciences

    Computational & Theoretical Biology

[http://pbd.lbl.gov/PBD\\_web\\_site/web\\_site/html/science/computational\\_theoretical\\_biology.html](http://pbd.lbl.gov/PBD_web_site/web_site/html/science/computational_theoretical_biology.html)

**Subject**     **mathematics modelling**

**Type**             **Scientific Divisions**

Computational Research

    High Performance Computing Research Department

<https://hpcrd.lbl.gov/>

**Subject**     **mechanochemical energy conversio**

**Type**             **Scientific Divisions**

Physical Biosciences

    Molecular Machines

[http://pbd.lbl.gov/PBD\\_web\\_site/web\\_site/html/science/molecular\\_machines.html](http://pbd.lbl.gov/PBD_web_site/web_site/html/science/molecular_machines.html)

**Subject**     **memory**

**Type**             **Scientific Divisions**

Life Sciences

    Radiotracer Development & Imaging Technology

[http://www.lbl.gov/lrd/Research/Radiochemistry\\_Instrumentation.htm](http://www.lbl.gov/lrd/Research/Radiochemistry_Instrumentation.htm)

**Subject**     **metabolomics**

**Type**             **Scientific Divisions**

Life Sciences

Bioenergy/GTL & Structural Biology

<http://www.lbl.gov/lrd/Research/Bioenergy.html>

**Subject**     **metadata**

**Type**             **National User Facilities**

Computational Research

Advanced Computing for Science (ACS)

<http://acs.lbl.gov/>

**Subject**     **metagenomics**

**Type**             **National User Facilities**

Joint Genome Institute

<http://www.jgi.doe.gov/>

**Subject**     **microarray analysis**

**Type**             **Scientific Divisions**

Life Sciences

Resources

[http://www.lbl.gov/lrd/Research/Research\\_Resources.html](http://www.lbl.gov/lrd/Research/Research_Resources.html)

**Subject**     **microbes**

**Type**             **Scientific Divisions**

Physical Biosciences

GTL@Berkeley Lab

<http://pbd.lbl.gov/gtl/default.htm>

**Subject**     **microbial ecology**

**Type**      **National User Facilities**

Joint Genome Institute

<http://www.jgi.doe.gov/>

**Type**      **Scientific Divisions**

Genomics (complements the US DOE Joint Genome Institute)

<http://www.lbl.gov/gsd/>

**Subject**      **microcharacterization**

**Type**      **National User Facilities**

Materials Sciences

National Center for Electron Microscopy

<http://ncem.lbl.gov/frames/center.htm>

**Type**      **Scientific Divisions**

Materials Sciences

National Center for Electron Microscopy

<http://ncem.lbl.gov/frames/center.htm>

**Subject**      **microelectronics**

**Type**      **National User Facilities**

Materials Sciences

National Center for Electron Microscopy

<http://ncem.lbl.gov/frames/center.htm>

**Type**      **Scientific Divisions**

Materials Sciences

National Center for Electron Microscopy

<http://ncem.lbl.gov/frames/center.htm>

**Subject**      **microorganisms**

**Type**      **Scientific Divisions**

Physical Biosciences

Virtual Institute of Microbial Stress and Survival (VIMSS)

<http://vimss.lbl.gov/>

**Subject**     **microscopy**

**Type**             **Scientific Divisions**

Life Sciences

Resources

[http://www.lbl.gov/lrd/Research/Research\\_Resources.html](http://www.lbl.gov/lrd/Research/Research_Resources.html)

Engineering

Mechanical Engineering

<http://engineering.lbl.gov/org/me/index.html>

Physical Biosciences

Advanced Imaging

[http://pbd.lbl.gov/PBD\\_web\\_site/web\\_site/html/science/advanced\\_imaging.html](http://pbd.lbl.gov/PBD_web_site/web_site/html/science/advanced_imaging.html)

Materials Sciences

Scattering and Instrumentation Sciences

[http://www.lbl.gov/msd/programs/3si/si\\_intro.html](http://www.lbl.gov/msd/programs/3si/si_intro.html)

Physical Biosciences

Molecular Machines

[http://pbd.lbl.gov/PBD\\_web\\_site/web\\_site/html/science/molecular\\_machines.html](http://pbd.lbl.gov/PBD_web_site/web_site/html/science/molecular_machines.html)

**Subject**     **mineralogy**

**Type**             **Scientific Divisions**

Earth Sciences

Geochemistry

<http://esd.lbl.gov/GEO/>

**Subject**     **modelling**

**Type**             **Scientific Divisions**

Environmental Energy Technologies

Indoor and Outdoor Environmental Quality

<http://eetd.lbl.gov/r-indoor.html>

**Subject**     **molecular biology**

**Type**             **Scientific Divisions**

<http://www.lbl.gov/gsd/>

**Subject**    **molecular chemistry**

**Type**        **Scientific Divisions**

Chemical Sciences

Seaborg Center: Actinide Science

<http://actinide.lbl.gov/gtsc/>

**Subject**    **molecular ecology**

**Type**        **Scientific Divisions**

Earth Sciences

Ecology

<http://esd.lbl.gov/departments/ecology/>

**Subject**    **molecular geochemistry**

**Type**        **Scientific Divisions**

Earth Sciences

Geochemistry

<http://esd.lbl.gov/GEO/>

**Subject**    **molecular imaging**

**Type**        **Strategic Directions**

Soft X-Ray science for discovery

Advanced Light Source, Accelerator and Fusion Research Division

[http://www.lbl.gov/LBL-Programs/sp\\_xray.html](http://www.lbl.gov/LBL-Programs/sp_xray.html)

**Subject**    **molecular machines**

**Type**        **Scientific Divisions**

Physical Biosciences

Molecular Machines

[http://pbd.lbl.gov/PBD\\_web\\_site/web\\_site/html/science/molecular\\_machines.html](http://pbd.lbl.gov/PBD_web_site/web_site/html/science/molecular_machines.html)

**Subject**      **molecular microbial ecology**

**Type**            **Scientific Divisions**

Earth Sciences

Ecology

<http://esd.lbl.gov/departments/ecology/>

**Subject**      **molecular motors**

**Type**            **Scientific Divisions**

Physical Biosciences

Molecular Machines

[http://pbd.lbl.gov/PBD\\_web\\_site/web\\_site/html/science/molecular\\_machines.html](http://pbd.lbl.gov/PBD_web_site/web_site/html/science/molecular_machines.html)

**Subject**      **molecular physics**

**Type**            **National User Facilities**

Advanced Light Source (ALS)

<http://www.als.lbl.gov/>

**Type**            **Scientific Divisions**

Advanced Light Source (ALS)

