

UNION
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SUITED

WORKSHOP

Supporting Undergraduate Institutions *in* Technology and Entrepreneurship Development (SUITED)



FUNDED BY THE NATIONAL SCIENCE FOUNDATION AND HOSTED BY UNION COLLEGE, SCHENECTADY, N.Y.

SUITED 2024 Workshop

Program Booklet

November 1-2, 2024
450 Nott Street
Union College, Schenectady NY



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Welcome!

We are delighted to welcome you to the Union College campus for our third workshop, SUITED 2024. We have a full day and a half of activities planned. The schedule can be found on page 3 with a map of the workshop venue on page 13. A map of campus is located on the back cover. Information about the experts and speakers participating in the workshop starts on page 5. And check out the inside back cover for information on some of our favorite local dining options.

The SUITED Workshop organizing committee:

Ann M. Anderson
Committee Chair
Agnes S. MacDonald Professor of
Mechanical Engineering
Union College

Diana Dabby
Professor of Electrical Engineering and Music
Olin College of Engineering

John Blaho
Director, Industrial-Academic Research,
Innovation & Applied Research Division
City University of New York

Jeff Goronkin
CEO
Urban Co-Works

Bradford A. Bruno
Professor of Mechanical Engineering
Union College

Mercedes Susi
Director of College Grants & Sponsored Programs
Union College

Mary K. Carroll
Dwane W. Crichton Professor of Chemistry
Union College

Emily Tong
Assistant to the Dean of Academic Departments
and Programs
Union College

Union College is committed to providing a safe, inclusive, and respectful learning, living, and working environment. To this end, Union will not tolerate gender-based misconduct. [Title IX Policy](#), [Gender-based Misconduct Policy](#), and [Policy Prohibiting Discrimination, Harassment, Bias, and Retaliation in Employment](#) and their associated procedures define prohibiting conduct. Union College students, faculty, and staff as well as non-members are expected to comply with our policies. A “non-member” refers to independent contractors, vendors, visitors and others who conduct business with the College or on College property.

More information and links for making reports can be found at: <https://www.union.edu/suited>

In case of Emergency, the Union College Safety office can be reached at (518) 388-6911.

For other inquiries, please contact Emily Tong at (518) 388-6233, tonge@union.edu

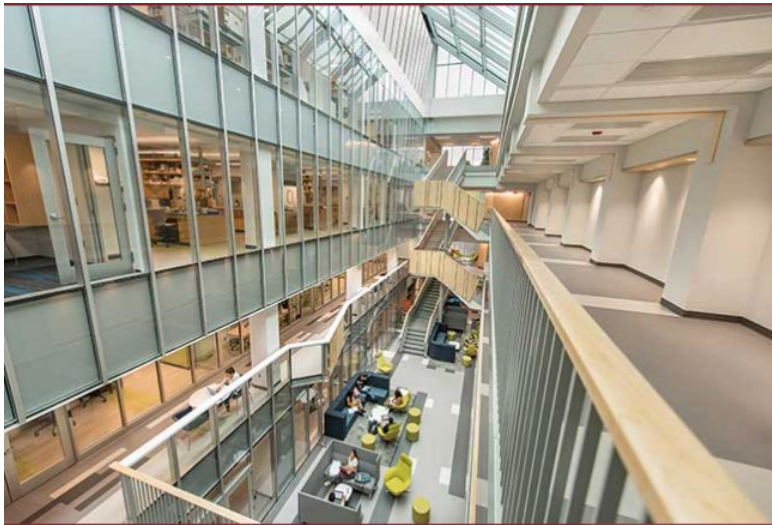
The Union College Campus (from: <https://www.union.edu/about/campus>)

Founded in 1795, Union College is a liberal arts college with engineering; home to 2,050 undergraduate students. Spread across 130 scenic acres, Union College's historic campus showcases American collegiate architecture at its finest. Joseph Ramée's revolutionary 1813 master plan set the stage for campuses nationwide.

Nott Memorial: Dating to 1875, the Nott is a National Historic Landmark and one of America's most distinctive examples of High Victorian Gothic architecture. The Nott features a domed roof set with 709 small colored glass windows; an assemblage of Medieval, Persian and European styles; and Hebrew script on its slate roof that bears the Talmudic inscription: "*Short time, vast labor, great reward, master urgent.*" The Nott Memorial is the only 16-sided building in North America. It is named for Eliphalet Nott, a minister, inventor and educational pioneer who served as Union's president for more than six decades, the longest tenure of any American college president.



