



University of Colorado Boulder

*Serving Colorado.
Engaged in the World.*

Advisory Council Orientation

June 2013

Philip P. DiStefano
Chancellor



University of Colorado
Boulder

CU-Boulder Circa 1880



CU-Boulder Today



LEADERSHIP

State Constitution ARTICLE IX Section 12.
Regents of university.

There shall be nine regents of the university of Colorado who shall be elected in the manner prescribed by law for terms of six years each.



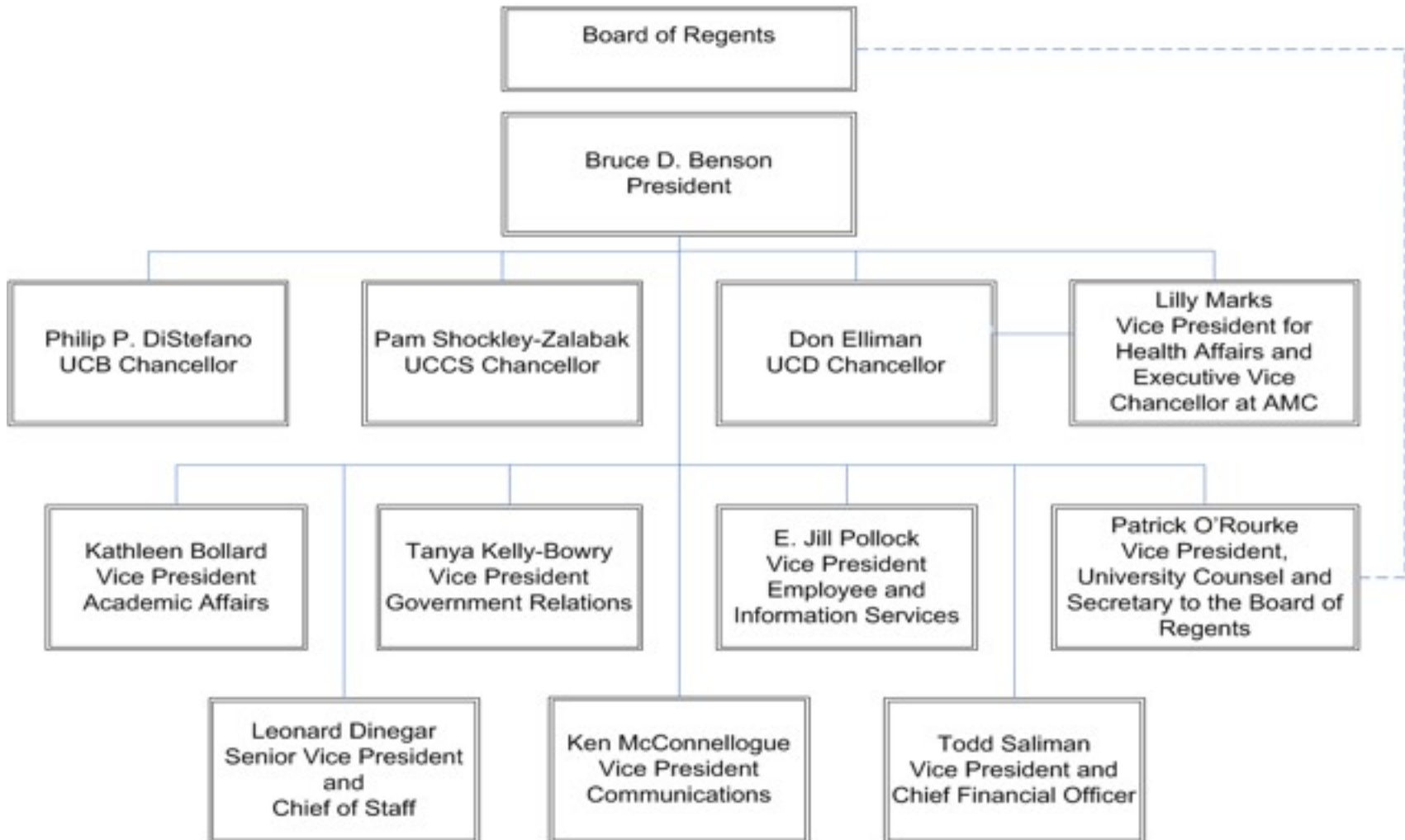
University of Colorado

Boulder | Colorado Springs | Denver | Anschutz Medical Campus

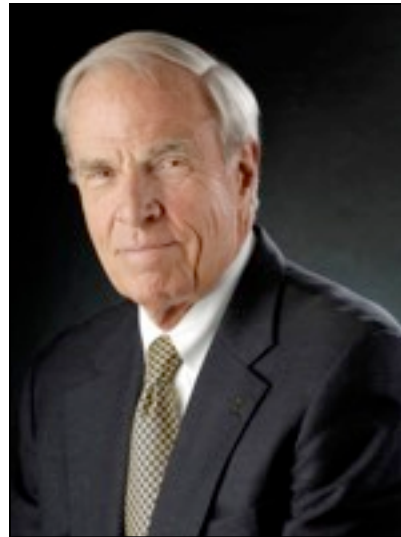


University of Colorado

System Administration Office of the President



Functional reporting relationships are represented by dotted lines.
Administrative reporting relationships are represented by solid lines.



Bruce D. Benson
CU's 22nd President



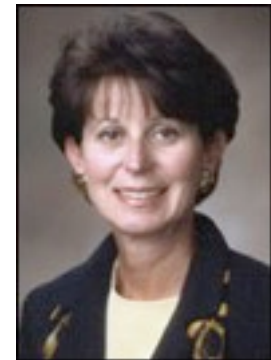
Philip P. DiStefano
Chancellor, CU-Boulder



Pam Shockley-Zalabak
Chancellor
UCCS



Donald M. Elliman, Jr.
Chancellor
CU Denver



Lilly Marks
Vice President
for Health Affairs and
Executive Vice Chancellor
Anschutz Medical Campus

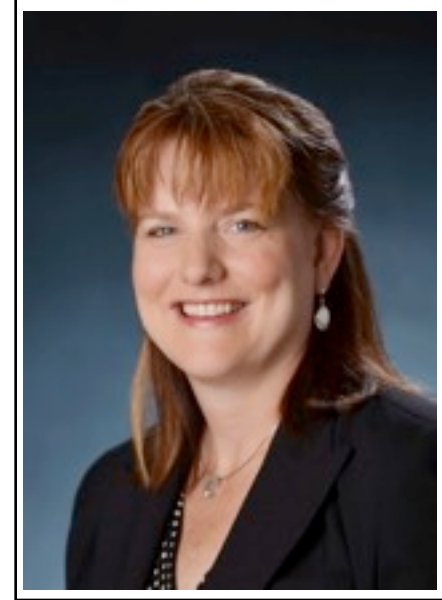
CU-Boulder Leadership



Philip P. DiStefano
Chancellor



Russell Moore
Provost and
Executive VC for
Academic Affairs



Kelly Fox
