


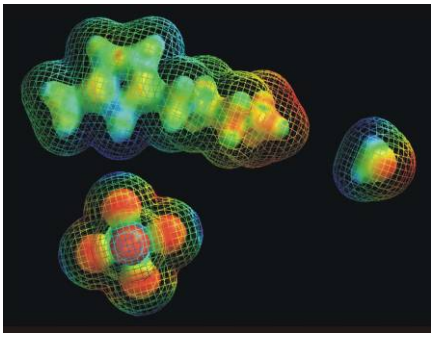

Boulder and Boulder County
Leading the Way in Green

- Research Facilities -

- World Class Scientists
- Nobel Prize Winners
- National Oceanic & Atmospheric Administration
- Cooperative Institute for Research in Environmental Sciences
- National Center for Atmospheric Research
- University Corporation for Atmospheric Research
- National Renewable Energy Laboratory
- National Institute of Standards & Technology
- Tours

World Class Scientists

The National Institute of Standards and Technology (NIST) is a world-class research agency whose staff has received numerous awards and other honors for a wide range of accomplishments. For instance, three NIST scientists have won the Nobel Prize in Physics in the past 10 years. Two of these scientists work in Boulder at JILA, a joint institute of NIST and the University of Colorado at Boulder. They are Eric Cornell, who shared the prize in 2001 for creating a new state of matter, the Bose-Einstein condensate, and John "Jan" L Hall, who shared the prize in 2005 for his contributions to laser science. A third NIST physicist, William D. Phillips, who works in Gaithersburg, Md., won the prize in 1997 for his work using laser light to cool and trap atoms. Another NIST physicist at JILA, Deborah Jin, won a MacArthur Fellowship (or Genius Award). Three NIST physicists have won Service to America medals.

Media Contact: Laura Ost, 303-497-4880
www.nist.gov
www.boulder.nist.gov
physics.nist.gov/News/contents.html

Scientists at the National Oceanic and Atmospheric Administration (NOAA) in Boulder solved the mystery of the ozone hole formation and produced the world's longest continuous record of carbon dioxide in Earth's atmosphere—the basis of worldwide research into human-produced climate change. NOAA Boulder scientists developed the workstation software used by every weather forecast office in the nation. They are currently developing the next-generation weather forecast models. The prestigious National Academy of Sciences has elected three NOAA Boulder scientists as members and another received the country's top award, the National Medal of Science. More recently, NOAA scientists at the Earth System Research Laboratory were honored to share in the Nobel Peace Prize.

Expert: Anatta, 303-497-6288
www.esrl.noaa.gov
www.publicaffairs.noaa.gov/releases2006/aug06/noaa06-r912.html
www.noaanews.noaa.gov/stories2007/20071126_carbonrecord.html
www.noaanews.noaa.gov/stories/s368.htm

Boulder's new shopping district, Twenty Ninth Street, is an unexpected place to find information about our scientists and research facilities. On permanent display is a 35-foot rocket outside near the movie theater. The rocket is authentic and was previously used in atmospheric studies. There are six other outdoor permanent displays that give overviews of some of the research labs located in Boulder. This is a perfect illustration of how Boulder's science community is interconnected with Boulder's lifestyle. Cool, interesting exhibits for kids.
Expert: Kim Farin Boulder Convention and Visitors Bureau 303-938-2066
The Wonder of Science

Here's a twist – when was the last time you heard that researchers and artists got together to collaborate on climate change? It happens every fall in Boulder when the researchers, artists and locals gather to learn about climate change and the possibilities of a sustainable future. It's called EcoArts. There are performances, exhibits, talks, tours, feasts, and parades. Plus there are tours of solar homes, culinary gardens, science exhibits and wind turbines.
Expert: Kim Farin Boulder Convention and Visitors Bureau 303-938-2066
www.ecoartsonline.com
Boulder Convention and Visitors Bureau