Integrated Science & Engineering Center (ISEC): Students and faculty across disciplines collaborate, innovate, conduct research and exchange ideas throughout Union's \$100 million Integrated



Science and Engineering Complex, the largest and most ambitious project in Union's history. A key feature of the facility is the striking glass-walled Ainlay Hall, with labs and classrooms for biology, chemistry, physics and astronomy, mechanical electrical, computer and biomedical engineering. It is home to a 1.1-MV tandem pelletron accelerator, 400-MHz NMR spectrometer, micro CT scanner and other instrumentation for student use, as well as an advanced thermal science and fluid mechanics lab.

We acknowledge that we live, work, and study at Union College on the traditional homelands that were originally peopled by the Iroquois Confederacy (Haudenosaunee), including the Cayuga, Mohawk, Oneida, Onondaga, Seneca, and other tribes. What we call Schenectady is a Dutch version of a Mohawk word skahnéhtati, meaning 'The Place Beyond the Pines.' As a College, we honor the land itself with gratitude and acknowledge the people who have stewarded the land, lost lives, and had their land taken unjustly throughout the ages.

SUITED SCHEDULE

FRIDAY 11/1 Union College Campus (College Park Hall)

7:30	Shuttle pick up at DoubleTree	12:15	Lunch with Lightning Presentations (Ballroom) <ul style="list-style-type: none">• Intro to the Business Model Canvas• Intellectual Property Panel• Story Telling• Lessons Learned
7:45	Registration - College Park Hall (Lobby)		
8:15	Welcome & Introductions (M102) (Breakfast available at 8:00)		
8:40	Faculty Research Presentations <ul style="list-style-type: none">Teams 1, 3, 7, 9, 12 (M101)Teams 4, 6, 8, 14, 15, 17 (M107)Teams 2, 5, 10, 11, 13, 16 (M102)	2:45	Concurrent Sessions <ul style="list-style-type: none">• Individual Meetings w/ Mentors (M101, M013, M107)• Story Telling (M102)• Experts (Ballroom)• Team Work (Ballroom)
9:40	Coffee Break (Mezzanine)		
10:00	Faculty Research Presentations <ul style="list-style-type: none">Teams 1, 3, 7, 9, 12 (M101)Teams 4, 6, 8, 14, 15, 17 (M107)Teams 2, 5, 10, 11, 13, 16 (M102)	5:30	Sunset tour of campus
11:15	NSF Presentation/Q&A (M102)	6:00	Networking Hour (Old Chapel)
		7:00	Dinner with Keynote Speaker (Old Chapel)
		8:30	Shuttle ride back to DoubleTree

SATURDAY 11/2 Union College Campus (College Park Hall)

7:45	Shuttle pick up at DoubleTree	11:00	Team Presentations on Plans for Moving Forward (M102)
8:00	Breakfast and Presentation Preparation (Ballroom)	12:40	Wrap-up Lunch (Ballroom)
9:00	Team Presentations on Plans for Moving Forward (M102)	1:30	Depart Schenectady
10:30	Coffee Break (Mezzanine)		

PRESENTING TEAMS:

1. Albion College
 2. Butler University
 3. California Polytechnic State University, San Luis Obispo
 4. California State University, Long Beach
 5. Colgate University
 6. Eastern Washington University
 7. Elon University
 8. Fairleigh Dickinson University
 9. Macalester College
 10. Queens College, City University of New York
 11. Seattle University
 12. St John's University
 13. State University of New York, Potsdam
 14. Union College
 15. University of the Pacific
 16. Western Washington University
 17. York College, City University of New York
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LESSONS LEARNED TEAMS:

1. Colgate University
 2. St John's University
-

OTHER INSTITUTIONS ATTENDING:

Borough of Manhattan Community College, Bryant University, Hofstra University, Iona University, Southeast Missouri State University