<http://www.als.lbl.gov/>

**Subject**      **molecular science**

**Type**            **Scientific Divisions**

Chemical Sciences

Atomic, Molecular and Optical Sciences

<http://www.lbl.gov/LBL-Programs/CSD/research/AMOS/index.html>

**Subject**      **molecular structure and dynamics**

**Type**            **Scientific Divisions**

Chemical Sciences

Chemical Physics

<http://www.lbl.gov/csd/research/chemical-physics/index.html>

**Subject**    **multi-enzyme metabolic conversion**

**Type**        **Scientific Divisions**

Physical Biosciences

Synthetic Biology

[http://pbd.lbl.gov/PBD\\_web\\_site/web\\_site/html/science/synthetic\\_biology.html](http://pbd.lbl.gov/PBD_web_site/web_site/html/science/synthetic_biology.html)

**Subject**    **multilayer optics**

**Type**        **Scientific Divisions**

Materials Sciences

Center for X-Ray Optics

<http://www-cxro.lbl.gov/>

**Subject**    **multiscale and multimodal imaging**

**Type**        **Scientific Divisions**

Life Sciences

Bioenergy/GTL & Structural Biology

<http://www.lbl.gov/lrd/Research/Bioenergy.html>

**Subject**    **multi-scale imaging**

**Type**        **Scientific Divisions**

Life Sciences

Technology Centers

[http://www.lbl.gov/lrd/Research/Technology\\_Centers.html](http://www.lbl.gov/lrd/Research/Technology_Centers.html)

**Subject**    **multiscale information from microbi**

**Type**        **Scientific Divisions**

Life Sciences

Bioenergy/GTL & Structural Biology

<http://www.lbl.gov/lrd/Research/Bioenergy.html>

**Subject**     **nanofabrication**

**Type**            **National User Facilities**

Materials Sciences  
Molecular Foundry  
<http://foundry.lbl.gov/about/index.html>

**Type**            **Scientific Divisions**

Materials Sciences  
Molecular Foundry  
<http://foundry.lbl.gov/about/index.html>

**Subject**     **nanogeoscience**

**Type**            **Scientific Divisions**

Earth Sciences  
Geochemistry  
<http://esd.lbl.gov/GEO/>

**Subject**     **nanoimaging**

**Type**            **National User Facilities**

Materials Sciences  
Molecular Foundry  
<http://foundry.lbl.gov/about/index.html>

**Type**            **Scientific Divisions**

Materials Sciences  
Molecular Foundry  
<http://foundry.lbl.gov/about/index.html>

**Subject**     **nanointerfaces**

**Type**            **National User Facilities**

Materials Sciences  
Molecular Foundry  
<http://foundry.lbl.gov/about/index.html>

**Type**      **Scientific Divisions**

Materials Sciences  
Molecular Foundry  
<http://foundry.lbl.gov/about/index.html>

**Subject**      **nanomaterials**

**Type**      **Scientific Divisions**

Materials Sciences  
Condensed Matter and Materials Physics  
[http://www.lbl.gov/msd/programs/2cm/cm\\_intro.html](http://www.lbl.gov/msd/programs/2cm/cm_intro.html)

Materials Sciences  
Materials Discovery, Design and Synthesis  
[http://www.lbl.gov/msd/programs/1md/md\\_intro.html](http://www.lbl.gov/msd/programs/1md/md_intro.html)

Environmental Energy Technologies  
Advanced Energy Technologies  
<http://eetd.lbl.gov/r-aet.html>

**Subject**      **nanoscale devices**

**Type**      **Scientific Divisions**

Physical Biosciences  
Synthetic Biology  
[http://pbd.lbl.gov/PBD\\_web\\_site/web\\_site/html/science/synthetic\\_biology.html](http://pbd.lbl.gov/PBD_web_site/web_site/html/science/synthetic_biology.html)

**Subject**      **nanoscience**

**Type**      **Scientific Divisions**

Chemical Sciences  
Catalytic Science  
<http://www.lbl.gov/LBL-Programs/CSD/research/catalytic-science/index.html>

Materials Sciences  
Materials Discovery, Design and Synthesis  
[http://www.lbl.gov/msd/programs/1md/md\\_intro.html](http://www.lbl.gov/msd/programs/1md/md_intro.html)

**Subject**      **nanostructure fabrication**

**Type**      **National User Facilities**

Materials Sciences  
Molecular Foundry  
<http://foundry.lbl.gov/about/index.html>

**Type**      **Scientific Divisions**

Engineering  
Mechanical Engineering  
<http://engineering.lbl.gov/org/me/index.html>

Materials Sciences  
Center for X-Ray Optics  
<http://www-cxro.lbl.gov/>

Materials Sciences  
Molecular Foundry  
<http://foundry.lbl.gov/about/index.html>

**Subject**      **nanostucture materials**

**Type**      **National User Facilities**

Materials Sciences  
Molecular Foundry  
<http://foundry.lbl.gov/about/index.html>

Materials Sciences  
National Center for Electron Microscopy  
<http://ncem.lbl.gov/frames/center.htm>

**Type**      **Scientific Divisions**

Materials Sciences  
National Center for Electron Microscopy  
<http://ncem.lbl.gov/frames/center.htm>

Materials Sciences  
Molecular Foundry  
<http://foundry.lbl.gov/about/index.html>

**Subject**      **nanotechnology**

**Type**      **Scientific Divisions**

Environmental Energy Technologies  
Advanced Energy Technologies  
<http://eetd.lbl.gov/r-aet.html>

Accelerator & Fusion Research  
Ion Beam Technology  
<http://www-afrd.lbl.gov/ibt.html>

**Subject**    **natural attenuation**

**Type**        **Scientific Divisions**

Earth Sciences  
Ecology  
<http://esd.lbl.gov/departments/ecology/>

**Subject**    **natural gas**

**Type**        **Scientific Divisions**

Life Sciences  
Bioenergy/GTL & Structural Biology  
<http://www.lbl.gov/lrd/Research/Bioenergy.html>

**Subject**    **neurodegenerative disease**

**Type**        **Scientific Divisions**

Life Sciences  
Radiotracer Development & Imaging Technology  
[http://www.lbl.gov/lrd/Research/Radiochemistry\\_Instrumentation.htm](http://www.lbl.gov/lrd/Research/Radiochemistry_Instrumentation.htm)

**Subject**    **neutral B-meson system**

**Type**        **Scientific Divisions**

Physics  
Quark & Lepton Flavor Physics  
Quark & Lepton Flavor Physics

**Subject**    **neutrino telescope**

**Type**        **Scientific Divisions**

Nuclear Science  
IceCube  
<http://www.lbl.gov/nsd/programs/ICECUBE.html>

**Subject**    **neutrinos**

**Type**        **Scientific Divisions**

Physics

    Quark & Lepton Flavor Physics

        Quark & Lepton Flavor Physics

**Type**        **Strategic Directions**

Matter and force in the universe

[http://www.lbl.gov/LBL-Programs/sp\\_matter.html](http://www.lbl.gov/LBL-Programs/sp_matter.html)

