

M E M O R A N D U M

To: Chancellor's Advisory Committee
From: Brad Bernthal, Associate Professor, and Frances Draper, Vice Chancellor for Strategic Relations
Cc: Catherine Shea, Chief of Staff, Office of the Chancellor
Date: June 2, 2014
Re: Background memo in advance of June 10 CAC discussion about entrepreneurship at CU-Boulder

I. EXECUTIVE SUMMARY

During its June 10 meeting, the Chancellor's Advisory Committee will be asked for strategic direction about how CU-Boulder can excel as a leading public entrepreneurial university. The Chancellor has identified the opportunity to amplify and expand entrepreneurial efforts, as well as perhaps more closely associate CU-Boulder's brand with entrepreneurship and innovation, in the coming years.

Grassroots entrepreneurial efforts have boomed at CU-Boulder over the past decade. The growth of entrepreneurship is in part due to the fact that the University is located in the world-class startup scene of Boulder, Colorado. Writer Richard Florida dubbed Boulder "America's Most Creative City." According to a 2013 Kauffman Foundation report, Boulder also boasts the highest density of high-tech startups in the United States. Boulder is home to TechStars and the Unreasonable Institute, two internationally recognized accelerators that attract and work with early stage startups. Collocation with a thriving innovation scene provides CU-Boulder unique opportunities unavailable to other universities. Geography shapes the nature of entrepreneurship on campus.

The objective of the CAC discussion is to explore several issues related to campus entrepreneurship and, ultimately, select one actionable idea that the CAC would like to help with. Issues for discussion are highlighted in Section II below. To assist CAC reflection, Section III of this Memorandum provides background context concerning the state of entrepreneurship at CU-Boulder.

In advance, thank you for your advance consideration on the matters below.

II. QUESTIONS FOR CONSIDERATION AT JUNE 10 CAC

1. **Should entrepreneurship be a core part of CU-Boulder's brand over the next five years?** Why or why not? If so, what mechanisms should CU-Boulder consider in messaging its entrepreneurship brand to various stakeholders, such as prospective students (both undergraduate and graduate), existing researchers, and the surrounding community?

2. **Should CU-Boulder seek to establish a Town / Gown compact?** Colorado's Front Range features a world-class innovation scene. Many CEOs and executives are encouraged by CU-Boulder's entrepreneurship-related progress in recent years and, moreover, are enthusiastic about heightened engagement with CU-Boulder. A meeting between CEOs, the Chancellor, and Deans / leaders of the University may help establish a compact whereby CU-Boulder and the area's innovation scene identify common principles and methods of collaboration within entrepreneurial realms. Would a summit or meeting along these lines be worthwhile and, if so, what topics would be best to address?
3. **How could CU-Boulder better engage technologist graduate students involved in entrepreneurship?** A notable trend nationwide is that PhD students are outpacing available professor positions. A recent study reports roughly 7 PhDs awarded for each existing (not necessarily open) faculty position. This phenomenon affects grad students as well as the number of post docs looking for work. Whatever the exact numbers, PhD students and post docs are increasingly aware that there is an oversupply of qualified candidates vis-à-vis faculty slots. How should CU-Boulder be better preparing its grad students and post docs – many of whom will not become professors – for entrepreneurship and commercialization programs?

Relatedly, the University of Michigan is rolling out a Masters in Entrepreneurship program next year. The coursework is oriented around moving university technology into commercial contexts. In short, they are formalizing certain tech transfer functions into a Master's program with graduate students focused on getting ideas into startups and emerging companies. Should CU-Boulder consider such a program?

4. **How should CU-Boulder benchmark itself against other public entrepreneurial universities?** There is a sense in Colorado's Front Range community that CU-Boulder has made significant strides towards inspiring students to engage in entrepreneurship and, moreover, that CU-Boulder has succeeded in creating a nerve center for the surrounding community's innovation scene. Yet we still lack the ability to meaningfully compare CU-Boulder with other entrepreneurial universities. What efforts should be made to baseline CU-Boulder against other institutions? What metrics / measurements should we be longitudinally focused on? How can CU-Boulder better select peer institutions for comparison in entrepreneurship?

III. BACKGROUND PRIMER ON STATE OF ENTREPRENEURSHIP AT CU-BOULDER

A summary of entrepreneurial efforts across CU-Boulder is provided below. A confederated structure connects entrepreneurship efforts across the campus. Leaders across disciplines collaborate with one another, as well as with the startup community, through an informal network of committed individuals, centers, student groups, and campus initiatives. For example, leaders from entrepreneurship entities in the business school (Remy Arteaga, Deming Center), engineering (Mark Gross, ATLAS), law school (Brad Bernthal, Silicon Flatirons), and technology transfer (Kate Tallman, Technology Transfer Office) regularly meet in an informal configuration known as the CU-Boulder Entrepreneurship (CUBE) group. Similarly, approximately 20-25 entrepreneurially-minded leaders -- including faculty, staff, and students -- convene for lunch on a quarterly basis in an informal configuration known as the Co-conspirators group.