Keynote Speaker

Megan O'Connor, Nth Cycle



Dr. Megan O'Connor is co-founder and CEO of Nth Cycle, a pioneering metal refining company revolutionizing the clean energy transition. Under her leadership, Nth Cycle has developed a cutting-edge refining technology that was commercialized in under 6 years, called the Oyster. The Oyster facilitates a sustainable, domestic production of critical metals, ensuring a cleaner and more efficient supply chain. Dr. O'Connor earned her BS from Union College, her doctorate in environmental engineering from Duke University and was a visiting researcher at Yale University's Center for Green Chemistry and Green Engineering. After founding Nth Cycle in 2017, Dr. O'Connor was an Entrepreneurial Fellow in the Department of Energy's Innovation Crossroads program at Oak Ridge National Laboratory, and has been recognized by Forbes in its "30 under 30" energy list in 2019, the Grist50 list in 2022, and named a Bloomberg New Energy Finance Pioneer in the "Sustainable Metals and Materials for an Electrified Future" category in 2023. Based in Boston, Nth Cycle has raised over \$65 million in investments and grants from Clean Energy Ventures, VoLo Earth Ventures, MassMutual, Caterpillar Venture Capital Inc., Elemental Exceleator, the U.S. Department of Energy and The National Science Foundation.

National Science Foundation Speaker

Jessica Fields

Jessica Fields serves as a Program Director for the U.S. National Science Foundation's ENGINES program in the NSF Technology and Innovation Partnerships (TIP) Directorate. Fields has centered her work over the past decade on increasing diversity within the startup ecosystem. In her current role she supports the development of Innovation Ecosystems across the country. Prior to her time at the NSF, she worked in the private and non-profit educational spaces, including most recently serving as the Associate Director for the NSF New York Innovation Corps (I-Corps) Hub based out of the City University of New York (CUNY). She received her B.A. in Anthropology and Psychology from Webster University and her M.P.A. from the School of International and Public Affairs from Columbia University in the City of New York.



Funding for the SUITED Workshop was provided by the National Science Foundation (Award #2225762). The opinions, findings, and conclusions, or recommendations expressed are those of the organizing committee/author(s) and do not necessarily reflect the views of the National Science Foundation.

Mentors

Ann M. Anderson, Union College, SUITED Workshop Organizing Committee Chair



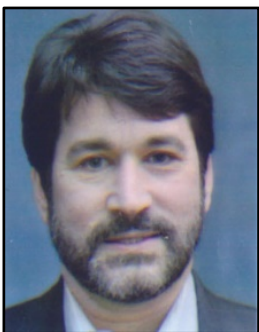
Ann Anderson is the Agnes S. MacDonald Professor of Mechanical Engineering and co-Director of the Aerogel Lab at Union College. She earned her bachelor's degree in mechanical engineering from Tufts University and her masters and PhD from Stanford University. The Aerogel Lab has been funded through a series of MRI, RUI and PRF grants from the CMMI, DMR, CHM and TIP divisions at NSF. She participated in the NSF National I-Corps program as a technical lead in 2013, 2018 and 2020, served as PI on an NSF PFI grant, has been co-PI on two NSF STTR Phase 1 grants. In 2013 she co-founded SunThru LLC as a result of her first I-Corps experience and currently serves as part-time CTO. SunThru is working on commercialization of technology related to research in the Union College Aerogel Lab and was recently awarded a Phase II SBIR grant from NSF and a grant from NYSERDA.

Lisa Avila, Kitware, Inc.

Lisa Sobierajski Avila is Kitware's Chief Executive Officer and a founder of the company. Prior to transitioning to CEO in 2017, Dr. Avila was Vice President of Commercial Operations and a lead technical developer at Kitware. In her 26-year history with Kitware, Dr. Avila contributed to volume rendering efforts in many scientific and medical fields ranging from seismic data exploration to radiation treatment planning. As CEO, she led the company through significant growth, and helped transition Kitware to a 100% employee-owned company. Dr. Avila received her B.S. (1989), M.S. (1990), and Ph.D. (1994) in Computer Science from the State University of New York at Stony Brook. She serves on the NY State Emerging Technology Advisory Board and the Capital Region Chamber Board.

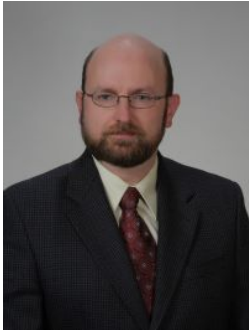


John Blaho, NY I-Corps (CUNY), SUITED Workshop Organizing Committee Member



John Blaho has worked at startups for over fifteen years. He served a CSO function at a biotech company in Princeton, NJ for three years until its exit, was the President of the Life Support Corporation, a medical management startup based in NYC, for seven years, and currently serves on the board of directors of an industrial science and technology consultancy. He currently advises companies as a mentor in the NYS Biodefense Innovation Fund program. He has served as the Industrial Mentor for four national NSF I-Corps teams – all four of which have formed NYS companies and were awarded SBIR/STTR funding. Dr. Blaho was trained as a chemical engineer, received a Ph.D. in biochemistry, and was the PI of an academic basic science research lab at the University of Chicago and the Mount Sinai School of Medicine of CUNY for over 25 years. He currently serves on NIH SBIR/STTR study sections and NSF SBIR/STTR Phase I and Phase II peer review panels.