**Subject**    **NMR**

**Type**        **Scientific Divisions**

Materials Sciences

    Materials Discovery, Design and Synthesis

[http://www.lbl.gov/msd/programs/1md/md\\_intro.html](http://www.lbl.gov/msd/programs/1md/md_intro.html)

**Subject**    **novel diffractive optics**

**Type**        **Scientific Divisions**

Materials Sciences

    Center for X-Ray Optics

<http://www-cxro.lbl.gov/>

**Subject**    **nuclear astrophysics**

**Type**        **Scientific Divisions**

Nuclear Science

    Nuclear theory

<http://www.lbl.gov/nsd/programs/theory.html>

**Subject**    **nuclear chemistry**

**Type**        **Scientific Divisions**

Chemical Sciences  
Seaborg Center: Actinide Science  
<http://actinide.lbl.gov/gtsc/>

**Subject**    **nuclear dynamics**

**Type**        **Scientific Divisions**

Nuclear Science  
Nuclear theory  
<http://www.lbl.gov/nsd/programs/theory.html>

**Subject**    **nuclear energy**

**Type**        **Scientific Divisions**

Earth Sciences  
General department  
<http://esd.lbl.gov/home/>

**Subject**    **nuclear physics**

**Type**        **Scientific Divisions**

Nuclear Science  
Nuclear theory  
<http://www.lbl.gov/nsd/programs/theory.html>

Nuclear Science  
Institute for Nuclear and Particle Astrophysics (INPA)  
<http://www.lbl.gov/nsd/programs/INPA.html>

**Subject**    **nuclear properties under extreme c**

**Type**        **Scientific Divisions**

Nuclear Science  
Low energy nuclear physics  
<http://www.lbl.gov/nsd/programs/LENP.html>

**Subject**    **nuclear science**

**Type**        **Strategic Directions**

[http://www.lbl.gov/LBL-Programs/sp\\_matter.html](http://www.lbl.gov/LBL-Programs/sp_matter.html)

**Subject**     **nuclear structure**

**Type**             **Scientific Divisions**

Nuclear Science

    Nuclear theory

<http://www.lbl.gov/nsd/programs/theory.html>

Nuclear Science

    88-Inch Cyclotron Operations

<http://www.lbl.gov/nsd/programs/88-inch.html>

**Subject**     **nuclear theory**

**Type**             **Scientific Divisions**

Nuclear Science

    Nuclear theory

<http://www.lbl.gov/nsd/programs/theory.html>

**Subject**     **nuclear waste**

**Type**             **Scientific Divisions**

Earth Sciences

    General department

<http://esd.lbl.gov/home/>

**Subject**     **numerical algorithms**

**Type**             **Scientific Divisions**

Computational Research

    High Performance Computing Research Department

<https://hpcrd.lbl.gov/>

**Subject**     **oceanic science**

**Type**             **Scientific Divisions**

Earth Sciences  
Geochemistry  
<http://esd.lbl.gov/GEO/>

**Subject** oil and gas resources

**Type** Scientific Divisions

Earth Sciences  
Hydrogeology  
<http://esd.lbl.gov/departments/hydrogeology/>

**Subject** omics analysis tools

**Type** Scientific Divisions

Life Sciences  
Cancer & DNA Damage Responses  
[http://www.lbl.gov/lcd/Research/cancer\\_and\\_radiation.html](http://www.lbl.gov/lcd/Research/cancer_and_radiation.html)

**Subject** optical systems

**Type** Scientific Divisions

Engineering  
Mechanical Engineering  
<http://engineering.lbl.gov/org/me/index.html>

**Subject** optical tweezers microscopy

**Type** Scientific Divisions

Physical Biosciences  
Advanced Imaging  
[http://pbd.lbl.gov/PBD\\_web\\_site/web\\_site/html/science/advanced\\_imaging.html](http://pbd.lbl.gov/PBD_web_site/web_site/html/science/advanced_imaging.html)

Physical Biosciences  
Molecular Machines  
[http://pbd.lbl.gov/PBD\\_web\\_site/web\\_site/html/science/molecular\\_machines.html](http://pbd.lbl.gov/PBD_web_site/web_site/html/science/molecular_machines.html)

**Subject** optics

**Type** National User Facilities

Advanced Light Source (ALS)

<http://www.als.lbl.gov/>

**Type**      **Scientific Divisions**

Advanced Light Source (ALS)

<http://www.als.lbl.gov/>

**Subject**      **ozone photochemistry**

**Type**      **National User Facilities**

Advanced Light Source (ALS)

<http://www.als.lbl.gov/>

**Type**      **Scientific Divisions**

Advanced Light Source (ALS)

<http://www.als.lbl.gov/>

**Subject**      **Parkinson's disease**

**Type**      **Scientific Divisions**

Life Sciences

Radiotracer Development & Imaging Technology

[http://www.lbl.gov/lrd/Research/Radiochemistry\\_Instrumentation.htm](http://www.lbl.gov/lrd/Research/Radiochemistry_Instrumentation.htm)

**Subject**      **partial different equations**

**Type**      **Scientific Divisions**

Computational Research

High Performance Computing Research Department

<https://hpcrd.lbl.gov/>

**Subject**      **particle physics**

**Type**      **Scientific Divisions**

Nuclear Science

Institute for Nuclear and Particle Astrophysics (INPA)

<http://www.lbl.gov/nsd/programs/INPA.html>

Physics

Particle Data Group

<http://www.lbl.gov/LBL-Programs/physics/research/pdg.html>

Physics

Energy Frontier

<http://www.lbl.gov/LBL-Programs/physics/research/frontier/atlas.html>

Physics

Quark & Lepton Flavor Physics

Quark & Lepton Flavor Physics

**Type**      **Strategic Directions**

Matter and force in the universe

[http://www.lbl.gov/LBL-Programs/sp\\_matter.html](http://www.lbl.gov/LBL-Programs/sp_matter.html)

