The Virtualization of I-Corps

In the midst of a global pandemic, I-Corps quickly shifted all programming and events online to safely accomodate participants and prevent the further spread of COVID-19. UNY I-Corps is leveraging this virtual frontier to assist a wider audience of STEM researchers and student entrepreneurs who wish to "get out of the lab" (from the safety of their homes) to connect with and learn from potential customers about their innovative ideas.

"

When creating a culture for entrepreneurship, we need to focus on impact, not just the value of a potential product. We start by educating people about entrepreneurship and helping them understand that you don't need to reinvent the wheel to make an impact. I'm excited about I-Corps, because it is a tool for accelerating the pace in which a new idea becomes an impactful product.

-LYNDEN A. ARCHER, JOSEPH SILBERT DEAN OF ENGINEERING, CORNELL UNIVERSITY AND TECHNICAL LEAD/PI FOR I-CORPS TEAM 1843, POLI

I-CORPS TEAMS NATIONAL PROGRAM

Top researchers from across the US receive a $50,000 NSF grant to participate in this intensive innovation and entrepreneurship training course. Over seven weeks, teams complete 100+ customer discovery interviews to collect evidence of product-market fit.

WITHIN THE LAST YEAR:

25	**$1.15M**	**15**	**52%**	**32%**
TEAMS SENT TO THE NATIONAL PROGRAM	IN FUNDING AWARDED TO TEAMS	MENTORS MATCHED WITH TEAMS	OF TEAMS INCLUDED WOMEN	OF TEAMS INCLUDED INDIVIDUALS FROM UNDER-REPRESENTED GROUPS

NATIONAL FACULTY

Our team has led six cohorts to date, including Summer 2020 Virtual Cohort #2. Fernando Gomez-Baquero completed the 2020 national training.

| **FERNANDO GOMEZ-BAQUERO** | **ANDREA IPPOLITO** | **MIKE REIDLINGER** | **KEN ROTHER** | **TOM SCHRYVER** | **DEBORAH STREETER** |

REGIONAL COURSES

We pivoted to virtual delivery and led 24 courses for 344 participants with partners across the Northeast.

38 REGIONAL COURSE INSTRUCTORS

11 NEWLY TRAINED

Cornell University · RIT | Rochester Institute of Technology · UNIVERSITY of ROCHESTER · University of Pittsburgh

BINGHAMTON UNIVERSITY STATE UNIVERSITY OF NEW YORK · Drexel UNIVERSITY · HOBART AND WILLIAM SMITH COLLEGES · ITHACA COLLEGE

PennState · Rensselaer · Syracuse University · Carnegie Mellon University

UNIVERSITY AT ALBANY State University of New York · The University of Vermont · University at Buffalo The State University of New York · West Virginia University

> "While the circumstances are less than ideal, we are excited about the opportunity to develop and deploy I-Corps materials that can be used by participants across the region. Participants made tremendous progress in the virtual format, and it was great to see the deep engagement in our video meetings. We're excited to use this model to expand our reach." - TOM SCHRYVER, EXECUTIVE DIRECTOR, UNY I-CORPS NODE

NE I-CORPS ANNUAL ADVENTURE

The "2020 Northeast I-Corps Annual Adventure" was originally planned by the UNY, NERIN and NYCRIN Nodes to occur in-person at Cornell University, but in the face of a global pandemic, the two-day event pivoted online to safely accommodate the 140+ panelists, speakers, organizers, and attendees who tuned in from across the United States, making this year's gathering one of the most engaging, informative, and enjoyable annual meetings yet.

DIVERSITY & INCLUSION INITIATIVES

- RIT's National Institute for the Deaf (NTID) hosted the third annual I-Corps regional course for Deaf entrepreneurs, with teams from NTID, Gallaudet University, and Cal State Northridge.

- RIT/NTID are developing native American Sign Language (ASL) course materials to expand access to the I-Corps learning experience for the national Deaf community.

- In partnership with Women Entrepreneurs (W.E.) Cornell and Black Entrepreneurs in Training, we have developed customized I-Corps regional courses for women and underrepresented minorities in STEM fields.

- We are developing a Role Model workshop for STEM women to highlight opportunities in commercialization, in collaboration with W.E. Cornell.

- Our Node is collaborating with the national GEM Consortium's Inclusion in Innovation Initiative (i4) to raise awareness of I-Corps and support participation by GEM Fellows and other URM grad students.

- The GEM i4 team is reviewing and providing feedback on our Instructor Training module "Employing Inclusive Teaching Practices."