Nobel Prize Winners

When the U.N. Intergovernmental Panel on Climate Change (IPCC) won the 2007 Nobel Peace Prize with former Vice President Al Gore, several dozen scientists and support staff at the National Center for Atmospheric Research (NCAR) shared the honor. The researchers served as authors or reviewers of IPCC reports showing that the planet is undergoing a rapid climate transition with significant societal and environmental impacts. NCAR also helped develop computer models used by IPCC authors around the world to simulate global climate.
Expert: David Hosansky, 303-497-8611
www.ucar.edu/news/releases/2007/nobel1.shtml
www.ucar.edu/news/releases/2007/ipcctips.shtml
www.ucar.edu/news/features/climatechange/index.jsp
www.ucar.edu/news/releases/2007/ipcctips2.shtml

Almost 40 Boulder scientists received the Nobel Peace Prize on climate change with Al Gore.

The 2007 Nobel Peace Prize recognized the immense importance of science for the world's well being. Boulder scientist Susan Solomon of NOAA's Earth System Research Laboratory co-chaired the latest scientific assessment of the Intergovernmental Panel on Climate Change (IPCC). Solomon was invited to Sweden to receive the 2007 Nobel Peace Prize, awarded to the panel and to former vice president Al Gore. Solomon has spent her career at the National Oceanic and Atmospheric Administration (NOAA) in Boulder. The IPCC technical support team for the latest scientific assessment was also based at the NOAA site here in Boulder. Scores of other NOAA Boulder scientists have participated in IPCC reports over the years as lead authors, contributors, and reviewers.
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www.noaa.gov
www.esrl.noaa.gov
www.cpo.noaa.gov/ipcc/first_ipcc.html

Boulder scientists from the University of Colorado's Cooperative Institute for Research in Environmental Sciences (CIRES) and National Snow and Ice Data Center (NSIDC) also received the 2007 Nobel Peace Prize. Tingjun Zhang, from NSIDC, served as a lead author of the chapter "Observations: Changes in Snow, Ice and Frozen Ground" for the IPCC's fourth assessment report. Other CIRES researchers and affiliates authored chapters on sea level rise and radiative forcing caused by air pollutants and other atmospheric gases and particles.
Media Contact: Adriana Raudzens Bailey, CIRES, 303-492-6289
Media Contact: Stephanie Renfrow, NSIDC, 303-492-1497
cires.colorado.edu
www.nsidc.org
cires.colorado.edu/news/press/2007/07-10-12b.html
cires.colorado.edu/news/press/2007/07-10-12b.html

Three physicists at the National Institute of Standards and Technology (NIST) have won the Nobel Prize in physics in the past 10 years. Two of them work in Boulder at JILA, a joint institute of NIST and the University of Colorado at Boulder. They are Eric Cornell, who shared the prize in 2001 for the creation of a new state of matter called the Bose-Einstein condensate, and John "Jan" L. Hall, who shared the prize in 2005 for his contributions to laser science and the development of optical frequency combs, precision tools for measuring different colors of light. A third physicist, William D. Phillips, who works at NIST's labs in Gaithersburg, Md., shared the prize in 1997 for his work using laser light to cool and trap atoms.
Media Contact: Laura Ost, 303-497-4880
www.nist.gov
www.boulder.nist.gov
physics.nist.gov/News/contents.html

National Oceanic & Atmospheric Administration

The National Oceanic and Atmospheric Administration's Boulder campus is the largest NOAA research center in the nation and the largest NOAA facility of any kind outside the Washington, D.C., area. The facility houses 1,000 scientists, engineers, and others conducting cutting-edge research into long-term climate change, climate patterns, severe weather, air quality, solar physics, sea-floor mapping, nighttime lights, and countless other topics. NOAA's Earth System Research

