



Northeastern University Center for Entrepreneurship Education

Global Consortium of Entrepreneurship Centers 2022 Award Nominations

Submission for Exceptional Activities in Entrepreneurship Across Disciplines

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As a global leader in experiential learning, Northeastern University is a premiere institution for producing, engaging entrepreneurial activities across disciplines and throughout campus. A key tenant in the [Northeastern University 2025 Academic Plan](#) is “No Boundaries.” This sentiment is at the heart of our current work that strives to create no silos and declares that across campus departments will be integrative and interactive, connecting students, alumni, researchers, employers, and entrepreneurs dynamically and organically in response to the needs and goals of the network members. This tenant of “No Boundaries” is the model for which we lead our entrepreneurial efforts at Northeastern.

The [Northeastern University Center for Entrepreneurship Education \(NUCEE\)](#) as well as the larger [Northeastern University Entrepreneurship Ecosystem](#) oversees a variety of programs centered on incubating ventures, empowering founders, curating entrepreneurial leaders, and building community across disciplines. Building entrepreneurship activities across disciplines is the primary driver in our entrepreneurship ecosystem, and our multidisciplinary approach enables us to embed entrepreneurship into the DNA of the Northeastern experience for students, faculty, alumni, and staff members.

Within NUCEE, [Mosaic](#) is a University-wide umbrella organization that supports the creation, growth, and longevity of entrepreneurship-related student-led groups. Student leadership, inclusivity, empowerment, and growth are integral touchstones throughout. There are fourteen Mosaic organizations at Northeastern which engage over 3,000 students and support over 700 ventures each year across all [nine of our colleges](#). Each of these organizations is typically run by one or two students. Our most recent academic year showcased another diverse cohort of students with 12 women and over 40% BIPOC students. This showcases that Mosaic is a diverse and accessible place for all to learn and lead. To date over 24,000 students and community members have been engaged in this multidisciplinary range of activities. These organizations are formed and sustained by students to directly increase awareness about entrepreneurship across disciplines, educate future entrepreneurs, enable peer-to-peer community learning, and support a venture’s growth through affinity membership, design, legal, marketing, engineering, and investment services. Nearly 400 student-leaders currently run these organizations, and over 230 of them hold managerial positions.

[Generate](#) is an excellent example of multidisciplinary student-body participation. Generate is a student-led product development studio empowering innovative ventures by providing entrepreneurial engineering. Their product development work spans computer science, graphic design, business, engineering, and many other backgrounds. Generate is housed within the [The Michael J. and Ann Sherman Center for Engineering Entrepreneurship Education](#) which sits in the College of Engineering at Northeastern. The Sherman Center has funded 30 students to pursue their own ventures as 6-month co-op experiences, and their mentorship and entrepreneurial product development programs have touched over 500 unique student participants. By hiring students to pursue their own venture as paid co-ops, we are broadening the socioeconomic background of students who enter the entrepreneurship space.

[Scout](#), Northeastern’s student-led design studio, further exemplifies the true inclusivity of the entrepreneurial ecosystem. Students identified how professional design experience has a high barrier to entry and noticed how ventures and individuals with design experience would mutually benefit from the experience of working together. Scout consists of ~50% college of design students, ~30% computer science students, and the rest being diverse across all aspects. This team of 100 students comes together each year to consult brand development for 10+ ventures. This includes work around brand development, website design, communication style, and more, providing ventures with free access to

professional help while providing students with relevant work experience. Scout provides a path for design-minded students to get involved and develop valuable entrepreneurial skills.

[The Women's Interdisciplinary Society for Entrepreneurship \(WISE\)](#) is also an excellent showcase of how Northeastern supports traditionally underrepresented founders and learners. WISE was co-founded in 2018 by two Northeastern University sophomores with the aim of supporting women and developing an innovative mindset through interactive workshops and innovation classes, thought- and project-incubation, and mentorship pairings. They quickly assembled a management team composed entirely of students and an advisory board of students and alumni. Notably, many other student leaders in Mosaic, ranging across a variety of disciplines, offered to share lessons they and their organizations had learned with the WISE team. It was a process that incorporated true experiential, peer-to-peer learning. In Spring 2022, WISE piloted a new program called WeLaunch to help assist women and non-binary founders turn passion projects into businesses.