**Subject**      **particle theory**

**Type**      **Scientific Divisions**

Physics

Theoretical Physics

<http://www.lbl.gov/LBL-Programs/physics/research/theory.html>

**Subject**      **perturbative QCD**

**Type**      **Scientific Divisions**

Physics

Theoretical Physics

<http://www.lbl.gov/LBL-Programs/physics/research/theory.html>

**Subject**      **photoelectrochemical cells**

**Type**      **Scientific Divisions**

Physical Biosciences

Solar Energy Research Center

<http://www.lbl.gov/LBL-Programs/helios-serc/index.html>

Materials Sciences

Helios Solar Energy Research Center

<http://www.lbl.gov/LBL-Programs/helios-serc/html/overview.html>

**Subject**    **photoionization**

**Type**        **Scientific Divisions**

Chemical Sciences

Atomic, Molecular and Optical Sciences

<http://www.lbl.gov/LBL-Programs/CSD/research/AMOS/index.html>

**Subject**    **photosynthesis**

**Type**        **Scientific Divisions**

Earth Sciences

Ecology

<http://esd.lbl.gov/departments/ecology/>

Materials Sciences

Helios Solar Energy Research Center

<http://www.lbl.gov/LBL-Programs/helios-serc/html/overview.html>

**Subject**    **photovoltaic semiconductor elemen**

**Type**        **Scientific Divisions**

Materials Sciences

Helios Solar Energy Research Center

<http://www.lbl.gov/LBL-Programs/helios-serc/html/overview.html>

**Subject**    **phylogenomics**

**Type**        **National User Facilities**

Joint Genome Institute

<http://www.jgi.doe.gov/>

**Type**        **Scientific Divisions**

Genomics (complements the US DOE Joint Genome Institute)

<http://www.lbl.gov/gsd/>

**Subject**    **physics**

**Type**        **National User Facilities**

Advanced Light Source (ALS)

<http://www.als.lbl.gov/>

**Type**        **Scientific Divisions**

Advanced Light Source (ALS)

<http://www.als.lbl.gov/>

Engineering

Mechanical Engineering

<http://engineering.lbl.gov/org/me/index.html>

**Subject**    **plants**

**Type**        **Scientific Divisions**

Physical Biosciences

Joint BioEnergy Institute

<http://www.jbei.org/>

**Subject**    **plasma physics**

**Type**        **Scientific Divisions**

Accelerator and Fusion Research

Laser Optics and Accelerator Systems Integrated Studies

<http://www-afrd.lbl.gov/loasis.html>

Accelerator & Fusion Research

Ion Beam Technology

<http://www-afrd.lbl.gov/ibt.html>

**Subject**    **plastic electronics**

**Type**        **Scientific Divisions**

Materials Sciences

Materials Discovery, Design and Synthesis

[http://www.lbl.gov/msd/programs/1md/md\\_intro.html](http://www.lbl.gov/msd/programs/1md/md_intro.html)

**Subject**     **policy analysis**

**Type**             **Scientific Divisions**

Environmental Energy Technologies  
Washington, DC, Projects Office  
<http://eetd.lbl.gov/eetd-org-dc.html>

**Subject**     **pollutant control**

**Type**             **Scientific Divisions**

Environmental Energy Technologies  
Indoor and Outdoor Environmental Quality  
<http://eetd.lbl.gov/r-indoor.html>

**Subject**     **pollutant transport**

**Type**             **Scientific Divisions**

Environmental Energy Technologies  
Indoor and Outdoor Environmental Quality  
<http://eetd.lbl.gov/r-indoor.html>

**Subject**     **polymers**

**Type**             **National User Facilities**

Advanced Light Source (ALS)  
  
<http://www.als.lbl.gov/>

**Type**             **Scientific Divisions**

Physical Biosciences  
Computational & Theoretical Biology  
[http://pbd.lbl.gov/PBD\\_web\\_site/web\\_site/html/science/computational\\_theoretical\\_biology.html](http://pbd.lbl.gov/PBD_web_site/web_site/html/science/computational_theoretical_biology.html)

Advanced Light Source (ALS)  
  
<http://www.als.lbl.gov/>

Materials Sciences  
Materials Discovery, Design and Synthesis  
[http://www.lbl.gov/msd/programs/1md/md\\_intro.html](http://www.lbl.gov/msd/programs/1md/md_intro.html)

Materials Sciences  
Condensed Matter and Materials Physics  
[http://www.lbl.gov/msd/programs/2cm/cm\\_intro.html](http://www.lbl.gov/msd/programs/2cm/cm_intro.html)

**Subject**    **positron emission tomography**

**Type**        **Scientific Divisions**

Life Sciences  
Radiotracer Development & Imaging Technology  
[http://www.lbl.gov/lrd/Research/Radiochemistry\\_Instrumentation.htm](http://www.lbl.gov/lrd/Research/Radiochemistry_Instrumentation.htm)

**Subject**    **power-efficient computing**

**Type**        **Strategic Directions**

Computational science and networking  
  
[http://www.lbl.gov/LBL-Programs/sp\\_compsci.html](http://www.lbl.gov/LBL-Programs/sp_compsci.html)

**Subject**    **processing science**

**Type**        **Scientific Divisions**

Materials Sciences  
Materials Discovery, Design and Synthesis  
[http://www.lbl.gov/msd/programs/1md/md\\_intro.html](http://www.lbl.gov/msd/programs/1md/md_intro.html)

**Subject**    **production sequencing**

**Type**        **National User Facilities**

Joint Genome Institute  
  
<http://www.jgi.doe.gov/>

**Subject**    **protein crystallography**

**Type**        **Scientific Divisions**

Physical Biosciences  
Genome Research  
[http://pbd.lbl.gov/PBD\\_web\\_site/web\\_site/html/science/genome\\_research.html](http://pbd.lbl.gov/PBD_web_site/web_site/html/science/genome_research.html)

**Subject**     **protein folding**

**Type**             **Scientific Divisions**

Physical Biosciences

Computational & Theoretical Biology

[http://pbd.lbl.gov/PBD\\_web\\_site/web\\_site/html/science/computational\\_theoretical\\_biology.html](http://pbd.lbl.gov/PBD_web_site/web_site/html/science/computational_theoretical_biology.html)

**Subject**     **proteins**

**Type**             **Scientific Divisions**

Materials Sciences

Materials Discovery, Design and Synthesis

[http://www.lbl.gov/msd/programs/1md/md\\_intro.html](http://www.lbl.gov/msd/programs/1md/md_intro.html)

Life Sciences

Bioenergy/GTL & Structural Biology

<http://www.lbl.gov/lcd/Research/Bioenergy.html>

**Subject**     **proteomic markers**

**Type**             **Scientific Divisions**

Life Sciences

Cancer & DNA Damage Responses

[http://www.lbl.gov/lcd/Research/cancer\\_and\\_radiation.html](http://www.lbl.gov/lcd/Research/cancer_and_radiation.html)

**Subject**     **proteomics**

**Type**             **Scientific Divisions**

Life Sciences

Cancer & DNA Damage Responses

[http://www.lbl.gov/lcd/Research/cancer\\_and\\_radiation.html](http://www.lbl.gov/lcd/Research/cancer_and_radiation.html)