Laboratory is the nation's authoritative source for global carbon dioxide monitoring and the official source for warnings of solar storms that can disrupt GPS, communications, satellites, spacewalks, power grids, and aviation. The National Geophysical Data Center is one of NOAA's three major data centers—the only one that is fully connected to the fastest nationwide research networks.
Expert: Anatta, 303-497-6288
www.noaa.gov
www.esrl.noaa.gov
www.swpc.noaa.gov
www.nws.noaa.gov
www.ngdc.noaa.gov

Cooperative Institute for Research in Environmental Sciences

From urban air quality to global sea level rise, scientists at the University of Colorado's Cooperative Institute for Research in Environmental Sciences (CIRES) tackle today's most pressing environmental concerns. With more than 550 scientists and students, CIRES supports innovative research in diverse fields like polar climate change, earthquake and tsunami hazards, drought, ecological impacts of pine beetle, and carbon policy. Celebrating over 40 years of state of the art science, CIRES is the oldest and largest of NOAA's cooperative institutes and is also home to the internationally-recognized National Snow and Ice Data Center.
Media Contact: Adriana Raudzens Bailey, CIRES, 303-492-6289
Media Contact: Stephanie Renfrow, NSIDC, 303-492-1497
cires.colorado.edu
www.nsidc.org

National Center for Atmospheric Research

Founded in 1960, NCAR plays a leading role in weather and climate research nationally and worldwide, providing university scientists with the tools, facilities, and support required to perform innovative research. NCAR and university scientists work together on research topics in atmospheric chemistry, climate, cloud physics and storms, weather hazards to aviation, and Sun-Earth interactions between the sun and Earth. In all of these areas, scientists are looking closely at the role of humans in both creating climate change and responding to severe weather occurrences. Tens of thousands of visitors each year come to NCAR's world-renowned Mesa Laboratory, a scientific and architectural landmark designed by I.M. Pei.
Expert: David Hosansky, 303-497-8611
www.ncar.ucar.edu
www.ucar.edu/news
www.ncar.ucar.edu/research/
www.eo.ucar.edu/visit

University Corporation for Atmospheric Research

Founded in 1959, UCAR is a nonprofit consortium with 71 member institutions across North America, each of which grants doctoral degrees in atmospheric or related science, and other affiliated institutions worldwide. Through its members, UCAR operates the National Center for Atmospheric Research (NCAR) and other education and support activities. UCAR employs more than 1,400 staff in three major campuses across Boulder, including the world-renowned NCAR Mesa Laboratory. UCAR's members and affiliates strengthen and promote professional interactions, collaborations, and collegiality. This unique partnership has produced some of the best research and technology in the world over the past half century.
Expert: David Hosansky, 303-497-8611
www.ucar.edu
www.ucar.edu/org/about-us.shtml
www.ucar.edu/news
www.ncar.ucar.edu/researchhttp://www.eo.ucar.edu/visit

National Renewable Energy Laboratory

NREL is the United States' primary laboratory for renewable energy and energy efficiency research and development. Its areas of expertise are renewable electricity, renewable fuels, integrated energy systems and strategic energy analysis. It is located in Golden, Colorado, 25 miles south of Boulder.

The National Wind Technology Center, a division of NREL, is located about 6 miles from Boulder. Wind energy is one of the fastest-growing forms of electricity generation in the world. Industry experts predict that, with proper development, wind energy could provide 20% of this nation's energy needs. Much of the wind industry's success can be attributed to the research conducted at this facility.
Expert: George Douglas, (303) 275-4096
www.nrel.gov