One major access point to collaborative relationships is through the [IDEA Venture Accelerator](#). Each year, IDEA supports 400+ venture concepts and, over its 12-year existence, has supported over 1100 concepts led by students. Last year only 30% of the venture founders came from the D'Amore-McKim Business School, the other 70% of ventures came from our eight other colleges. Student entrepreneurs have access to several resources including connections to AWS, Google, venture capitalists, public pitching opportunities, pro bono legal work, external accelerators, and frequent collaboration with the mentors in the McCarthy(s) Venture Mentoring Network (VMN). Throughout the acceleration process, expertise is provided by volunteer coaches. Many of whom are MBA students or alumni, as well as faculty Entrepreneurs-in-Residence, and external industry experts. Access to IDEA's non-equity grants is a vital aspect of how IDEA can support student entrepreneurs. To date, IDEA has granted over \$2.3 million to entrepreneurs.

Throughout our programs, we include advisory boards and councils to ensure that our organizations have a diverse perspective leading them. The Mosaic Council has representatives from six colleges and external advisors. The IDEA Advisory Board consists of faculty, previous student leaders, and industry experts to provide support and guidance.

Outside of our key student-led initiatives that reach across disciplines and colleges, we expand our capacity to serve by partnering with departments and key stakeholders across campus. Through these robust partnerships we have been able to provide support and resources to entrepreneurs across the global university ecosystem.

Within the [Bouvé College of Health Sciences](#) there is a mentorship program that supports health and life science ventures by matching them with mentors with deep industry expertise, called [Health Sciences Entrepreneurs \(HSE\)](#). This program has supported over 30 ventures over the past two years and has 88 dedicated mentors who support these health and life science ventures.

A further indication of our venture support, education, and empowerment across disciplines is the [McCarthy\(s\) Venture Mentoring Network \(VMN\)](#) in the [D'Amore-McKim School of Business](#). The VMN supports venture founders (student, staff, faculty, and alumni) across college, discipline, and industry by matching them with a wide swath of industry mentors who can support them as they grow, launch and scale their business. Mentors are leaders across business, tech, product development, law, marketing, sales, software, and various additional industries to support founders as they scale and launch their

business. The VMN has supported over 350 ventures in the past four years and boasts 200 active mentors who support these ventures who span disciplines and industries.

The VMN also supports additional programs across campus that require mentor support. This includes the Lab for Inclusive Entrepreneurship at Northeastern. This program offers fellowships for small business owners to take micro-credential or digital-badge courses at Northeastern University. They are focused on supporting diverse founders in the New England area who have been disproportionately affected by the COVID-19 pandemic. This program has run one cohort that supported 10 ventures with business support and guidance from VMN mentors, and scholarship funding through the [U.S. EDA Grant](#), which has committed over \$1M over five years.