Senior VC and CFO

CU-Boulder Leadership



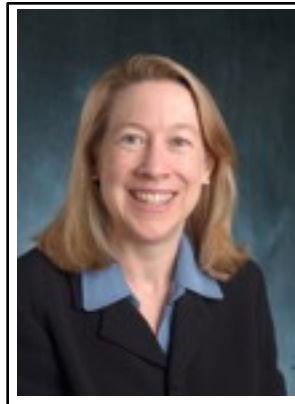
Robert Boswell
VC for Diversity, Equity and
Community Engagement



Deb Coffin
VC for Student
Affairs



Frances Draper
VC for Strategic
Relations



Catherine Shea
Chief of Staff
To the Chancellor



John Sleeman
Managing Senior Associate
University Counsel

CU-Boulder Leadership



Stein Sture
VC for Research



Louise Vale
VC for Administration



Carolyn Whitehead
VP for Development
CU Foundation

Deans, Schools and Colleges



Robert Davis
College of Engineering
and Applied Science



Steven Leigh
College of Arts and
Sciences



Anne Heinz
Continuing Education and
Professional Studies



David Ikenberry
Leeds School of
Business



Lorrie Shepard
School of Education

Deans, Schools and Colleges



Daniel Sher
College of Music



John Stevenson
Graduate School



Philip Weiser
School of Law



James Williams II
University Libraries

GENERAL

CU-Boulder Academics

- Enrollment Fall 2012: 29,278
- 5,086 graduate students
- 3,600 courses in 150 fields of study in arts and sciences, business, education, engineering, environmental design, journalism, law and music
- 78 degree programs (bachelor's), 56 (master's), 53 (doctoral)
- 7,500 degrees granted in 2011-2012
- The source of more than one-third of PhDs awarded annually in Colorado