**Subject**     **proton-proton interactions**

**Type**             **Scientific Divisions**

Physics

Energy Frontier

<http://www.lbl.gov/LBL-Programs/physics/research/frontier/atlas.html>

**Subject**     **public policy**

**Type**             **Scientific Divisions**

Environmental Energy Technologies  
Energy Analysis  
<http://eetd.lbl.gov/r-ea.html>

**Subject**     **pulsed power**

**Type**             **Scientific Divisions**

Engineering  
Electronics, Software & Instrumentation Engineering  
<http://engineering.lbl.gov/org/esie/>

**Subject**     **purification and screening technique**

**Type**             **Scientific Divisions**

Physical Biosciences  
Joint BioEnergy Institute  
<http://www.jbei.org/>

**Subject**     **QCD in hadronic physics**

**Type**             **Scientific Divisions**

Nuclear Science  
Nuclear theory  
<http://www.lbl.gov/nsd/programs/theory.html>

**Subject**     **quantum chemistry**

**Type**             **Scientific Divisions**

Chemical Sciences  
Chemical Physics  
<http://www.lbl.gov/csd/research/chemical-physics/index.html>

**Subject**     **quantum computing**

**Type**      **Scientific Divisions**

Accelerator & Fusion Research  
Ion Beam Technology  
<http://www-afrd.lbl.gov/ibt.html>

**Subject**      **quantum gravity**

**Type**      **Scientific Divisions**

Physics  
Theoretical Physics  
<http://www.lbl.gov/LBL-Programs/physics/research/theory.html>

**Subject**      **quantum groups**

**Type**      **Scientific Divisions**

Physics  
Theoretical Physics  
<http://www.lbl.gov/LBL-Programs/physics/research/theory.html>

**Subject**      **quantum materials**

**Type**      **Scientific Divisions**

Materials Sciences  
Condensed Matter and Materials Physics  
[http://www.lbl.gov/msd/programs/2cm/cm\\_intro.html](http://www.lbl.gov/msd/programs/2cm/cm_intro.html)

**Subject**      **quantum mechanics**

**Type**      **Scientific Divisions**

Physics  
Theoretical Physics  
<http://www.lbl.gov/LBL-Programs/physics/research/theory.html>  
Physical Biosciences  
Computational & Theoretical Biology  
[http://pbd.lbl.gov/PBD\\_web\\_site/web\\_site/html/science/computational\\_theoretical\\_biology.html](http://pbd.lbl.gov/PBD_web_site/web_site/html/science/computational_theoretical_biology.html)

**Subject**      **quantum theory**

**Type**      **Scientific Divisions**

Materials Sciences  
Condensed Matter and Materials Physics  
[http://www.lbl.gov/msd/programs/2cm/cm\\_intro.html](http://www.lbl.gov/msd/programs/2cm/cm_intro.html)

**Subject**      **quark**

**Type**      **Scientific Divisions**

Physics  
Quark & Lepton Flavor Physics  
Quark & Lepton Flavor Physics

**Subject**      **quark decays**

**Type**      **Scientific Divisions**

Physics  
Energy Frontier  
<http://www.lbl.gov/LBL-Programs/physics/research/frontier/atlas.html>

**Subject**      **quark-gluon plasma**

**Type**      **Scientific Divisions**

Nuclear Science  
Relativistic Nuclear Collisions  
<http://www.lbl.gov/nsd/programs/RNC.html>

**Subject**      **quasars**

**Type**      **Scientific Divisions**

Physics  
Dark Energy & Dark Matter  
<http://www.lbl.gov/LBL-Programs/physics/research/dark-energy/supernova-cosmo.html>

**Subject**      **radiation**

**Type**      **Scientific Divisions**

Life Sciences  
Cancer & DNA Damage Responses  
[http://www.lbl.gov/lrd/Research/cancer\\_and\\_radiation.html](http://www.lbl.gov/lrd/Research/cancer_and_radiation.html)

**Subject**    **radiation detectors**

**Type**        **Scientific Divisions**

Life Sciences  
Radiotracer Development & Imaging Technology  
[http://www.lbl.gov/lrd/Research/Radiochemistry\\_Instrumentation.htm](http://www.lbl.gov/lrd/Research/Radiochemistry_Instrumentation.htm)

**Subject**    **radiation effect**

**Type**        **Scientific Divisions**

Materials Sciences  
Condensed Matter and Materials Physics  
[http://www.lbl.gov/msd/programs/2cm/cm\\_intro.html](http://www.lbl.gov/msd/programs/2cm/cm_intro.html)

**Subject**    **radiation physics**

**Type**        **Scientific Divisions**

Accelerator and Fusion Research  
Laser Optics and Accelerator Systems Integrated Studies  
<http://www-afrd.lbl.gov/loasis.html>

**Subject**    **radiochemical synthesis**

**Type**        **Scientific Divisions**

Life Sciences  
Biomedical Isotope Facility  
[http://www.lbl.gov/lrd/Research/Research\\_Resources.html](http://www.lbl.gov/lrd/Research/Research_Resources.html)

**Subject**    **radiochemistry**

**Type**        **Scientific Divisions**

Life Sciences  
Radiotracer Development & Imaging Technology  
[http://www.lbl.gov/lrd/Research/Radiochemistry\\_Instrumentation.htm](http://www.lbl.gov/lrd/Research/Radiochemistry_Instrumentation.htm)

**Subject** Raman imaging

**Type** Scientific Divisions

Life Sciences  
Bioenergy/GTL & Structural Biology  
<http://www.lbl.gov/lrd/Research/Bioenergy.html>

**Subject** remote computing

**Type** National User Facilities

Computational Research  
Advanced Computing for Science (ACS)  
<http://acs.lbl.gov/>

**Subject** rock physics

**Type** Scientific Divisions

Earth Sciences  
Geophysics  
<http://esd.lbl.gov/GG/>

**Subject** safety

**Type** Scientific Divisions

Engineering  
Operations  
<http://engineering.lbl.gov/org/ops.html>

**Subject** scientific collaboration

**Type** National User Facilities

Computational Research  
Energy Sciences Network (ESnet)  
<http://www.es.net/>  
Computational Research  
Advanced Computing for Science (ACS)  
<http://acs.lbl.gov/>

**Type**      **Scientific Divisions**

Computational Research  
High Performance Computing Research Department  
<https://hpcrd.lbl.gov/>

Computational Research  
Energy Sciences Network (ESnet)  
<http://www.es.net/>

**Subject**      **scintillation detector**

**Type**      **Scientific Divisions**

Physics  
Quark & Lepton Flavor Physics  
Quark & Lepton Flavor Physics

**Subject**      **scintillation radiation**

**Type**      **Scientific Divisions**

Life Sciences  
Radiotracer Development & Imaging Technology  
[http://www.lbl.gov/lrd/Research/Radiochemistry\\_Instrumentation.htm](http://www.lbl.gov/lrd/Research/Radiochemistry_Instrumentation.htm)