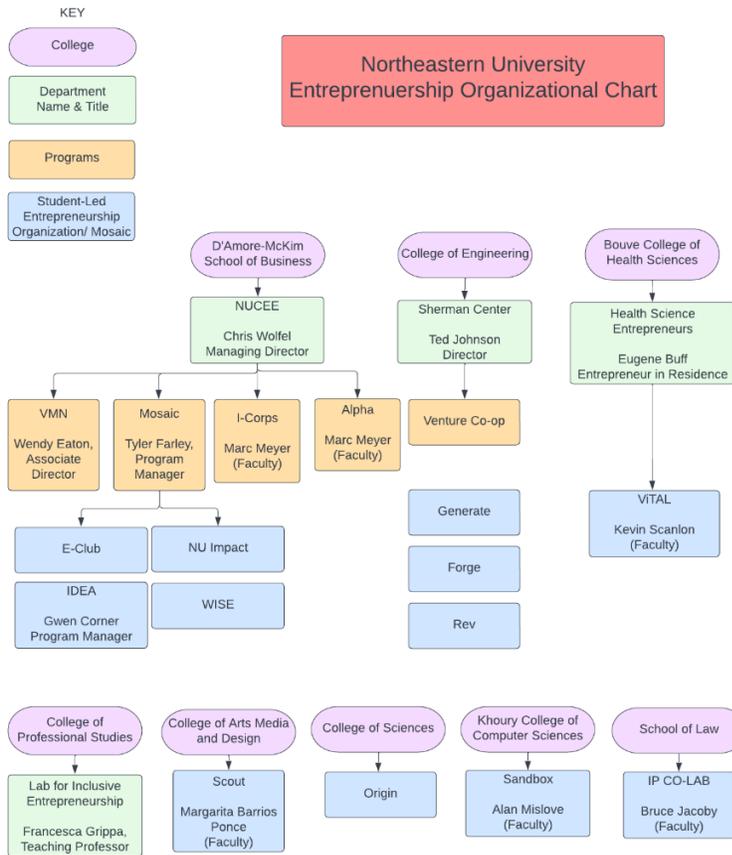
One regional campus and key partner is Northeastern's Roux Institute in Portland, Maine where entrepreneurship is a main focus. The Roux Institute has already made an impact with its local community through [Experiential Network](#) projects with startups where students solve business challenges and craft actionable insights. Roux hosts a one-year [Founder Residency program](#) where founders from underrepresented groups receive funding to operate their venture. Northeastern is expanding our global reach to our London and Oakland campuses that will meet at the intersection of liberal arts and entrepreneurship to truly provide entrepreneurial education across all disciplines and mindsets.

Our offerings also scale to our deep tech community of entrepreneurs, students, and faculty. NUCEE's Deep Tech initiative has two main activity areas: NSF I-Corps and Alpha. NUCEE received an [NSF I-Corps Site Program](#) grant to provide education, mentoring, and market research support for faculty, post-docs, and PhD students interested in commercializing their research. Sixty-eight research concepts have been supported through Northeastern's I-Corps program. [Alpha](#) provides prototype development grants to lab-based innovators for commercial applications. To date, Alpha has awarded over \$175K in grants to 29 concepts. In both cases, over 110 research and development mentors from the VMN were assigned to help individual teams. These ventures also work with our [Center for Research Innovation](#) which connects with them on their IP, licensing their tech, and important aspects of spinning out tech from a lab.

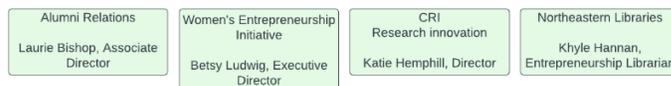
Northeastern has received several external acknowledgements of their work in entrepreneurship. Such awards include the 2015 and 2022 Deshpande Foundation's Excellence in Student Engagement in Entrepreneurship award, the [2018 Leading Entrepreneurial University award](#), the [2020 Outstanding Contributions to Venture Creation award](#), and 2020 finalist for Outstanding Student Engagement and Leadership Award from the Global Consortium of Entrepreneurship Centers. As a testament to our sustained excellence in entrepreneurship education, Northeastern University is consistently ranked in the top 20 undergraduate entrepreneurship rankings from the Princeton Review.

Our ability to serve venture founders and students across stage, industry, discipline, and knowledge level is truly unique. There is a seat for everyone at the entrepreneurship table at Northeastern. Our ability to offer such a wide breadth of entrepreneurship activities across colleges and departments is driven by our multidisciplinary approach. This approach is innovative because we have cut through traditional university silos in favor of entrepreneurial support and education for all, regardless of background or experience. Pair that with our one-of-a-kind student-led organizations and we have created a space that empowers entrepreneurs, students, and the Northeastern community to embed entrepreneurial thinking in everything we do. NUCEE is not one center operating in a silo and fighting to do our best in a vacuum. We are collaborating, connecting, and working across campus to instill entrepreneurship in the DNA of Northeastern, and that it is accessible to all on a global scale.