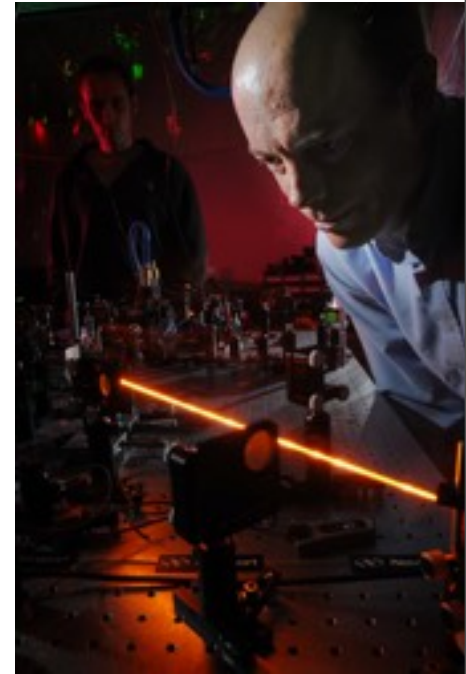
CU-Boulder is the source of more than one-third of all PhDs awarded annually in Colorado.



CU-Boulder by the Numbers

- **5** Nobel Prize Winners (most recent 2012)
- **7** MacArthur Fellows (most recent in 2003)
- **63** faculty members elected to prestigious national academies
- **20** doctoral programs in top 20 or top 20% in National Research Council review (Oct. 2010)
- **15** Graduate School specialty programs ranked in the top 50 in the nation including six in the Top 10 (*U.S News & World Report 2013*)
 - Atomic, molecular, and optical physics tied for No. 1 with MIT

CU is the only research institution in the world to send space instruments to every planet in the solar system.



Faculty and Staff

Faculty

- Academic faculty: 1,560
 - 1,160 tenure track
 - 400 instructional
- Research faculty: 1,326
- 854 international visiting scholars

The true greatness of a university is measured by its faculty.



Staff

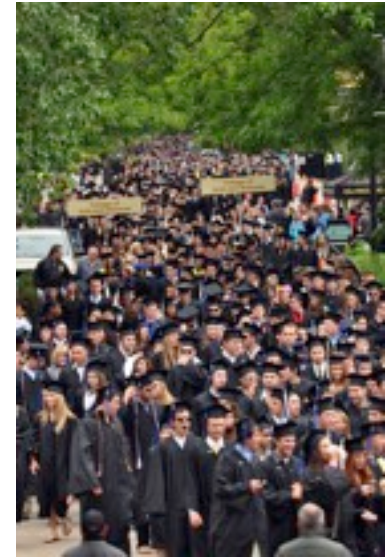
- Classified Staff: 2,513
- Exempt professionals and officers: 743

CU-Boulder Impact/Value

- Colorado's flagship university
- Largest employer in Boulder County: more than 7,200 employees
- 76 new companies created based on faculty discoveries since 1994 – from biotech to aerospace to renewable energy
- 335,000 Coloradans served by educational outreach programs
- No. 1 provider of Peace Corps volunteers 2011 and 2012
- CU-Boulder degree rated Top 20 for return on investment (*SmartMoney.com 2012*)
 - Ahead of Harvard, Cornell and Yale