**Subject**      **semiconductors**

**Type**      **National User Facilities**

Advanced Light Source (ALS)  
  
<http://www.als.lbl.gov/>

**Type**      **Scientific Divisions**

Materials Sciences  
Materials Discovery, Design and Synthesis  
[http://www.lbl.gov/msd/programs/1md/md\\_intro.html](http://www.lbl.gov/msd/programs/1md/md_intro.html)

Materials Sciences  
Condensed Matter and Materials Physics  
[http://www.lbl.gov/msd/programs/2cm/cm\\_intro.html](http://www.lbl.gov/msd/programs/2cm/cm_intro.html)

Advanced Light Source (ALS)

<http://www.als.lbl.gov/>

**Subject**    **sensor technology for pathogen det**

**Type**        **Scientific Divisions**

Physical Biosciences

Computational & Theoretical Biology

[http://pbd.lbl.gov/PBD\\_web\\_site/web\\_site/html/science/computational\\_theoretical\\_biology.html](http://pbd.lbl.gov/PBD_web_site/web_site/html/science/computational_theoretical_biology.html)

**Subject**    **sensors**

**Type**        **Scientific Divisions**

Environmental Energy Technologies

Advanced Energy Technologies

<http://eetd.lbl.gov/r-aet.html>

**Subject**    **sequencing**

**Type**        **National User Facilities**

Joint Genome Institute

<http://www.jgi.doe.gov/>

**Subject**    **single-molecule fluorescence micros**

**Type**        **Scientific Divisions**

Physical Biosciences

Molecular Machines

[http://pbd.lbl.gov/PBD\\_web\\_site/web\\_site/html/science/molecular\\_machines.html](http://pbd.lbl.gov/PBD_web_site/web_site/html/science/molecular_machines.html)

Physical Biosciences

Advanced Imaging

[http://pbd.lbl.gov/PBD\\_web\\_site/web\\_site/html/science/advanced\\_imaging.html](http://pbd.lbl.gov/PBD_web_site/web_site/html/science/advanced_imaging.html)

**Subject**    **soft matter**

**Type**        **National User Facilities**

Advanced Light Source (ALS)

<http://www.als.lbl.gov/>

**Type**      **Scientific Divisions**

Advanced Light Source (ALS)

<http://www.als.lbl.gov/>

**Subject**      **soft x-ray radiation**

**Type**      **Scientific Divisions**

Materials Sciences

Center for X-Ray Optics

<http://www-cxro.lbl.gov/>

**Subject**      **software development**

**Type**      **National User Facilities**

Computational Research

Advanced Computing for Science (ACS)

<http://acs.lbl.gov/>

**Type**      **Scientific Divisions**

Physical Biosciences

Computational Crystallography Initiative (CCI)

<http://cci.lbl.gov/>

Environmental Energy Technologies

Buildings Energy Efficiency

<http://eetd.lbl.gov/r-bldgsee.html>

Computational Research

High Performance Computing Research Department

<https://hpcrd.lbl.gov/>

**Subject**      **software engineering**

**Type**      **Scientific Divisions**

Engineering  
Electronics, Software & Instrumentation Engineering  
<http://engineering.lbl.gov/org/esie/>

**Subject**    **software implementation**

**Type**        **Scientific Divisions**

Computational Research  
High Performance Computing Research Department  
<https://hpcrd.lbl.gov/>

**Subject**    **soil geochemistry**

**Type**        **Scientific Divisions**

Earth Sciences  
Geochemistry  
<http://esd.lbl.gov/GEO/>

**Subject**    **solar cells**

**Type**        **Scientific Divisions**

Physical Biosciences  
Solar Energy Research Center  
<http://www.lbl.gov/LBL-Programs/helios-serc/index.html>

**Type**        **Strategic Directions**

Soft X-Ray science for discovery  
Advanced Light Source, Accelerator and Fusion Research Division  
[http://www.lbl.gov/LBL-Programs/sp\\_xray.html](http://www.lbl.gov/LBL-Programs/sp_xray.html)

**Subject**    **solar energy**

**Type**        **Scientific Divisions**

Physical Biosciences  
Solar Energy Research Center  
<http://www.lbl.gov/LBL-Programs/helios-serc/index.html>

Physical Biosciences  
Joint BioEnergy Institute  
<http://www.jbei.org/>

Materials Sciences

Helios Solar Energy Research Center

<http://www.lbl.gov/LBL-Programs/helios-serc/html/overview.html>

**Type**      **Strategic Directions**

Energy efficiency and sustainable energy

[http://www.lbl.gov/LBL-Programs/sp\\_energy.html](http://www.lbl.gov/LBL-Programs/sp_energy.html)

**Subject**      **solar neutrinos**

**Type**      **Scientific Divisions**

Nuclear Science

Institute for Nuclear and Particle Astrophysics (INPA)

<http://www.lbl.gov/nsd/programs/INPA.html>

**Subject**      **solid state chemistry**

**Type**      **Scientific Divisions**

Materials Sciences

Materials Discovery, Design and Synthesis

[http://www.lbl.gov/msd/programs/1md/md\\_intro.html](http://www.lbl.gov/msd/programs/1md/md_intro.html)

**Subject**      **space observatory**

**Type**      **Scientific Divisions**

Physics

Dark Energy & Dark Matter

<http://www.lbl.gov/LBL-Programs/physics/research/dark-energy/supernova-cosmo.html>

**Subject**      **spectroscopy**

**Type**      **Scientific Divisions**

Environmental Energy Technologies

Advanced Energy Technologies

<http://eetd.lbl.gov/r-aet.html>

**Subject**      **standard model**

**Type**      **Scientific Divisions**

Physics

Theoretical Physics

<http://www.lbl.gov/LBL-Programs/physics/research/theory.html>

**Subject**      **statistical mechanics**

**Type**      **Scientific Divisions**

Physical Biosciences

Computational & Theoretical Biology

[http://pbd.lbl.gov/PBD\\_web\\_site/web\\_site/html/science/computational\\_theoretical\\_biology.html](http://pbd.lbl.gov/PBD_web_site/web_site/html/science/computational_theoretical_biology.html)

**Subject**      **stored energy**

**Type**      **Scientific Divisions**

Materials Sciences

Helios Solar Energy Research Center

<http://www.lbl.gov/LBL-Programs/helios-serc/html/overview.html>

**Subject**      **string theory**

**Type**      **Scientific Divisions**

Physics

Theoretical Physics

<http://www.lbl.gov/LBL-Programs/physics/research/theory.html>

**Subject**      **structural cell biology**

**Type**      **Scientific Divisions**

Life Sciences

Cancer & DNA Damage Responses

[http://www.lbl.gov/lcd/Research/cancer\\_and\\_radiation.html](http://www.lbl.gov/lcd/Research/cancer_and_radiation.html)