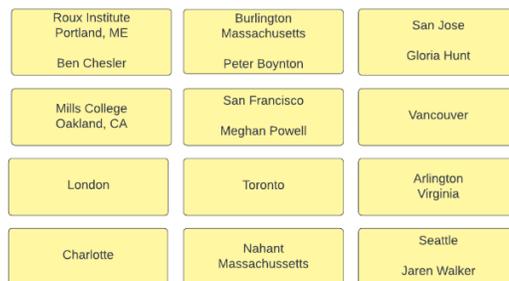
Appendix: NU Entrepreneurship Organizational Chart



Central University-Wide Resources for Entrepreneurship



Regional Campuses



Appendix A: IDEA and Venture Contributions and Resources They Used

Current breakdown of IDEA Founders by College

School	Number of founders	Percent
College of Arts, Media & Design	25	6.10%
D'Amore-McKim School of Business	113	27.56%
College of Computer and Information Science	42	10.24%
College of Engineering	84	20.49%
College of Science	15	3.66%
Bouve College of Health Sciences	12	2.93%
College of Social Sciences and Humanities	17	4.15%
College of Professional Studies	24	5.85%
Undeclared	2	0.49%
Not Northeastern (This indicates that they are partnered with a Northeastern Founder, but they did not attend NU)	76	18.54%
Total	410	

- **Recent Notable Venture Achievements**

- [Bureo](#), a company that upcycles fishing nets from Chile into plastic materials, recently announced a [partnership with Patagonia](#) to provide material for brim stiffeners for Patagonia's hats.
- [Mobile Pixels](#), a company that creates on-the-go dual screen laptop monitors, raised \$1.65M through a Crowdfunding campaign.
- [Slate Milk](#), a lactose-free chocolate milk company, was recently featured on [Shark Tank](#). While they were not funded on the show, they have since gone on to be sold in 400+ stores.



- [Zepsor](#), led by Assistant Professor Zhenyun Qian, is designing a low voltage wireless sensor for detecting smoke and fire. The company has been accepted into the NSF [Partnerships for Innovation \(PFI\)](#) program.
- [Ichosia Biotechnology](#), led by a combined Northeastern and George Washington student team, is working to create disease-free, synthetic blood based on a patient's own blood. The company was accepted into an NSF Node program and received two supplemental "Alpha" grants from NUCEE to support specific gene-based lab work with local service providers. They have since won several external awards.
- [SeaSpire Skincare](#), a venture led by recent PhD graduate Camille Martin and Professor Leila Deravi, is developing environmentally friendly skincare products based on the chemical machinery of the chromatophore, a pigment-containing organ found in the skin of marine life like squid and other cephalopods. Sea Spire was recently accepted and received substantial seed investment from [The Engine \(MIT\)](#) and is setting up its lab in that facility.
- Artimis, whose founder Ben Gincley is creating an automated microscope for detecting specific algae in the water and other liquids, just received the prestigious [NSF Graduate Research Fellowship](#) for this work, as well as an MVP prototyping grant from the IDEA Accelerator. Additionally, Artimis recently received an Alpha prototyping grant from NUCEE to build its first working system.