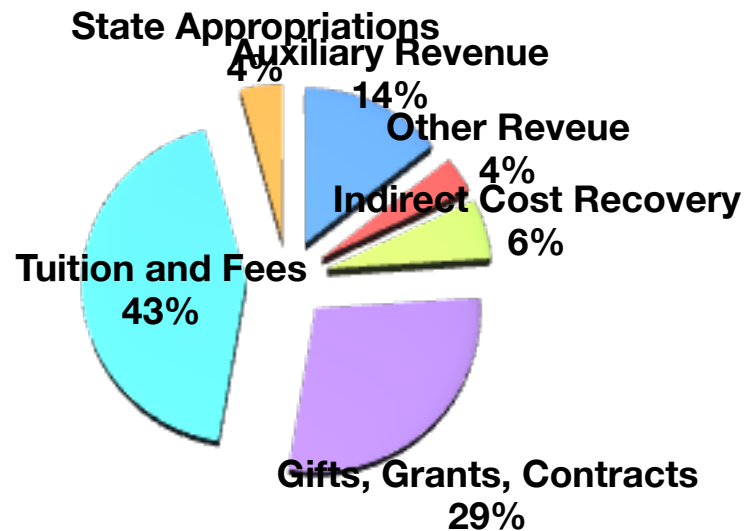
CU-Boulder is No. 35 out of 452 state schools for graduates' mid-career salaries.

-- PayScale.com (2012)



Campus Revenue by Type FY 2012–13

Total Revenue: \$1.3 Billion



STUDENTS

Students 2012-2013

- Enrollment: 29,278
- 6,800 degrees awarded annually
- 5,232 U.S. students of color 17.9% of enrollment (up from 17% 2011-12)
- 1,643 international students (up 10% over 2011-12)
 - CU-B leads all Colorado institutions
 - International students contribute \$48 million to local economy
- 1,272 students studying abroad
- 700 student veterans

*CU-Boulder
boasts 100
Fulbright, 19
Rhodes and six
Marshall Scholars
in its history.*



New freshmen 2012-13

- New freshmen: 5,472
- 3,047 Colorado residents
- Most diverse freshman class in history: 1,199 domestic students of color (22% of class)
- 26% of **resident** freshman are students of color
 - Goal: Mirror Colorado high school graduating class by 2020, today 33% diverse

CU-Boulder recorded the most diverse freshman class in its history in 2012-13 for the second consecutive year.



Residential Academic Programs

- Creates a small-college atmosphere at a national, comprehensive research university
- 13 Residential Academic Programs enrolling 2,408 students
- Enrollment is 44% of on-campus residents
- 5 Faculty-in-Residence programs
- 2 Faculty-in Residence programs TBA 2013

Professors are moving themselves and classroom instruction into living-and-learning residence halls.



RESEARCH



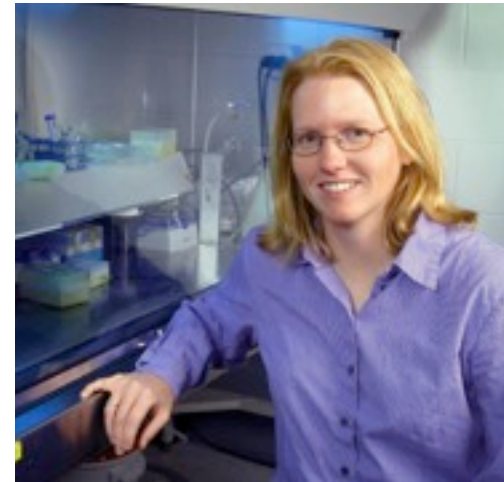
University of Colorado
Boulder

Research Initiatives

Key Areas

- Aerospace Sciences and Engineering
- Biotechnology and Biosciences
- Renewable and Sustainable Energy
- Geosciences/Environmental Sciences
- Computational Sciences
- STEM Education (Science, Technology, Engineering, Mathematics)

World-class interdisciplinary research at CU-Boulder advances society and the economy.



Aerospace Sciences & Engineering

Aerospace

- Colorado is No. 2 in space economy based on employment
- CU has sent instruments to every planet in the solar system
- CU-Boulder largest public university recipient of NASA research dollars
- Aerospace employs more than 150 graduate and undergraduate students
- Embodies *Flagship 2030* initiatives in experiential learning and creating a Colorado Research Diamond

Colorado's aerospace industry ranks third nationally based on employment behind only California and Florida.