Engineering

Electronics, Software & Instrumentation Engineering

<http://engineering.lbl.gov/org/esie/>

**Subject**      **structural genomics**

**Type**      **Scientific Divisions**

Genomics (complements the US DOE Joint Genome Institute)

<http://www.lbl.gov/gsd/>

Physical Biosciences

Genome Research

[http://pbd.lbl.gov/PBD\\_web\\_site/web\\_site/html/science/genome\\_research.html](http://pbd.lbl.gov/PBD_web_site/web_site/html/science/genome_research.html)

Physical Biosciences

Berkeley Center for Structural Biology

[http://bcsb.als.lbl.gov/wiki/index.php/Main\\_Page](http://bcsb.als.lbl.gov/wiki/index.php/Main_Page)

**Subject**      **structure prediction**

**Type**      **Scientific Divisions**

Physical Biosciences

Computational & Theoretical Biology

[http://pbd.lbl.gov/PBD\\_web\\_site/web\\_site/html/science/computational\\_theoretical\\_biology.html](http://pbd.lbl.gov/PBD_web_site/web_site/html/science/computational_theoretical_biology.html)

**Subject**      **subsurface energy production**

**Type**      **Strategic Directions**

Climate change and environmental science

[http://www.lbl.gov/LBL-Programs/sp\\_climate.html](http://www.lbl.gov/LBL-Programs/sp_climate.html)

**Subject**      **superconducting magnets**

**Type**      **Scientific Divisions**

Engineering

Mechanical Engineering

<http://engineering.lbl.gov/org/me/index.html>

**Subject**      **superconductivity**

**Type**      **Scientific Divisions**

Accelerator & Fusion Research

Superconducting magnets

<http://www-afrod.lbl.gov/super.html>

Nuclear Science

88-Inch Cyclotron Operations

<http://www.lbl.gov/nsd/programs/88-inch.html>

Engineering

Electronics, Software & Instrumentation Engineering

<http://engineering.lbl.gov/org/esie/>

Materials Sciences

Condensed Matter and Materials Physics

[http://www.lbl.gov/msd/programs/2cm/cm\\_intro.html](http://www.lbl.gov/msd/programs/2cm/cm_intro.html)

Engineering

Electronics, Software & Instrumentation Engineering

<http://engineering.lbl.gov/org/esie/>

Materials Sciences

Materials Discovery, Design and Synthesis

[http://www.lbl.gov/msd/programs/1md/md\\_intro.html](http://www.lbl.gov/msd/programs/1md/md_intro.html)

**Type**      **Strategic Directions**

Soft X-Ray science for discovery

Advanced Light Source, Accelerator and Fusion Research Division

[http://www.lbl.gov/LBL-Programs/sp\\_xray.html](http://www.lbl.gov/LBL-Programs/sp_xray.html)

**Subject**      **supernovae**

**Type**      **Scientific Divisions**

Nuclear Science

Institute for Nuclear and Particle Astrophysics (INPA)

<http://www.lbl.gov/nsd/programs/INPA.html>

Physics

Dark Energy & Dark Matter

<http://www.lbl.gov/LBL-Programs/physics/research/dark-energy/supernova-cosmo.html>

**Subject**      **supersymmetry**

**Type**      **Scientific Divisions**

Physics

Energy Frontier

<http://www.lbl.gov/LBL-Programs/physics/research/frontier/atlas.html>

Physics

Theoretical Physics

<http://www.lbl.gov/LBL-Programs/physics/research/theory.html>

**Subject**     **surface chemistry**

**Type**            **National User Facilities**

Advanced Light Source (ALS)

<http://www.als.lbl.gov/>

Materials Sciences

National Center for Electron Microscopy

<http://ncem.lbl.gov/frames/center.htm>

**Type**            **Scientific Divisions**

Materials Sciences

Materials Discovery, Design and Synthesis

[http://www.lbl.gov/msd/programs/1md/md\\_intro.html](http://www.lbl.gov/msd/programs/1md/md_intro.html)

Advanced Light Source (ALS)

<http://www.als.lbl.gov/>

Chemical Sciences

Chemical Physics

<http://www.lbl.gov/csd/research/chemical-physics/index.html>

Materials Sciences

National Center for Electron Microscopy

<http://ncem.lbl.gov/frames/center.htm>

**Subject**     **sustainable design**

**Type**            **Scientific Divisions**

Environmental Energy Technologies

Buildings Energy Efficiency

<http://eetd.lbl.gov/r-bldgsee.html>

**Subject**     **symmetries**

**Type**            **Scientific Divisions**

Physics

Quark & Lepton Flavor Physics

Quark & Lepton Flavor Physics

**Subject**     **synchrotron light**

**Type**      **Scientific Divisions**

Accelerator and Fusion Research  
Advanced light source accelerator physics  
<http://www-afrd.lbl.gov/als.html>

**Subject**      **synchrotron**

**Type**      **National User Facilities**

Advanced Light Source (ALS)  
  
<http://www.als.lbl.gov/>

**Type**      **Scientific Divisions**

Chemical Sciences  
Chemical Physics  
<http://www.lbl.gov/csd/research/chemical-physics/index.html>  
  
Advanced Light Source (ALS)  
  
<http://www.als.lbl.gov/>

**Subject**      **synthesis**

**Type**      **Scientific Divisions**

Materials Sciences  
Materials Discovery, Design and Synthesis  
[http://www.lbl.gov/msd/programs/1md/md\\_intro.html](http://www.lbl.gov/msd/programs/1md/md_intro.html)

**Subject**      **synthetic biology**

**Type**      **Scientific Divisions**

Physical Biosciences  
Joint BioEnergy Institute  
<http://www.jbei.org/>  
  
Physical Biosciences  
Synthetic Biology  
[http://pbd.lbl.gov/PBD\\_web\\_site/web\\_site/html/science/synthetic\\_biology.html](http://pbd.lbl.gov/PBD_web_site/web_site/html/science/synthetic_biology.html)

**Subject**      **systems biology**

**Type**      **Scientific Divisions**

Physical Biosciences

Virtual Institute of Microbial Stress and Survival (VIMSS)

<http://vimss.lbl.gov/>

Physical Biosciences

Systems Biology

[http://pbd.lbl.gov/PBD\\_web\\_site/web\\_site/html/science/systems\\_biology.html](http://pbd.lbl.gov/PBD_web_site/web_site/html/science/systems_biology.html)