Bradford A. Bruno, Union College, SUITED Workshop Organizing Committee Member



Brad Bruno earned his bachelor's degree from Penn State University, his masters from the University of Michigan, and his Ph.D. from Penn State University, all in Mechanical Engineering with focus on atomization and sprays, combustion, and laser diagnostics. He has postdoctoral research experience at Penn State University and with the Centre National de la Recherche Scientifique (CNRS) in Orleans, France. He also has industrial experience as a senior project engineer and project leader with the International Paper Corporation at their Packaging Innovation Center. He is currently a professor of mechanical engineering at Union College and a research collaborator at Union's multidisciplinary Aerogel Lab where he has been a PI, Co-PI, or contributor to many NSF grants, including grants through the MRI, PFI, and I-Corps programs. Drawing on his background in combustion and automotive engineering, his major research focus with Union's aerogel group has been on the development of aerogel catalysts for automotive pollutant mitigation; work that has led to several publications, one patent, and which formed the

basis for one of the lab's I-Corps experiences.

Cira Cardaci, NY I-Corps (CUNY)

Cira Cardaci is the Executive Manager for the NY I-Corps Hub with experience building and mentoring technology-driven startups. She has taught the Lean LaunchPad entrepreneurship methodology on several Regional I-Corps cohorts and frequently serves as an adjunct in the NSF National I-Corps Program. She is currently a lead instructor for the NY I-Corps Hub Regional I-Corps Program in which she trains early stage STEM founders in customer discovery and business model generation. Through the NYC Innovation Hot Spot she mentors deep-technology, Pre-Seed to Series A incubator companies, helps connect them to various innovation resources in NYC and creates programming to accelerate their development. She serves as a mentor to founders in the New York State Biodefense Commercialization Fund and is an adjunct lecturer in the Biomedical Engineering Department at the City College of New York, CUNY. Previously, Cira co-founded a women's digital health company MenoPal, Inc. after co-inventing a wearable technology in graduate school. With that project, Cira served as an entrepreneurial lead in the NSF National I-Corps Program in Fall 2018. Cira has a B.S. in biopsychology from Wagner College and an M.S. in Translational Medicine from the City College of New York.



John Costa, SunThru LLC



John Costa is the CEO of SunThru LLC, an advanced materials and manufacturing start-up working to commercialize a rapid aerogel manufacturing method that was invented at Union College. Prior to joining SunThru full-time, John founded a wholesale pizza manufacturing business that delivered fresh pizza to various school districts for their school lunch programs. John is a graduate of the Union College Mechanical Engineering Department and has experience developing manufacturing systems, fundraising from government sources, and business development.

Diana Dabby. Olin College, SUITED Workshop Organizing Committee Member



Diana Dabby has taught at MIT, Tufts, and Juilliard, and holds degrees in music and electrical engineering from Vassar, Mills, C.C.N.Y., and MIT. She is Music Program Director and Electrical Engineering faculty at Olin College of Engineering. Her musical variations project (CantoVario) was selected for MIT's VMS Demo Day 2014 and Entrepreneurial Edge Showcase 2017, the MIT Innovation Corps 2018, and the NSF National Teams Innovation Corps 2019. Currently, she holds an NSF "Partnerships for Innovation-Technology Transfer" grant for R&D as CantoVario moves from prototype to product. During 2024-25 she is the Lillian Gollay Knafel Fellow at the Harvard Radcliffe Institute for Advanced Study.

Michael Newell, AvantGuard

Michael is an experienced entrepreneur with over 35 years of experience in startups, sales, marketing, strategic planning, and general management for technology based industrial products in new businesses and new markets. Prior to AvantGuard, he was CEO at Ener-G-Rotors Inc. and has held key leadership positions in U.S. Analytical Instruments, AT&T Capital Corporation, Inficon, Rheodyne, Empire State Health Solution, and IDEX Health and Science Technologies, managing sales, marketing, and business development efforts in North America, Europe, China, and Japan. Michael has served as a Tech Entrepreneur in Residence for the New York State Small Business Development Center, a Severino Fellow for the Lally School of Management and Technology at Rensselaer, and as a mentor at the UStart Incubator in Schenectady, NY. In addition, Michael has served on the Union College Board of Trustees and Union College Alumni Council.



