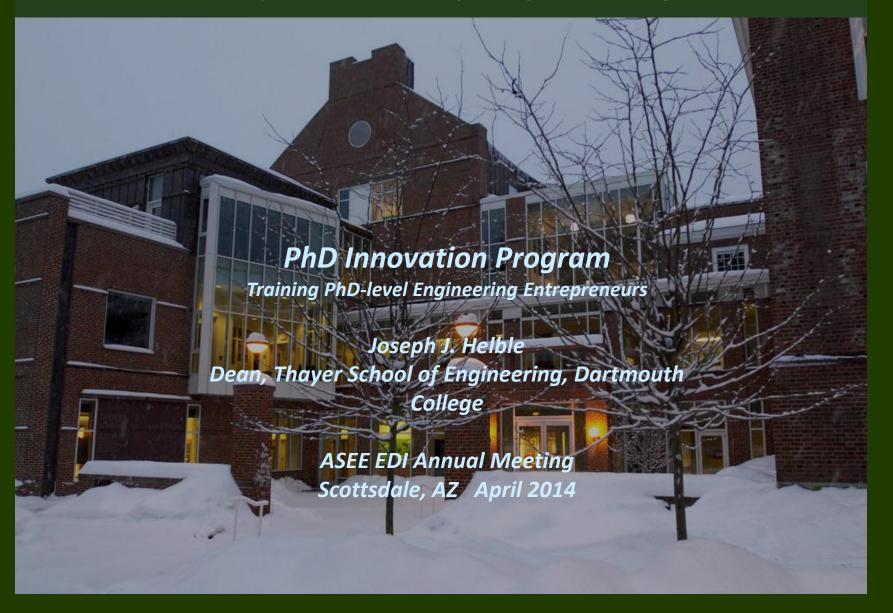
Thayer School of Engineering



background – STEM challenge

CHALLENGE

National need for STEM-education for global competitiveness









- Reports issued 2004-2006 cite need for STEM funding, lead to COMPETES
- Less noticed, also cite need for better translation of invention out of laboratories
- "Entrepreneurship" programs developed by engineering schools –UNDERGRADUATE
- PhD programs remain focused on producing faculty as model; little attention to incorporating entrepreneurial focus explicitly into PhD

Dartmouth "Engineering PhD Innovation Program" - 2008

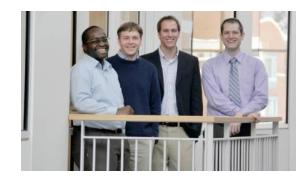
Designed to be **SMALL**, **SELECTIVE**, **FOCUSED**

Goal: **LIMIT** to 5 new students per year

Separate criteria beyond PhD - extra **COURSEWORK**, write and present **BUSINESS** PLAN, conduct late-stage 6 mo. INTERNSHIP

REVERSE FELLOWSHIPS - funded yrs 3-5 of PhD

PROJECT SEED FUNDING also provided









Luce Foundation grant 12/08



PhD Innovation Program – Fall 2013, 5 year status update

Complements ugrad and MEM offerings, enabling representation of full "Dartmouth

Engineering E'ship Program" (http://engineering.dartmouth.edu/about/dartmouth-difference/DEEP/)

SUPPORT – NSF Partners for Innovation funding; endowment

LEADERSHIP – hired faculty entrepreneur to oversee program (Columbia professor / JPL / entrepreneur / NAI / NAE)



RECOGNITION for company spun out of university



- 50% of students filing for IP protection (v. 15% baseline)
- PhD entrepreneurs: 0% (regular) v. 25% (innovation)
- PhDs to startup: 4% (regular) v. 75% (innovation)
- PhDs to post-doc: 38% (regular) v. 13% (innovation)
- Baseline (regular PhD, '79-'04): 26% to academic positions v. 0 to date





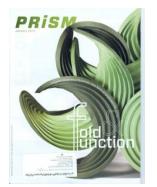


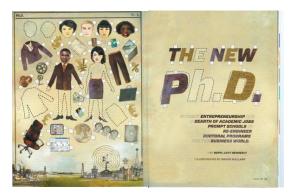






program recognition







NAE Gordon Award, May 2014



GOAL – was to change range of outcomes for our PhD students. Initial trend promising. http://engineering.dartmouth.edu/academics/graduate/innovation/