



Innovation at Work



CSU**VENTURES**

2013 ANNUAL REPORT

Colorado State University

Executive Summary

CSU Ventures actively supports and promotes the transfer of Colorado State University research and innovations into the marketplace for the benefit of society.

In 2013, CSU Ventures reached new heights in many areas, including record numbers of patents and startups. We initiated new partnerships that broadened our connections throughout Colorado and implemented changes that improved our efficiency and enhanced the value-added services we offer researchers and startups.

Since 1963, our office has managed 1,773 invention disclosures, trademarks, and copyrights for some of the most outstanding faculty and researchers at Colorado State University. CSU is one of the top-performing research institutions in the nation, with research spending of about \$313 million in Fiscal Year 2013.

2013 Achievements

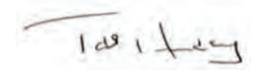
Licenses of CSU technologies earned more than \$110 million in net product sales based on licensed technologies in 2013 and more than \$500 million in the last five years.

CSU researchers were named on 27 issued patents in 2013, breaking the annual record.

Eight startup companies were formed in the last year – which equates to more than two startup companies per \$100 million in CSU research expenditures. This is CSU's highest startup creation rate to date and ranks among the highest of research universities in the United States.

CSU Ventures' Ambassador Program, comprised of CSU students, completed its inaugural year, significantly increasing awareness of intellectual property and commercialization through educational and networking efforts.

Many thanks to board of our directors, staff, academic partners, and business colleagues. You are vital to our success and the future impact of CSU research commercialization and entrepreneurship. We look forward to working with you in 2014.


Todd Headley, MBA
President
CSU Ventures

CSU Ventures is a 501(c)(3) not-for-profit organization, a subsidiary of Colorado State University Research Foundation (CSURF) and an affiliate of Colorado State University.



Proof of Concept Funding

Proof of Concept (POC) funding provides CSU researchers the opportunity to demonstrate the commercial feasibility of their research, making it more attractive to commercialization partners, such as companies, investors, and entrepreneurs.

POC Funding Programs for CSU Researchers

- **CSU Supercluster® grants** provide funding to advance commercially promising research projects in the areas of cancer, infectious disease, and clean energy. CSU Ventures works to translate funded projects into commercially valuable new products and/or startup companies.

- Colorado Office of Economic Development and International Trade allocates POC funding to CSU Ventures each year under two programs: the **Bioscience Discovery Evaluation Grant Program**, for bioscience research, and the **Advanced Industries Accelerator Grant Program**, which supports research in aerospace, advanced manufacturing, bioscience, electronics, energy and natural resources, infrastructure engineering, and technology and information.

- Please visit www.csuventures.org for more information.

Industry Engagement

CSU provides opportunities for industry partners to access the research expertise and research infrastructure at CSU. Industry involvement in the early stages of research and development can improve the commercial relevance of the results and accelerate the time frame for commercialization, thereby making new products available to the public. By providing matching funds for POC research programs administered by CSU Ventures, private companies can increase the impact of their sponsored research dollars. Companies interested in sponsoring research can contact CSU's Office of the Vice President for Research at 970.491.7194 or CSU Ventures at 970.491.7100.

CSU
Specialized Research
Expertise

Benefits to CSU Researchers

Alternative sources of funding

Opportunity to gain first-hand insight into industry research challenges

Share of licensing revenue

Opportunity to see research used in society

CSU Ventures
connects CSU Researchers
and Industry through
Proof of Concept funding

Industry
Product Development
Expertise

Benefits to Industry

Specialized research expertise

State-of-the-art facilities
and equipment

Opportunity to utilize
existing POC funds

Right to use commercially
relevant IP developed at CSU

SPOTLIGHT

Since 2007, more than
650 CSU researchers
from seven CSU colleges
and more than 30 departments
have disclosed inventions
to CSU Ventures.

SPOTLIGHT

Since 2006, **10 CSU startup
companies were formed**,
based on research supported
through Colorado's Bioscience
Discovery Evaluation POC
Grant Program.

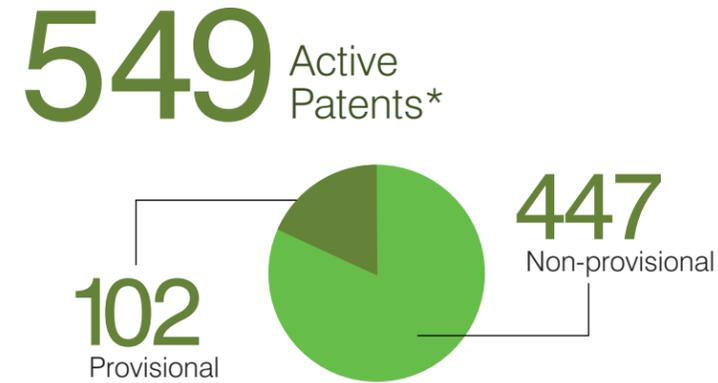
By the Numbers

Performance Metrics

METRICS	Last 5 Years	FY 2013
Inventions Disclosed	552	114
Patent Applications Filed	710	148
Patents Issued	56	27
New Startup Companies	21	8
Inventions Licensed to Colorado Companies	157	31
Inventions Licensed to Out-of-State Companies	67	16
Licensing Income	\$7.12M	\$1.16M