Biotechnology and Biosciences

BioFrontiers Institute

- Moved into new Jennie Smoly Caruthers Biotechnology Building in spring 2012
- 500 interdisciplinary researchers and students developing advanced medical and patient care
- Led by Nobel laureate Tom Cech
- Bench to bedside with Anschutz Medical Campus
- Anchor for Colorado biotech industry; creates companies and jobs
- Enhances *Flagship 2030 tenants* of interdisciplinary research; creating Colorado Research Diamond

Work in molecular biotechnology leads to blood tests that can detect cancer and cell therapies to regrow cartilage.



Renewable and Sustainable Energy

Renewable and Sustainable Energy Institute

- Partnering with NREL and other federal labs
- Goals
 - Establish integrated energy campus
 - Innovative research
 - Education
 - Establish sustainable energy for the market
 - Partners with industry

CU-Boulder is a world leader in renewable energy development and implementation.



Geosciences/Environment

Third Nationally in Federal Research Grants

- Global leaders in monitoring greenhouse gas and Arctic ice melt
- Federal environmental research grants total \$90 million a year
- Geosciences complex approved by Regents in 2011
- Multiple departments, centers and institutes
- Researchers in the National Snow and Ice Data Center and CIRES shared in the 2007 Nobel Peace Prize

There are more atmospheric scientists per square mile in Boulder than anywhere else in the world.

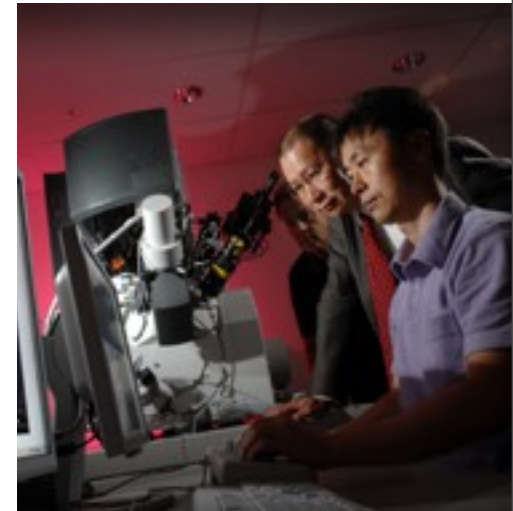


Computational Sciences

A Broad Spectrum of Faculty Partner with Universities, Government and Industry in:

- High-performance scientific computing
- Artificial intelligence
- Nanotechnology
- Next-generation internet
- Biotechnology
- Genomics
- Fluid dynamics
- Climate modeling
- Laser sciences

A great deal of research in the science and engineering disciplines is driven by simulations, requiring significant advances in computational technologies.



STEM Education

Science, Technology, Engineering and Mathematics

- CU-Boulder STEM programs emulated nationwide
- Chancellor met with President Obama and Education Secretary Arne Duncan in Jan. 2010 on STEM goals
- Preparing a new generation of teachers bolstering our nation's competitive advantage
- Today: American 15-year olds No. 21 in science and No. 25 in math compared to global peers
- 2015 goal: U.S. increases new science and math teachers by 10,000 annually to educate 10 million students
- Collaboration among School of Education, A&S, Engineering and Graduate School

*We are
transforming the
way we teach,
discover and
share knowledge.*



Sponsored Research

- \$380.7 million in federally sponsored research (FY 2012)
- Annual research awards have increased from \$260 million as recently as 2007
- \$41% of sponsored research revenue goes to local salaries
- Awards reinvested in the local economy equal \$1 billion over last four years
- Undergraduate (800+) and graduate students (1,160) participate in research

41% of sponsored research revenue goes to local salaries.



Sponsored Research

Top Federal Funding Agencies

- NASA
- National Science Foundation
- Department of Commerce
- Health and Human Services
- Department of Defense
- U.S. Department of Energy

*CU-Boulder is the No. 1
NASA-funded public
university.*



Federal Lab Partners

Local Federal Lab Partners include:

- National Institute of Standards and Technology (NIST)
- National Oceanic and Atmospheric Administration (NOAA)
- National Renewable Energy Lab (NREL)
- National Center for Atmospheric Research (NCAR)
- United States Geological Survey (USGS)

CU-Boulder's partnership with the National Institute of Standards and Technology (NIST) has led to four of its five Nobel Prizes.



