



I am the Dean of Graduate Education at the University of Minnesota

Number of Post-Baccalaureate Degrees

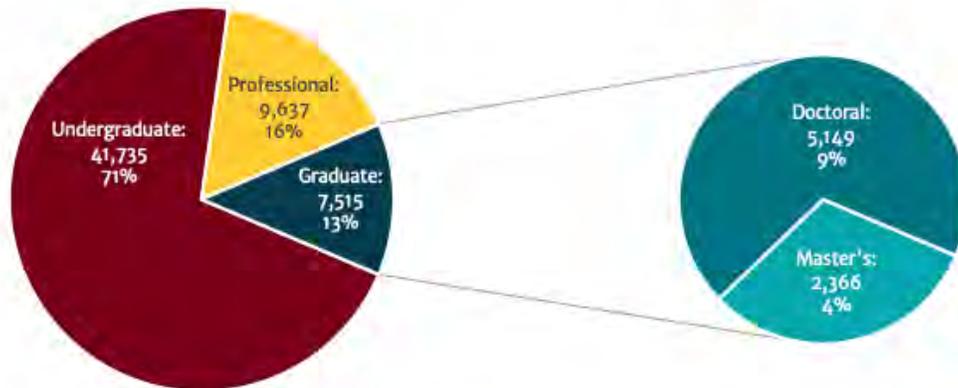


Source: <https://apps.grad.umd.edu/lists/GradProfessional/>

 GRADUATE SCHOOL

We categorize post-baccalaureate programs as being either Professional or research-based (Graduate). My responsibility, and that of the Graduate School, is solely for the 239 graduate (research-based) degrees.

University of Minnesota Enrollment, Fall 2017



"Graduate" and "Professional" defined by new Provostial dichotomy. Includes all campuses.
Source: University of Minnesota Office of Institutional Research and Graduate School Data Office

 GRADUATE SCHOOL

You can see that 29% of our students are postbaccalaureate with 9% PhD students and 4% research masters students

- 7515 - GRAD "graduate"
 - 5149 - Doctoral
 - 2366 - Master's
- 9637 - PROF "professional"
- 17152 - total grad & professional

Nineteen Fortune 500 Companies

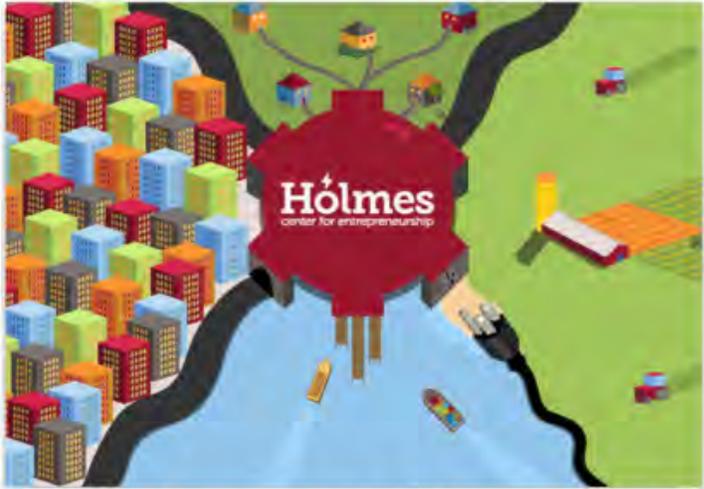


For the purposes of this presentation it is probably also worth pointing out that there are 19 fortune 500 companies based in the Twin Cities.

We have many initiatives around entrepreneurship that are designed to serve students in a specific graduate program or college. I'm not going to talk about these more local efforts but instead am going to introduce you to two programs that are open to all Univ. of Minnesota graduate students

- 5: [UnitedHealth Group](#), Minnetonka (up from 6; 2017 revenues of \$201.16 billion)
- 39: [Target](#), Minneapolis (down from 38; \$71.88)
- 72: [Best Buy](#), Richfield (down from 71; \$42.15)
- 96: [CHS](#), Inver Grove Heights (down from 84; \$31.94)
- 97: [3M](#), Maplewood (down from 93; \$31.66)
- 122: [U.S. Bancorp](#), Minneapolis (up from 131; \$24.00)
- 180: [Supervalu](#), Eden Prairie (down from 160; \$16.0)
- 182: [General Mills](#), Golden Valley (down from 161; \$15.62)
- 193: [C.H. Robinson Worldwide](#), Eden Prairie (up from 208; \$14.87)