There is opportunity to build upon grassroots entrepreneurship at CU-Boulder. An increasing challenge, as initiatives sprout across the campus, is to capture CU-Boulder's entrepreneurial energy in a single package. A concerted messaging effort would celebrate CU-Boulder's entrepreneurship assets and encourage future endeavors. Given the strength of the Front Range's world class startup community, in the coming years CU-Boulder could distinguish itself as an elite entrepreneurship institution.

Set forth below is a primer on some notable entrepreneurship efforts across the campus.



The New Venture Challenge (NVC), founded in 2008, is CU's cross-campus entrepreneurship championship. The NVC is a model for cross-campus entrepreneurial collaboration. Supported and led by 12 departments, centers, and student groups across campus, and funded by 15 companies and organizations in the community, in 2014 the NVC had 71 participating teams from across the campus, representing over 30 different majors and departments. NVC participants received mentorship from over 80 mentors from the community. The NVC has proven to be a high caliber structure that makes a strong impact upon those who get engaged.

Cutting-edge entrepreneurship conferences

The Silicon Flatiron Center's conference on *The Future of Entrepreneurial Finance*, in March 2013, and The Deming Center's conference on *Crowdfunding and Its Implications for Entrepreneurial Ecosystems*, in July 2013, are examples of leading entrepreneurship conferences hosted at CU-Boulder. These events attracted academic participants from some of the most prestigious schools in the world, including Wharton, Berkeley, UCLA, McGill, Wisconsin, and the London Business School. Other participants included professionals from the Securities and Exchange Commission, the United Nations and the Federal Reserve.

Catalyze CU is an 8-week startup accelerator designed for CU Students and Faculty. Launching in June 2014 with six companies, Catalyze CU takes the University's most

promising ideas and technologies and pairs them with world-class mentorship and \$4500 equity free grants. Through this combination, Catalyze CU provides the driving force to make these ideas and technologies succeed.

Also on the horizon, the College of Engineering & Applied Science is planning a maker's space. Named *Idea Forge*, this is envisioned as a flexible, collaborative, cross-disciplinary 22,000-sqft space where innovators can imagine, design, create, and test products and solutions to meet a range of societal and customer needs.

Startup Colorado is a regional initiative to increase the breadth and depth of the entrepreneurial ecosystem across Colorado's Front Range. Part of the wider, Startup America movement, Startup Colorado is housed in the Silicon Flatirons Center at CU-Boulder. A major part of the Startup Colorado initiative has been Startup Summer, a ten-week program that combines a summer internship with a Boulder-Denver area startup company with a series of evening events, all focused on teaching participants the fundamentals of creating and running a successful startup. Over the past three years, Startup Summer has placed 48 undergraduate students in these high-impact, paid summer internships.

Town Gown Connectivity. CU-Boulder has increasingly turned the university "inside out" by regularly bringing members of the Boulder and Denver startup communities onto campus. For example, ATLAS and Silicon Flatirons host the *Entrepreneurs Unplugged* series, which brings serial entrepreneurs to campus on a monthly basis during the academic year. Guests in recent years include Ted Turner, Sam Zell, Wendy Lea, David Bonderman, Brad Feld, and George Kembel. This past year alone, Silicon Flatirons presented over 40 public facing entrepreneurship events with over 6,000 attendees involved.

Leeds School of Business: Leading Entrepreneurship Research. The Leeds School of Business, including its Deming Center for Entrepreneurship, features a roster of top national researchers and PhD students engaged in entrepreneurship and innovation. Deming supports 10 full-time entrepreneurship faculty and another 10 entrepreneurship practice experts. In addition to its research, in fall 2010, Deming help launch the cross-campus entrepreneurship certificate program, which made entrepreneurship classes available to over 1,000 non-business students between 2010 and 2014. This program has been morphed into a "Business Minor" and continues to make entrepreneurship courses available to students across campus who are outside the business school.

The Blackstone Entrepreneurs Network Colorado (BEN Colorado) is a new, three-year initiative to help jumpstart the development of high-growth companies with the greatest potential to create new jobs in Colorado. BEN Colorado is a \$3 million dollar grant from the Blackstone Foundation to the Silicon Flatirons Center at CU-Boulder, where the initiative is headquartered. In addition to supporting the entrepreneurial ecosystem, BEN Colorado will provide regular internships to students at CU-Boulder.

The Technology Transfer Office (TTO) is working to identify valuable innovations on campus and offers support to students, faculty, and staff as they move ideas from the lab towards becoming marketable products and services. Since 1994, 75 companies have been

formed based on CU-Boulder technologies and the TTO is committed to supporting CU-Boulder students, faculty, and staff as they develop the next generation of great companies.

Community Office Hours occur once weekly at various coffee shops around Boulder. During these office hours, Brad Bernthal, the Director of Silicon Flatiron's Entrepreneurship Initiative, meets with members of the University and wider Boulder community, introducing them to new mentors and business partners and acquainting them to entrepreneurship resources on and off campus. Remy Arteaga, a Director with the Deming Center, regularly hosts community office hours in connection with Chamber of Commerce.

Ideas Launcher is an ongoing mentoring program for students interested in entrepreneurship. Once weekly, a group of varied business mentors from the community will meet at Spark Boulder on the Hill and hold open office hours for students and faculty who are working on building businesses.