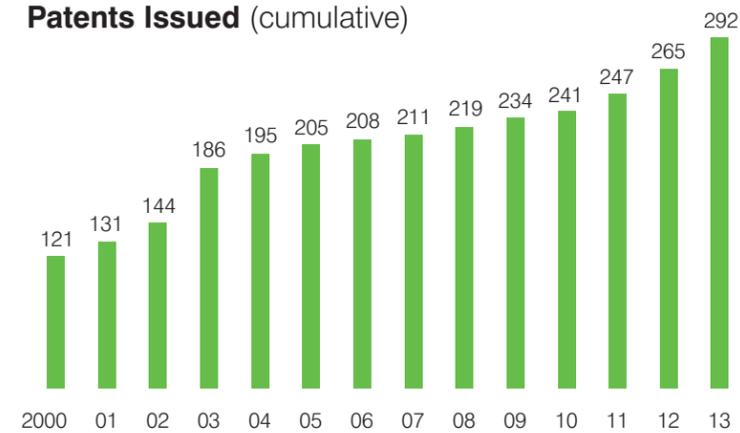


Patent Metrics



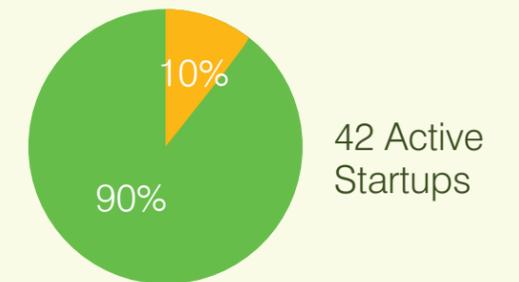
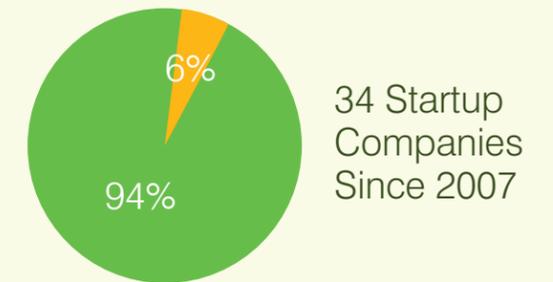
*U.S. and foreign-issued patents and pending patent applications.

Patents Issued (cumulative)



2013 CSU Startup Companies

● Colorado-Based ● Out-of-State



CSU Ventures and Rocky Mountain Innosphere are partnering closer than ever before to provide a better-defined process aimed at streamlining the commercialization path for CSU startup companies.

Highlights

470 People

Employed by CSU startup companies mostly in Colorado as of July 1, 2013.

\$110 Million

2013 net product sales based on licensed CSU technologies.

\$245 Thousand

Awarded by CSU Ventures to six Proof of Concept research projects under the Bioscience Discovery Evaluation Grant Program in 2013.