- 215: [Ecolab](#), St. Paul (down from 206; \$13.84)
- 216: [Land O'Lakes](#), Arden Hills (down from 215; \$13.74)
- 252: [Ameriprise Financial](#), Minneapolis (down from 232; \$12.08)
- 266: [Xcel Energy](#), Minneapolis (down from 257; \$11.40)
- 323: [Hormel Foods](#), Austin (down from 304; \$9.17)
- 343: [Thrivent Financial for Lutherans](#), Minneapolis (down from 318; \$8.53)
- 382: [Mosaic](#), Plymouth (down from 316; \$7.41)
- 462: [Securian Financial Group](#), St. Paul (new to the list; \$6.07)
- 490: [Patterson](#), Mendota Heights (down from 466; \$5.60)
- 496: [Polaris Industries](#), Medina (new to the list; \$5.50)



The Gary S. Holmes Center for Entrepreneurship is the hub of entrepreneurship and innovation at the University of Minnesota that inspires, educates and connects the next generation of Minnesota's entrepreneurs.

MIN-CORPS
MINNESOTA INNOVATION CORPS



The first initiative I want to talk about is administered by the Gary S. Holmes Center for Entrepreneurship (a unit in our business school).

The initiative is called Min-Corps and it has grown out of the National Science Foundation's I-Corp program. The program has been running for a little over three years.



MIN-CORPS activities fall into these three buckets

Seminars & Workshops

Bootcamp (One Day)

- Identifying and Defining a Commercializable Problem
- IP & Technology Transfer
- Product-Market Fit (*Intro*)
- Market Assessment (*Intro*)
- Commercialization Milestones (*Intro*)
- Academic Roles in Commercialization



MIN-CORPS
MINNESOTA INNOVATION CORPS



The seminars and workshops are designed to be introductions. One offering is a day-long workshop intended to introduce students to the steps involved in taking an idea and pursuing commercialization. Generally, students participating at this level don't have a specific idea in mind, but simply want to know what is involved.

Seminars & Workshops

Value Proposition Design Workshop

- 1) Product-Market Fit
- 2) Customer Discovery
- 3) Commercialization Pathway
- 4) Market Assessment

Includes \$3,000 grants for customer research & prototyping



MIN-CORPS
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A slightly more intensive offering are the Value Proposition Design Workshops. These are for students who have an idea and they want to take the first steps in actually looking into commercialization. There are four half day workshops on Product-Market Fit, Customer Discovery, Commercialization Pathway, and Market Assessment. Participants are eligible to apply for small grants to help them with customer research & prototyping.



Value Proposition Design Workshops

Medical Innovation

Science & Engineering

Agriculture, Biotech & Environment Innovation

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Currently Min-CORPS offers three versions of this workshop series over the course of the year: Medical Innovation, Science & Engineering Innovation, and Agriculture, Biotech & Environment Innovation.

Courses

STARTUP: Customer Development & Testing (MGMT5102)

Connect the Dots to
Commercialization:
STARTUP Course

- MGMT 5102, offered every semester
- Audit option for faculty, grad students & post docs
- 2 credit, full-semester course
- Lean LaunchPad hands-on curriculum: customer development & testing
- Determine the commercial potential of an innovation & make market connections
- Work with faculty advisors & industry mentors
- \$3,000 grants for prototyping & customer research
- Follow-on opportunity to participate in national NSF-I-Corps program, \$50,000 grant



<http://mincorps.umn.edu/>

MIN-CORPS
MINNESOTA INNOVATION CORPS

CORPS
NSF INNOVATION CORPS

The next category of programs is in the form of credit-bearing courses. This is an example of a semester-long two credit course.

