

Innovation Lab

Proposal to NCIIA: Narrative

D R A F T 11/11/11

Introduction

What are you proposing?

The Deming Center for Entrepreneurship is leading a team of cross-campus collaborators to establish a campus Innovation Lab to support students in innovative product development, design, and commercialization.

The Innovation Lab, as it is built out over the next few years, will feature:

- A central, accessible location for students to come and share ideas
- Software, smartboards, a resource library and other tools for student innovators
- A movable kiosk that travels across campus to different colleges to reach out to students and encourage them to explore entrepreneurship opportunities.
- Staff, including an entrepreneur-in-residence to facilitate mentoring, access to resources, and support of e-team formation
- Openness to a wide range of technologies and ideas, with an emphasis on sustainability and social entrepreneurship

We are seeking \$15,000 in seed support from NCIIA to:

- purchase equipment and software,
- fund faculty time, and
- cover student E-Team costs such as database access, materials, and other development support.

These funds will be leveraged with financial support from the Deming Center, other campus entities, and other external funders to launch the Innovation Lab.

How will this lead to the creation of student E-Teams?

During this seed phase, the Innovation Lab will have four components that will lead to the development of student E-Teams:

1. A traveling kiosk will move from building to building across campus to let students know about the Lab and E-team opportunities, and provide initial resources;
2. Materials, tools, software access, and student staff will be available at an on-campus location on a regular basis for student drop-in hours;
3. Educational workshops in conjunction with the campus New Venture Challenge will offer foundational instruction;
4. The Lab's faculty advisor and entrepreneurs-in-residence will work with each potential E-team to create a support network that may consist of faculty, MBA students, and/or outside business advisors as the team moves through its process.

The kiosk, student staff, and workshops are being funded through other sources.

How will the most promising ideas/teams be supported beyond the classroom/program towards commercialization?

CU-Boulder is fortunate to be located amidst a rich entrepreneurial environment. Each student E-Team that develops out of the Innovation Lab will be provided a set of ongoing resources to continue to build out their ideas. Depending on their needs, this may include:

- mentors from the business community and/or MBA students;
- support to enter the campus-wide New Venture Challenge business competition and other competitions;
- an opportunity to work on their idea in the new cross-campus entrepreneurship certificate program; or
- access to other incubation resources in the community.

The Innovation Lab will track and follow up with E-Teams periodically to ensure that they are getting the help they need to move toward commercialization.

History and context

What, if any, courses or programs currently exist? What do you feel is missing? What is in development?

The Innovation Lab builds on two related programs that serve the CU-Boulder community: the New Venture Challenge business plan competition, open to all students, faculty, and staff, and a new undergraduate cross-campus entrepreneurship certificate.

The New Venture Challenge, now in its fourth year, offers workshops, mentorship, and development of a business plan, culminating in a spring competition. NVC is a collaborative effort by the Deming Center, the Law School's Silicon Flatirons program, CU's Alliance for Technology, Learning, and Society, and other colleges including engineering, business, and even music. Last year's participation was double the previous year. This year over 200 participants, the largest number ever, attended the October launch event.

Last year over 30 business plans were submitted, of which xx were cleantech, biotech, IT. Several of the top-ranked plans have attracted outside funding and gone into startup mode. This year's event will include several tracks, including cleantech, IT, social entrepreneurship, and music and arts. CU, via the Deming Center, was awarded a three-year DOE grant to host a regional cleantech competition with a \$100,000 grand prize, so our cleantech NVC entrants now have something big to aspire to.

Over the past year, the Deming Center has started an entrepreneurship certificate program for non-business majors. Working closely with colleagues in law, music, journalism, engineering, and arts and sciences, we have developed a set of courses that include both the

broad-based foundations of entrepreneurship as well as discipline-specific information. The five-course program also includes experiential components such as an internship and participation in entrepreneurial events.

The certificate program is growing rapidly. From a single course offering in spring 2011, we grew to three waitlisted courses this fall, and will offer seven courses/sections in the spring of 2012. We anticipate offering up to 5 sections each of the three core courses by spring 2013.

The NVC has given us a strong foundation of collaborative partnership to “collapse the university” with the unifying theme of entrepreneurship. It has also helped us identify the common interests and needs of student teams that come together, so we know what resources are most helpful to them. The certificate program is building student skills in business principles and development of a business idea.

These two efforts, one curricular and one experiential, have demonstrated student interest in entrepreneurial efforts and have built a base of awareness and cooperative effort. We now see the opportunity to create an even stronger base for entrepreneurship and technology development via the establishment of an Innovation Lab.

The Lab gives all of our efforts a central hub. Student e-teams in the NVC and certificate programs as well as those who wish to proceed independently, will now have a place to go to get a wide range of support. The Lab will be open to students year-round, and will focus on connecting e-teams with the tools, mentors, and other students who can best support turning their innovative ideas into a commercial success.

This combination of a well-publicized, accessible location, regular mentoring and workshops, and customized resources for emerging e-teams, will be immensely valuable in strengthening e-teams and giving student innovators a low-risk opportunity to explore an entrepreneurial path.

What support have you received for your work?

Support for the Innovation Lab is broad-based, and has even brought new partners to the table. Our primary partner is the CU Environmental Center, the oldest and one of the largest such centers in the U.S. The Center is interested in seeing their sustainability-oriented students take a more businesslike approach to implementing their ideas. They are spearheading the development of the kiosk, and providing student employees. They have also secured a conceptual commitment from CU’s Natural History Museum to utilize their space for the Lab. The Museum is interested in attracting more student traffic, so this is a great fit for them.