Engineering

Electronics, Software & Instrumentation Engineering

<http://engineering.lbl.gov/org/esie/>

**Subject**      **target selection**

**Type**      **Scientific Divisions**

Physical Biosciences

Genome Research

[http://pbd.lbl.gov/PBD\\_web\\_site/web\\_site/html/science/genome\\_research.html](http://pbd.lbl.gov/PBD_web_site/web_site/html/science/genome_research.html)

**Subject**      **tau-lepton**

**Type**      **Scientific Divisions**

Physics

Quark & Lepton Flavor Physics

Quark & Lepton Flavor Physics

**Subject**      **technical research**

**Type**      **Scientific Divisions**

Environmental Energy Technologies

Washington, DC, Projects Office

<http://eetd.lbl.gov/eetd-org-dc.html>

**Subject**      **telescope**

**Type**      **Scientific Divisions**

Physics

Dark Energy & Dark Matter

<http://www.lbl.gov/LBL-Programs/physics/research/dark-energy/supernova-cosmo.html>

**Subject**     **terrestrial biogeochemistry**

**Type**            **Scientific Divisions**

Earth Sciences  
  Geochemistry  
    <http://esd.lbl.gov/GEO/>

**Subject**     **theoretical biology**

**Type**            **Scientific Divisions**

Physical Biosciences  
  Computational & Theoretical Biology  
    [http://pbd.lbl.gov/PBD\\_web\\_site/web\\_site/html/science/computational\\_theoretical\\_biology.html](http://pbd.lbl.gov/PBD_web_site/web_site/html/science/computational_theoretical_biology.html)

**Subject**     **theoretical chemistry**

**Type**            **Scientific Divisions**

Chemical Sciences  
  Chemical Physics  
    <http://www.lbl.gov/csd/research/chemical-physics/index.html>

**Subject**     **thermal comfort**

**Type**            **Scientific Divisions**

Environmental Energy Technologies  
  Indoor and Outdoor Environmental Quality  
    <http://eetd.lbl.gov/r-indoor.html>

**Subject**     **thermoelectrics**

**Type**            **Scientific Divisions**

Materials Sciences  
  Materials Discovery, Design and Synthesis  
    [http://www.lbl.gov/msd/programs/1md/md\\_intro.html](http://www.lbl.gov/msd/programs/1md/md_intro.html)

**Subject**     **thin films**

**Type**      **National User Facilities**

Materials Sciences

National Center for Electron Microscopy

<http://ncem.lbl.gov/frames/center.htm>

**Type**      **Scientific Divisions**

Materials Sciences

National Center for Electron Microscopy

<http://ncem.lbl.gov/frames/center.htm>

**Subject**      **topological field theory**

**Type**      **Scientific Divisions**

Physics

Theoretical Physics

<http://www.lbl.gov/LBL-Programs/physics/research/theory.html>

**Subject**      **toxic waste reduction**

**Type**      **Scientific Divisions**

Chemical Sciences

Catalytic Science

<http://www.lbl.gov/LBL-Programs/CSD/research/catalytic-science/index.html>

**Subject**      **transcription regulation**

**Type**      **Scientific Divisions**

Physical Biosciences

Molecular Machines

[http://pbd.lbl.gov/PBD\\_web\\_site/web\\_site/html/science/molecular\\_machines.html](http://pbd.lbl.gov/PBD_web_site/web_site/html/science/molecular_machines.html)

**Subject**      **transportation**

**Type**      **Scientific Divisions**

Environmental Energy Technologies

Energy Analysis

<http://eetd.lbl.gov/r-ea.html>

**Subject**     **ultrafast materials**

**Type**             **Scientific Divisions**

Materials Sciences

Scattering and Instrumentation Sciences

[http://www.lbl.gov/msd/programs/3si/si\\_intro.html](http://www.lbl.gov/msd/programs/3si/si_intro.html)

**Subject**     **ultrafast/time-resolved studies**

**Type**             **National User Facilities**

Advanced Light Source (ALS)

<http://www.als.lbl.gov/>

**Type**             **Scientific Divisions**

Advanced Light Source (ALS)

<http://www.als.lbl.gov/>

**Subject**     **universe expansion**

**Type**             **Scientific Divisions**

Physics

Dark Energy & Dark Matter

<http://www.lbl.gov/LBL-Programs/physics/research/dark-energy/supernova-cosmo.html>

**Subject**     **UV**

**Type**             **National User Facilities**

Advanced Light Source (ALS)

<http://www.als.lbl.gov/>

**Type**             **Scientific Divisions**

Advanced Light Source (ALS)

<http://www.als.lbl.gov/>

**Subject**     **water resources**

**Type**             **Scientific Divisions**

Environmental Energy Technologies

Energy Analysis

<http://eetd.lbl.gov/r-ea.html>

Earth Sciences

Ecology

<http://esd.lbl.gov/departments/ecology/>

**Subject**     **windows**

**Type**             **Scientific Divisions**

Environmental Energy Technologies

Buildings Energy Efficiency

<http://eetd.lbl.gov/r-bldgsee.html>

**Subject**     **x-ray crystallography**

**Type**             **Scientific Divisions**

Physical Biosciences

Genome Research

[http://pbd.lbl.gov/PBD\\_web\\_site/web\\_site/html/science/genome\\_research.html](http://pbd.lbl.gov/PBD_web_site/web_site/html/science/genome_research.html)

Life Sciences

Technology Centers

[http://www.lbl.gov/lrd/Research/Technology\\_Centers.html](http://www.lbl.gov/lrd/Research/Technology_Centers.html)

**Subject**     **x-ray microscopy**

**Type**             **Scientific Divisions**

Physical Biosciences

National Center for X-Ray Tomography

<http://pbd.lbl.gov/ncxt/default.htm>

**Subject**     **X-rays**

**Type**             **National User Facilities**

Advanced Light Source (ALS)

<http://www.als.lbl.gov/>

**Type**      **Scientific Divisions**

Materials Sciences

Scattering and Instrumentation Sciences

[http://www.lbl.gov/msd/programs/3si/si\\_intro.html](http://www.lbl.gov/msd/programs/3si/si_intro.html)

Chemical Sciences

Atomic, Molecular and Optical Sciences

<http://www.lbl.gov/LBL-Programs/CSD/research/AMOS/index.html>

Advanced Light Source (ALS)

<http://www.als.lbl.gov/>

Engineering

Mechanical Engineering

<http://engineering.lbl.gov/org/me/index.html>

Engineering

Electronics, Software & Instrumentation Engineering

<http://engineering.lbl.gov/org/esie/>

**Type**      **Strategic Directions**

Soft X-Ray science for discovery

Advanced Light Source, Accelerator and Fusion Research Division

[http://www.lbl.gov/LBL-Programs/sp\\_xray.html](http://www.lbl.gov/LBL-Programs/sp_xray.html)