Note that students have the option to audit this course. I mention this because opportunities in the form of a course may not be the best option at some institutions. At Minnesota we've banded tuition. Whether a student enrolls for 1 credit or 9 credits the tuition is the same. But once a student has passed their prelim they are allowed to enroll in 1 credit of independent research. But if an advanced student wants to take a course like this (even if only this course) they would have to pay full tuition. MIN-CORPS got permission to circumvent this by allowing students to audit the course.

Strategy Clinics

- Monthly dinner meetings
- Short lecture & round-table discussion
- Past topics:
 - Constructing financials
 - Building a startup team
 - Market launch
 - SBIR/STTR funding
 - Pitching your idea

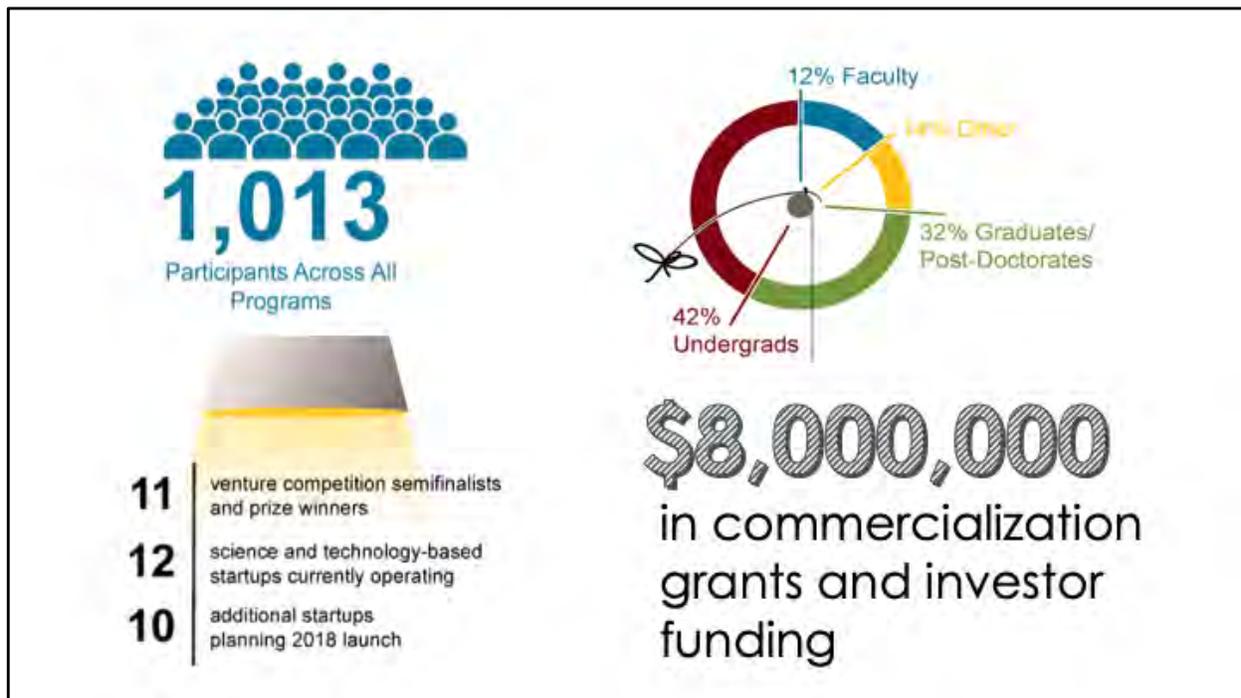


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Finally, for those students who are actively working to commercialize an innovation, there are strategy clinics.

Small Business Innovation Research/ Small Business Technology Transfer



\$100K/year operating cost

3yrs so far –

- 12 licenses of UMN intellectual property
- 1013 participants (31% grad/postdoc)

Attracted \$3.5M in additional support

Generated >\$8M in commercialization grants and investor funding



Additional Programs of The Gary S. Holmes Center for Entrepreneurship

		
MN Cup	Grow North	WE
<p>MN Cup is the largest statewide new venture competition in the country. They support emerging entrepreneurs from across the state through events, educational programming, and an annual new venture competition.</p>	<p>Grow North is a resource and connection hub serving Minnesota's food and agriculture entrepreneur ecosystem.</p>	<p>WE+ is a community of communities focused on supporting scalable women-led startups in Minnesota.</p>

Lastly, participating in MN-CORPS brings students and postdocs into contact with the other programs of the Center For Entrepreneurship.