Research Funded by CSU Startups

● 2002 - 2006 ● 2007 - 2011

Research Funded by CSU Startups

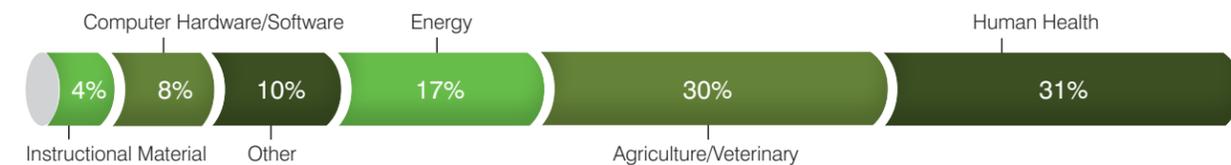


Research Funded by CSU Startups as a % of Total Industry Sponsored Research

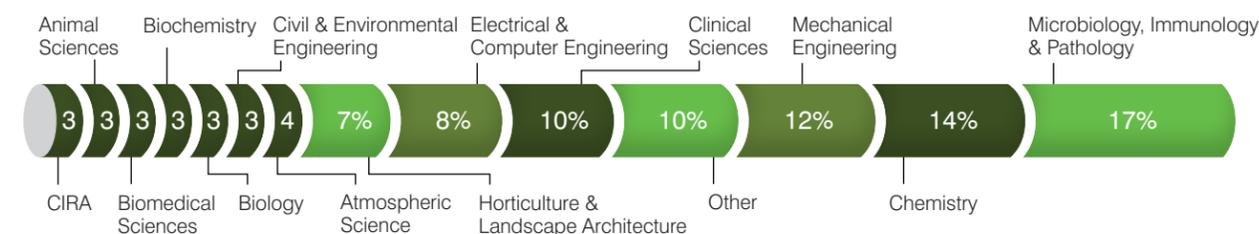


2013 Inventions

By Application

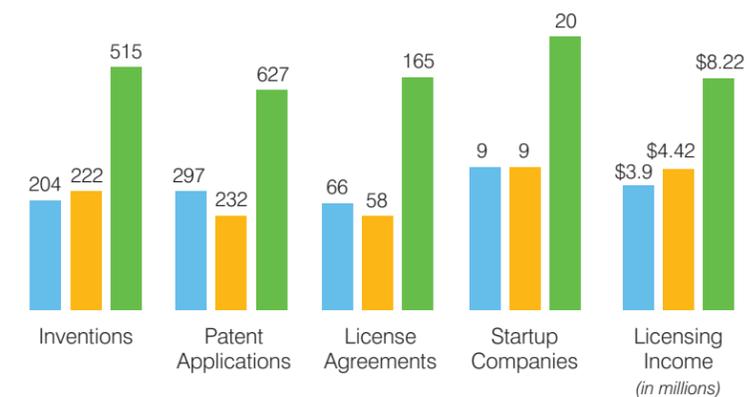


By CSU Department



CSU Ventures Impact Five-Year Comparison

● 1997 - 2001 ● 2002 - 2006 ● 2007 - 2011



2013 CSU Startups

Congratulations to these CSU startup companies created in Fiscal Year 2013.



Our Agricultural Roots

CSU's plant breeding programs for wheat and potatoes create a regional and even global impact while returning a source of revenue for further research. Product sales of CSU-developed wheat and potato varieties account for approximately \$20 million per year. Colorado agriculture is a vibrant sector of local and statewide communities that helps support long-term economic growth.



Potatoes

CSU's Potato Breeding and Selection Program developed approximately 60 percent of the potato varieties that are planted in Colorado fields.

Of newly released cultivars since 1997, those developed by Colorado ranked first in the U.S. (The ranking is based on the top 25 cultivars accepted for seed certification in the U.S. in 2012.)

Colorado is the fifth largest producer of potatoes in the U.S., producing about 23 million hundredweight per year.

Potato growers understand the importance of their relationship with CSU and contribute more than \$250,000/per year in research funding to CSU researchers.

Colorado potato sales totaled more than \$180 million in 2012, making potatoes tops among all fruits and vegetables in Colorado and seventh among all state food crops.

Wheat

Wheat is grown in 40 of the 64 counties in Colorado and supports more than 15,000 jobs in the state.

More than 80 percent of the annual wheat crop is exported out of the state, making its way to more than 60 countries worldwide.

In 2013, nearly 60 percent of the 2.2 million winter wheat acres in Colorado were planted with wheat varieties developed by CSU to produce higher yields and better baking flour and to resist diseases and insects prevalent in Colorado.

Wheat producers and the Colorado seed industry support the CSU Wheat Breeding and Genetics program through royalties. To date, more than \$2.6 million in royalty funds has been returned to CSU to support further research under the Colorado Wheat Research Foundation program.

SPOTLIGHT

The Wheat Breeding Program at CSU developed a new variety of wheat called "Snowmass" that is revolutionary in the milling and bakery industry and was instrumental in Ardent Mills locating its national headquarters in Colorado.

Colorado State University Superclusters®

Colorado State's academic Superclusters® are built on a foundation of scholarly excellence in core disciplines and focus on addressing the great global challenges of cancer, clean energy, and infectious disease.

CSU Ventures supports CSU's academic Superclusters by providing commercialization expertise that encourages existing and new business ventures to advance commercial applications and take them to the global marketplace.



Cancer

The Cancer Supercluster is a collaboration of several CSU colleges, ranging from the College of Veterinary Medicine and Biomedical Sciences to the College of Engineering. This multidisciplinary approach, along with numerous partnerships with the world's top cancer research centers, positions the University to make a tremendous impact in the fight against cancer by developing novel drugs and techniques to better detect, treat, and prevent the disease in both humans and animals.

Clean Energy

CSU faculty members, from the College of Liberal Arts to the College of Engineering, are developing market-driven solutions in the areas of biofuels, solar energy, wind power, and clean-burning engines. This cross-campus, interdisciplinary effort encompasses an extensive network of researchers, research programs, and centers and extends off campus to a global network of public and private partners. In Fiscal Year 2014, the Clean Energy Supercluster mission was broadened and re-envisioned as the Energy Institute, which aims to grow the impact and reputation of energy research and education at CSU.

Infectious Disease

The Infectious Disease Supercluster develops and implements effective interventions for human, animal, and plant diseases of global importance. It aims to enhance the overall infectious disease research, training, and service capacity at CSU and to accelerate the development and application of solutions worldwide by partnering with industry, government, foundations, and other entities.

SPOTLIGHT

The CSU spinoff VetDC acquired all rights to an investigational class of anti-cancer molecules from another startup company. The acquisition firmly establishes VetDC as one of the premier therapeutic companies in animal health.



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Colorado
State
University

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