Outreach and Engagement

Serving Colorado

Reaching 46 Colorado Counties



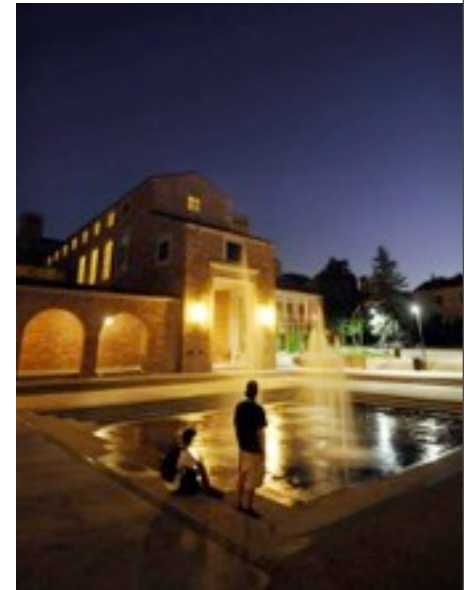
Professor Joe Ryan and students conduct water quality research for communities across the state.



CU-Boulder a Cultural Hub

- 381,000 come to campus annually for cultural events and programs
 - CU museums (117,495)
 - Conference on World Affairs (93,000)
 - CU Presents/College of Music (76,000)
 - Colorado Shakespeare Festival (33,000)
 - Fiske Planetarium (25,000)
 - International Film Series (18,000)
- 500,000 come to campus annually for athletic events, connecting campus with alumni, donors and community

Performing and visual arts are powerful teachers of different cultures, perspectives and historical interpretations.



CU-Boulder Economic Driver

- Largest employer in Boulder County: more than 7,200 employees excluding students
- Overall 17,000 total employees, including students = \$511 million annual payroll
- Nearly 30,000 students bring multiple visitors to area every year
- CU adds over \$26 to the Colorado economy for every state dollar it receives
- 102,000 living alums in Colorado; 250,000 worldwide

CU-Boulder is one of Colorado's primary economic drivers.



Start-up Companies 2007-2011

2010 - 2011

- Clean Urban Energy (Gregor Henze, Civil, Environmental & Architectural Engineering)
- Mosaic Biosciences (Anseth & Bowman, Chemical and Biological Engineering)
- OnKure, Inc. (Xuedong Liu, Chemistry and Biochemistry)
- Red Wave Energy (Garrett Model, Electrical, Computer and Energy Engineering)
- Suvica, Inc. (Tin Tin Su, Molecular, Cellular & Developmental Biology)
- Clarimedix (Poyton & Stowell, Molecular, Cellular & Developmental Biology)
- BioSIPs, Inc. (Julee Herdt, Environmental Design [joint appointment UCD])

2009 - 2010

- AmideBio, LLC (Michael Stowell, MCDB)
- Flashback Technologies, LLC (Greg Grudic & Jane Mulligan, Computer Science)
- Tigon EnerTec Inc. (Jean Koster, Aerospace Engineering)
- Xalud Therapeutics, Inc. (Linda Watkins, Psychology)

2008 - 2009

- Ion Engineering (Rich Noble & Doug Gin, Chemical & Biological Engineering)
- Phobos Energy (Bob Erickson, Electrical, Computer & Energy Engineering)
- LineRate Systems (Manish Vachharajani, Electrical, Computer & Energy Engineering)
- Tussar (Mark Hernandez, Civil & Environmental Engineering)
- Techoshark (Richard Han, Computer Science)
- Qflux (Conrad Stoldt, Mechanical Engineering)

2007 - 2008

- 3QMatrix (Anseth & Bowman, Chemical and Biological Engineering)
- Cello Biotech, LLC (Stephanie Bryant, Chemical and Biological Engineering)
- Precision Biopsy (John Daily, Mechanical Engineering)



Serving Colorado. Engaged in the World.

“The University is not the buildings, not the faculties, not the students of any one time. The University consists of all who come into and go forth from her halls, who are touched by her influence and who carry on her spirit. Wherever you go, the University goes with you. Wherever you are at work, there is the University at work.” — George Norlin, 1935