The Innovation Lab has received strong conceptual support from the campus' informal cross-campus entrepreneurship team, who are also our partners for the New Venture Challenge, including representatives from the law school, engineering, music, and our ATLAS center for technology and learning. We are in the process of following up with these groups to determine what specific financial or in-kind contributions they can offer.

There is a strong interest both among students and among off-campus entrepreneurs in building greater strength in social entrepreneurship, and students have expressed the desire to include social entrepreneurship in the Lab. We have also hosted a **focus group of xx students** from around the campus, as well as an online survey. Results: TBD.

Off-campus innovators with close ties to CU are working on a proposal for a Boulder Hub for entrepreneurial development, based on successful Hubs operating in Berkeley, Atlanta, and elsewhere around the world. These leaders want to integrate their efforts with the Innovation Lab. Finally, the Deming Board is at work on development of an Executive-in-Residence program that would draw on the skills of our 60+ person board of local entrepreneurs and innovators, and feed into the mentoring aspect of the Lab.

The Deming Center has contributed staff time to develop the Lab to date and will commit **up to \$50,000** over the next year to fund the program (see budget), as well as an office space if needed. The Environmental Center is seeking a CU grant of \$20,000 to develop and staff the kiosk. The Environmental Center has also committed to an additional \$11,500 in staff time and financial support.

Finally, we are greatly encouraged by the strong support we have received for cross-campus entrepreneurship program from campus administrators, including the Chancellor:

To ensure our graduates are viewed as exceptional in the marketplace, we immerse students in the most innovative environment that we can provide. One way is through a vast array of entrepreneurship opportunities across campus, including a cross-campus Certificate in Entrepreneurship developed for students of all majors, from chemistry to theater. It is offered through the Deming Center for Entrepreneurship in the Leeds School of Business.

The Deming Center also gives students a host of entrepreneurial opportunities in a number of transformational industry sectors such as bioscience, clean energy and organic business. Additionally, we offer entrepreneurial programs and certificates through specific colleges such as engineering and music, and through our Residential Academic Programs like the new Sustainable by Design RAP at Williams Village North.

It's no wonder [Payscale.com](https://www.payscale.com) rates CU-Boulder as one of the nation's top schools for mid-career salaries this year and a perennial leader in early-career salaries.

CU-Boulder Chancellor Phil DiStefano, letter to the CU Foundation, 11/1/11

Based on the widespread support for our efforts, we believe that the Innovation Lab will draw students, create opportunities for e-team development, and garner both internal and external financial support for expansion.

Please be clear about what exists today vs. what you are proposing to create or improve.

Current programs:

- New Venture Challenge
- Cross-campus entrepreneurship certificate (expanding)

2012-13 Innovation Lab plans:

- NCIIA grant proposal supports development of the lab and programming:
 - Faculty development and implementation time
 - Equipment for the lab
 - E-team support materials, resources, consulting, travel, etc.
- CU Environmental Center/CU grant funds support kiosk design and implementation:
 - Kiosk and other equipment
 - Student staff time
- Deming Center supports program design and implementation
 - Staff time to support faculty development work
 - Materials development
 - Creating mentor and Entrepreneur-in-Residence programs
 - Office space if needed
 - E-team tracking and support

2013-14 and beyond

- Permanent, central location
- Additional resources and equipment based on student needs
- Full-time staff person

Work plan and outcomes

Create a step-by-step work plan in a table or spreadsheet and include deliverables, action items, and a timeline. Be explicit about the milestones you hope to achieve by the end of the grant period.

Described in attached work plan.

Notes:

The steering committee will be formed out of the already-existing informal network of cross-campus advocates on the campus. This network includes both faculty and staff representatives from business, law, engineering, music, and the ATLAS center. We will include the faculty principal investigator for the project, student representation, and an external advisor, most likely the entrepreneur-in-residence, on the steering committee.

The steering committee will provide oversight and resources as needed to the Innovation Lab. At least initially, processes will be kept informal, with online review of materials where possible, and limited meeting time. The committee will also be kept small in the first year, with 5-8 members. This will facilitate Lab development and provide flexibility as we learn more about what the needs for the Lab are and how they affect the desired composition and role of the steering committee.

Key milestones:

- Steering committee formed: 2/28/12
- Outreach plan developed 5/31/12
- Faculty, mentor, coaches selected 7/31/12
- Equipment purchased and installed 7/31/12
- Innovation Lab launched 8/31/12
- Fall e-teams formed 12/31/12
- Spring e-teams formed 4/30/13
- Program evaluation 6/30/13

Key metrics:

- Number of students served (lab, kiosk, events)
- Number of e-teams formed
- Progress of e-teams
- Student satisfaction
- Advisor, mentor, coaches' satisfaction

Beyond the grant

How will the course or program continue beyond the end of the grant period?

As discussed above, there is growing interest in entrepreneurship education across the CU-Boulder campus. We have already begun discussions with both internal and external potential sources of funding for an expanded innovation lab.

At the same time, we're taking an entrepreneurial approach to developing the lab. With our basic building blocks of the kiosk to build awareness and potential space at the museum and/or in Leeds School office space for e-team meetings and resources, we can conduct much of the work of the innovation lab as it scales up. Most of our expenses beyond these initial investments will be for staff time, and we have a variety of options, from undergraduates to an entrepreneur-in-residence to Deming Center staff, to address those needs until resources are available for expansion.

Facilitating e-team development is a key aspect of any successful campus-wide entrepreneurship program, especially at a major research university like CU-Boulder. There is so much technology innovation here that students have an exceptional opportunity to work

across disciplines and learn experientially how to bridge the gap between invention and the marketplace. We believe that with a consistent hub for student discussion and expert mentoring, we will see e-teams take off and thrive across the campus.