National Institute of Standards & Technology

NIST is a world-class research agency that develops precision measurement tools, data, and standards that enable innovation in all technology areas. NIST Boulder may be best known for building the world's most accurate atomic clocks, which enable such diverse technologies as telecommunications networks, the Global Positioning System, and electric power distribution. Economic studies show that NIST measurements and standards add $44 in benefits to the U.S. economy for each dollar invested in NIST. NIST helps industry, university, and government researchers turn ideas into effective new products and services, including alternative fuels, biofuels, green solvents, and new technologies for solar power and green building materials. NIST continually invests in the infrastructure for innovation, currently through

construction of a new $77 million world-class measurement and research laboratory in Boulder. NIST is a key agency in the American Competitiveness Initiative, which aims to substantially increase U.S. investment in physical sciences, enabling American superiority in technology innovation.
Media Contact: Laura Ost, (303) 497-4880
www.nist.gov
www.nist.gov/public_affairs/factsheet/Boulder_overview.htm
www.boulder.nist.gov
www.nist.gov/public_affairs/techbeat/tb2008_0123.htm#hydrogen
www.100.nist.gov/cent_toc.htm

Tours (great for kids too)
The NCAR Mesa Laboratory offers a wealth of weather and climate exhibits at the Walter Orr Roberts Weather Trail, North America's first weather-oriented nature trail. Self-guided tours are available 8-5 weekdays and 9-4 weekends, with drop-in guided tours at noon each day. Organized group tours can be arranged. For more information, see www.eo.ucar.edu/visit/ or call 303-497-1174.
www.ncar.ucar.edu
www.ncar.ucar.edu/organization/about
www.eo.ucar.edu/visit/
www.ucar.edu/news/
www.ucar.edu
www.ucar.edu/org/about-us.shtml
www.ucar.edu/org/history.shtml

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Expert: Kim Farin Boulder Convention and Visitors Bureau 303-938-2066
The Wonder of Science

The National Institute of Standards and Technology (NIST) is a world-class research agency that develops precision measurement tools, data, and standards that enable innovation in all technology areas. NIST invites reporters to sign up for laboratory tours. We can accommodate a limited number of visitors on a first-come, first-served basis. Tours will cover "green" topics such as NIST's new materials laboratory for hydrogen pipeline testing and chemistry research on biofuels. Tours also will cover NIST's world-leading research in other areas such as the world's most accurate and smallest atomic clocks, nanotechnology, quantum computing, and health and safety. Tours will include an overview of a new $77 million state-of-the-art laboratory, to be built starting in 2008, that will enable continued innovations.
Media Contact: Laura Ost, (303) 497-4880
www.nist.gov
www.nist.gov/public_affairs/factsheet/Boulder_overview.htm
www.boulder.nist.gov

The highlight of a visit to NOAA's Boulder site is its dramatic visualization invention, Science-on-a-Sphere®, which presents spherical animations of climate change, ocean currents, hurricane formation, tsunamis, and other natural phenomena. At the NOAA (National Oceanic & Atmospheric Administration) campus, visitors can get a close look at two 27/7 forecast centers: the local Weather Forecast Office and the unique Space Weather Prediction Center, which issues the official forecasts of solar storms and their impacts. Among other tour stops is a working laboratory in NOAA's Earth System Research Laboratory, where air samples arriving from around the world are analyzed to track carbon dioxide other atmospheric gases. Visitors learn about computer models of weather and climate and see observing instruments developed here and used throughout the world.
Tour hotline: 303-497-3333
www.noaa.gov
www.esrl.noaa.gov
www.ngdc.noaa.gov
www.swpc.noaa.gov/AboutUs/index.html

Tours of the National Wind Technology Center are available by prior arrangement and NREL's Visitors' Center is open Monday-Friday, 9 am – 4 pm. If you can't get to Boulder or Golden, check out this website. It's full of info including a virtual tour. The National Wind Technology Center, one of three national research centers at NREL, is located about 6 miles from Boulder. Wind energy is one of the fastest-growing forms of electricity generation in the world. Industry experts predict that, with proper development, wind energy could provide 20% of this nation's energy needs. Much of the wind industry's success can be attributed to the research conducted at this facility.
Expert: George Douglas, (303) 275-4096
www.nrel.gov
www.nrel.gov/wind

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- National Center for Atmospheric Research
- National Oceanic and Atmospheric Administration - photo by Will von Dauster
- National Institute of Standards and Technology