- o [Evergreens](#), founded by Ahmad Zameli, a graduate student in Northeastern's Industrial Engineering Department, has created a highly automated, precision nutrient agricultural production system focused on organic fruits and vegetables. Evergreens has received substantial seed investment as well as its first customer contract from a large national grocer. Evergreens has created its first pilot production/growing plant near Boston and is now exploring different business models (including franchising its product system) as well as a substantial Series A investment. Evergreens is also at present competing as a [MassChallenge](#) Finalist.
- o [Phoenix Tailings](#), founded by a combination of Northeastern and MIT alumni (Nick Myers from Northeastern is the CEO) is a sustainability venture that refines "red mud" by-product from aluminum production into useful industrial products. The company was recently part of a \$225K [NSF SBIR](#) Phase 1. The company was also a [TechStars Boston Accelerator](#) member during Spring 2020 and has raised seed financing and secured its first several contracts from corporate/industrial customers for the new refined by-product materials.
- o [Tactus](#), founded by two graduating seniors from our sound engineering lab with support of their lab director/professor, is making vests that vibrate sound for deaf individuals for applications such as dancing. During its participation in Northeastern's NSF Site program, Tactus did extensive interviews with deaf individuals, designed multiple prototypes, and secured Alpha Funds from NUCEE to build functional vests. Tactus is now working with a clothes designer to make appealing vests and jackets with integral technology and is exploring the VR market. Tactus is currently competing as a Finalist in [MassChallenge](#).
- o Other Northeastern advanced technology ventures include NovoBiotics (approximately \$30M in research grants), [Metamagnetics](#) (surpassing \$7 million in research grants), and others that include [Akrivis Technologies](#), Quad Technologies, [QSM Diagnostics](#), and [Bionet Sonar](#).

Appendix B: Program Participant Testimonials

This video showcases the student experience in Mosaic, in the students' own words:

<https://entrepreneurship.northeastern.edu/mosaic/video>.

“As a long-time member of the Mosaic community, it wasn’t through ‘traditional’ means that I came into the role of IDEA CEO. It was through learning about entrepreneurship through the side processes and side effects - the challenging bits that entrepreneurs, designers, and engineers alike can collaborate on. I learned that it takes all backgrounds and every discipline, to truly get a venture up off the ground, and it takes a village of perspectives and hard work to make things happen - there is no shame in learning something new. So moving from the practitioner side, into the venture side has been a journey - it’s a whole new world of problems to solve, people to meet, and things to learn. But with the things learned at Scout, Generate, and beyond - I have a fresh perspective of what it means to be an entrepreneur, the challenges that can be faced at every step of the process, and how to bring everyone to the next step.”

- **Elizabeth Cavallo, 2020-2021 Altschuler-Meyer CEO of the IDEA Venture Accelerator**
Marketing and Experience Design Combined Major DMSB & CAMD '21 Entrepreneurial Engineering Minor
Former management team member of Scout and Generate

“It is hard to know if you have the capacity for leadership until you have the opportunity to lead. My time learning and growing within the entrepreneurship ecosystem at Northeastern equipped me with the knowledge in my professional life that I was capable of so much more than I ever thought. At IDEA I learned how to manage team members, set strategic priorities, build budgets, and form partnerships within a fast-paced environment. Having these experiences already under my belt was critical when it came time to grow my own venture and navigating similar challenges outside the walls of the University. Through the creation of Mosaic, we were able to see the power of creating these opportunities scale organically as students stepped up to take the lead within their discipline and recruit fellow students to join them. The community of students that are building and leading programs on campus are truly exceptional and the bar seems to be set higher every year.”

- **Annika Morgan, DMSB '16**
Co-Founder COO of About Fresh
2015-2016 Altschuler-Meyer CEO of IDEA
Entrepreneurship concentration DMSB
Former VP Entrepreneurs Club, Founding Member of Mosaic

“While I was in college, Mosaic was this perfect mix of helping me understand my personal ambitions in the world of entrepreneurship and teaching me crucial lessons regarding leadership, communication, and empathy - all of which are being utilized daily in my early career. At the same time, the community of friends and mentors I built through Mosaic made my time in college an experience I will forever be grateful for. They are still my most trusted peers and advisors. At Northeastern University and beyond, Mosaic is a gift that keeps on giving, and I am forever grateful for the experiences it provided to me and so many others.”

- **Mina Iskarous, College of Engineering '19**
Co-founder and first Executive Director of Generate
Scout management team member
Product Manager at Well