INSTRUCTOR TRAINING FOR INCLUSIVITY

Our focus as a Node has been to center inclusive teaching methods and recruitment strategies in our programming. Our newly launched online, asynchronous "train the trainer" course focuses on disrupting implicit bias, attracting diverse teams, creating an inclusive learning environment, delivering "purposefully direct" feedback to teams, and using a set of rubrics to objectively assess a team's performance in the regional course, and their potential fit with I-Corps Teams requirements.

The material in this training course was developed with funding from a 2019 Node Supplement Award from NSF, and is delivered through the same online learning platform that instructors use with their regional course students. New instructors are required to observe a virtual regional course led by experienced instructors and debrief with the instructors after each session. After completing the training course and observation, new instructors are paired with an experienced instructor to lead their first regional course.
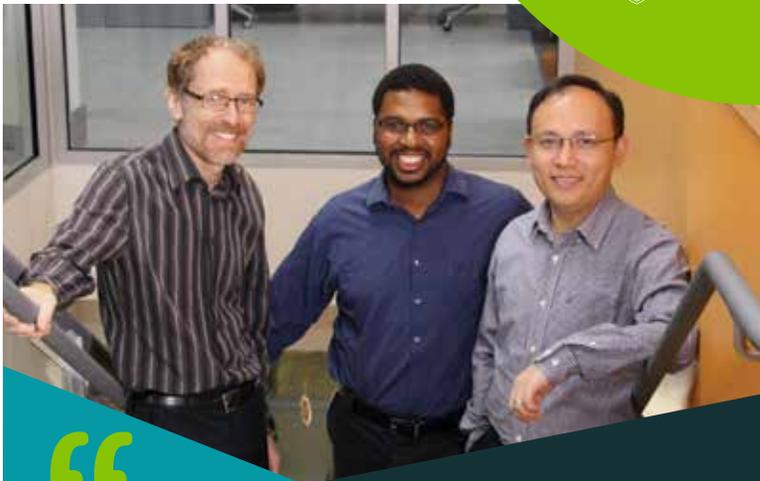
SUCCESS STORIES

EXOTANIUM

The pandemic could have ended Exotanium's ambitions before it even got off the ground—the cloud-optimization startup was in the midst of fundraising when COVID-19 hit—however, as businesses moved their operations online and demand for cloud software systems skyrocketed, the UNY I-Corps and National I-Corps Teams alumni raised $1 million.

Exotanium's "X-Spot" technology allows businesses to effectively navigate the spot market to harness low prices when temporary spot servers become available, saving businesses up to 90% on cloud application server fees—a huge advantage for a company in a market estimated to be worth $26 billion by 2024.

The startup's upward trajectory continues with a move to larger offices at Cornell's Praxis Center for Venture Development and workforce expansion. It also launched a pilot with Autodesk, Inc. to test Exotanium's concept for cloud back-end optimization.

2020 UNY I-CORPS REGIONAL ECONOMIC IMPACT:

$7.2M in capital raised

$1M in SBIR/STTR funding awarded

$470K in business revenue generated

38 new hires by startups

Data reflects economic impact of teams who have completed a national I-Corps Teams cohort, a UNY I-Corps regional course, and/or were affiliated with Cornell's I-Corps Site.

UNY I-CORPS NODE

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UNY I-CORPS PARTNERS

Cornell University R·I·T

UNIVERSITY of ROCHESTER

HALOMINE

The commercialization of an antimicrobial coating technology that keeps surfaces clean by extending the life of chlorine-based disinfectants—by days and even weeks—is being fast-tracked to determine how well it can combat COVID-19. Halomine, a UNY I-Corps and National I-Corps Teams alumni company and 2019 Grow-NY finalist, is behind the biomaterials innovation.

The technology's potential to prevent COVID-19 from contaminating private and public spaces has attracted the interest of the National Science Foundation. In May, NSF awarded Halomine $256,000 from its COVID-19 Rapid Response Research (RAPID) program to expedite the product's development, as well as a separate $225,000 RAPID grant to fight hospital-based infections related to COVID-19.

"Originally, we were targeting bacteria for agricultural use, then this pandemic happened" said Halomine's CTO, Mingyu Qiao. "When you're an academic, your technology may only have one stated purpose, but if it's a very good technology, you suddenly find it has a broad application and can address some immediate crisis."

> The purpose of the REGIONAL course is to get scientists who think they know what they're doing out of their comfort zones to talk to businesses marketing their products on a daily basis. That was our first taste.
> - HAKIM WEATHERSPOON, CEO, EXOTANIUM