Chapter 5.4: Entrepreneurship[1]

Context – Starting Points

The College of Engineering at Colorado State University is strategically pursuing economic development using the co-dependent engagement model for linking private sector (i.e., companies) with engineering faculty members and their laboratories. Entrepreneurship is an effective way to connect insights from fundamental research to an application with purpose and impact through commercial channels.

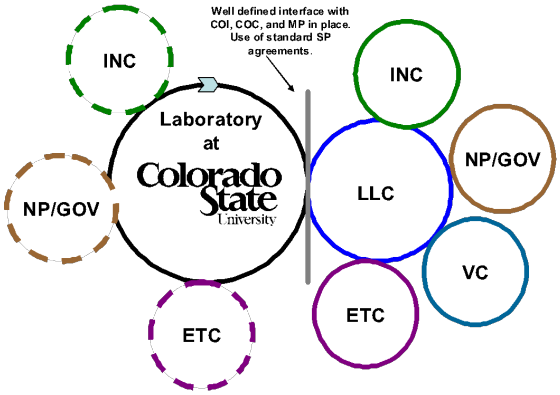

Figure 1: "Co-dependent" Model for Private Sector Interaction

Objective: Create an entrepreneurial ecosystem in the College of Engineering for students and faculty to engage in entrepreneurship that can lead to innovation via our scholarship and research activities.

Goal: Increase activities and avenues for students to understand and express the value creation in market-based commercialization to translate creative ideas and innovation into products and commercial enterprises.

Strategies

- Create an annual catalog of courses and events for students.
- Create a calendar of events of student-oriented entrepreneurship activities and events (e.g., EECL's 1Mpact Challenge).
- Create "engineer as entrepreneur" opportunities for learning and exploring the possibilities of entrepreneurship.

[1] Author: Wade Troxell, Associate Dean for Research and Economic Development

- Form partnerships with the private sector partners to engage our students in commercialization and new product development.
- Develop a list of entrepreneurial mentors for students to connect with and engage in meaningful dialog.
- Develop Professional Learning Institute entrepreneurship curriculum.
- Establish an Entrepreneurship Leadership Center that identifies, recognizes and engages former students that go forth and establish themselves as leaders in forming commercial enterprises. (DAB recommendation)

Goal: Increase faculty interest and participation in commercialization of their research.

Strategies

- Introduce faculty and staff to CSU Ventures Startup Guide for successfully starting a new company with university inventions.
- Notify faculty of solicitations involving entrepreneurship as it can relate to their research.
- Create categorization of research in terms of technology readiness levels in order to better characterize paths to commercialization.
- Engage "spin-in" companies to bring intellectual capital, financial resources, and human resources to help research teams build capabilities and capacity.
- Expose our faculty and staff to the local entrepreneurship networking ecosystem including SAGE, Rocky Mountain Innosphere, Innovation After Hours, Fort Collins' Economic Clusters: Clean Energy, Water Innovation, Bioscience, Hardware/Software.
- Establish an Entrepreneurship Leadership Center that identifies, recognizes and engages faculty and staff that translate research into established commercial enterprises in the market. (DAB recommendation)

Metrics

- Number of CSU Ventures new companies formed in FY12.
- Number of CSU Ventures companies equity events including IPOs in FY12.
- Number of CSURF Ventures disclosures, patent applications, patents issued, and licenses in FY12.
- Number of CSU entrepreneurship events offered in COE and CSU, FY11-baseline.
- Establish an Entrepreneurship Leadership Center

Targets

The following targets are based on a five-year running average:

- The number of new companies formed from the COE will increase from 1 to 2 annually.
- The number of COE CSURF Ventures inventions will increase to by 10% to 41 annually.
- The number of COE CSURF Ventures patent applications will increase 10% to 51 annually.