MN Cup is the largest statewide new venture competition in the country.
 Grow North is focused on the food and agriculture sector
 And WE is designed to support women-led startups in Minnesota.



**Economic Development Fellows
Consulting Program**

Sponsored by the Office of University Economic Development

Developed with support from the Graduate School

Economic Development Fellows

<https://research.umn.edu/units/business/fellows-consulting-program/about-program>

The second initiative I'd like to discuss is our Economic Development Fellows Consulting Program. Which is housed in the Office of Vice President for Research. I want to highlight this program both because I think it has been very effective, but also because there is a story here about sustainability.

Economic Development Fellows Consulting Program

What is it?

The Economic Development Fellows Consulting Program connects companies with graduate/professional students and postdocs looking for business consulting opportunities.

Program goals:

- Provide opportunities to students
- Train students/postdocs with relevant skills
- Serve students/postdocs across the University
- Support MN economic development



Economic Development Fellows

How it works



Companies are identified and recruited by the Office of University Economic Development (UED)



An Economic Development Fellow (EDF) is selected to work with the company to identify a set of project goals and develop strategies

UED provides guidance to the cohort of EDFs



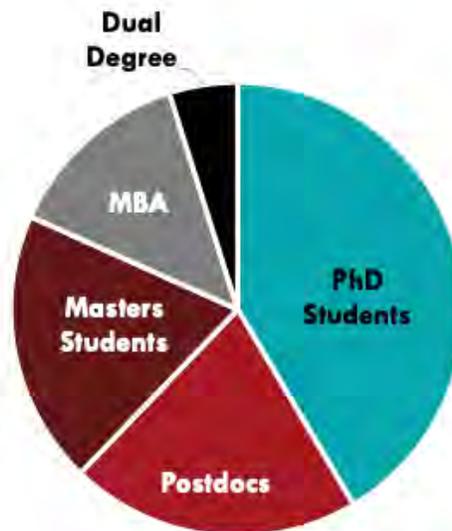
EDF forms a consulting team of 5 grad students and postdocs, serves as project manager, and acts as a liaison between the team and the client

Economic Development Fellows

The EDF is compensated the volunteers are not. However, in order to be eligible to serve as an EDF, the student or postdoc must previously have been a volunteer on a consulting team.

Students Contributing

- 38 Economic Development Fellows
- Over 180 student consultants
- 40 graduate programs represented
- About 15% of students remain engaged with the business
- About 29% international students



Economic Development Fellows

For students

- Lowers barriers to exploration of careers in industry
- Cross-disciplinary colleague exposure
- Practical application of the research, critical thinking and analytical skills that are the core of their graduate education

For businesses

- Provides businesses access to talent
- Lowers barriers to entry into University engagement
- Capacity and intelligence to grow their business

For university

- Builds a connection point between business and the University



VALUE DELIVERED TO CLIENTS

Advanced degree students have the **research, analytical** and **critical thinking skills** to answer questions and solve problems in the businesses.

From Client Survey Responses:

- Data collection, access and analysis
- Informing new:
 - Strategies
 - Marketing
 - Product development
 - Business plans
- Augmented effort
- Providing:
 - Fresh eyes
 - Gut check
 - Confirmation
- Beginning University Engagement

Economic Development Fellows

How it works



Companies are identified and recruited by the Office of University Economic Development (UED)



Tim Tripp is the Assistant Director of the Office of University Economic Development (UED) at the University of Minnesota



I wanted to highlight this program not only because it has been so successful, but because it is an opportunity to talk about sustainability. The program works because Tim Tripp is so well connected both on campus and within the business community. He is able to identify companies for these projects and they trust him to manage a productive relationship.

Unfortunately, he recently left the university to become Director of Specialized Services at *Be The Match* operated by National Marrow Donor Program where no doubt he will continue to do great things. However, it isn't clear the the Economic Development Fellows program will survive without him. The program was highlight dependent on his unique skill set and his professional network that spanned the campus and the community.

I point this out because it is important when starting programs such as this to think about sustainability and succession.



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