Kelly Reardon-Sleicher, NY I-Corps (U of Albany)



Kelly Reardon-Sleicher has dedicated more than a decade to helping nascent entrepreneurs develop the skills and knowledge necessary to explore the market potential of their business ideas. A connector with drive and creativity, she streamlines essential processes and builds relationships to promote growth and success in herself and others. Kelly co-founded a startup meetup that provides a platform for young companies to ask for a hand-up from a supportive community. Having coached hundreds of teams to pitch their businesses, she excels in teaching early-stage companies to hone their key messages for a variety of audiences. As a public speaker and NSF I-Corps instructor, Kelly enjoys sharing her knowledge of the Lean Methodology used by startups around the world. She is also a 2017 recipient of the Albany Business Review 40 Under 40 award.

Experts

Christina Brule, Heslin Rothenberg Farley & Mesiti P.C.



Christina is a registered patent attorney with the United States Patent and Trademark Office and is admitted to practice law in New York State. Her practice areas include: patents, trademarks, copyrights, due diligence, international intellectual property, licensing and tech transfer, and general IP counseling; and spans across industries in chemical/materials, biotech, pharmaceutical, startups, and universities. Christina has earned a Bachelor of Science in Biochemistry from Nazareth College of Rochester, a Ph.D. in Biochemistry from the University of Rochester School of Medicine and Dentistry, and a Juris Doctor from the Syracuse University College of Law.

Mary K. Carroll, Union College, SUITED Workshop Organizing Committee Member

Mary K. Carroll is the Dwane W. Crichton Professor of Chemistry at Union College and the 2024 President of the American Chemical Society. She earned a BS in chemistry from Union College, a PhD in analytical chemistry from Indiana University, Bloomington, and performed postdoctoral research at the University of Massachusetts, Amherst. She co-directs the Union College Aerogel Lab, a vibrant and productive interdisciplinary research group. In addition to fundamental studies, the group investigates applications of aerogels in sustainable buildings, chemical sensing, drag reduction, and automotive pollution mitigation. She co-founded Sun-Thru LLC to commercialize the aerogel technology developed at Union. Mary has extensive experience with grant-writing activities, having served as PI for or contributed to successful proposals for funding from ACS-PRF, Dreyfus, NSF RUI, NSF MRI, NSF I-Corps, NSF STTR/SBIR, NSF PFI and NYSERDA programs.



Shahrokh (Seve) Falati, New York Law School



Shahrokh (Seve) Falati is a Professor of Law from Practice and the co-Director of the Innovation Center for Law & Technology at New York Law School. He teaches Intellectual Property (IP), Trademark & Unfair Competition Law, and directs the Patent Law Clinic at New York Law School. Seve began his IP law career as a Scientist. Having studied Pharmacology at Edinburgh University in Scotland, he moved to England and obtained a Ph.D. in Pharmacology before completing a three-year fellowship as a Fellow in Medicine at Harvard Medical School. Four of his first-author publications have been cited by over 2000 subsequent scientific papers. He has 19 years of experience in IP law and is admitted to practice law in New York and Massachusetts, before the U.S. District Court for the District of Massachusetts, and as a registered patent attorney before the USPTO in Washington.

Brian Gerling, Syracuse University



Brian Gerling is the executive director of the Innovation Law Center and Professor of Practice. He teaches the course on Innovation Law at Syracuse University College of Law. As ILC Executive Director, Gerling oversees the center’s applied learning course—the Innovation Law Practicum—in which students from the College of Law and across Syracuse University gain practical skills and experience assisting companies with IP, regulatory, and market landscape research, as well as capital sourcing.

Jeff Goronkin, Urban Co-Works, SUITED Workshop Organizing Committee Member

Jeffrey Goronkin is the founder and CEO of Urban Co-Works, a coworking business with locations in Schenectady, New York and Scranton, Pennsylvania. Goronkin previously co-founded Buzz Media, a marketing and communications company. Before that, he was the founder and CEO of social networking website iZoca.com and the Vice President for Life Sciences at Evident Technologies, a nanotechnology firm specializing in quantum dot-based applications. Goronkin is excited to bring his expertise and passion for entrepreneurship to the Scranton community with the opening of a new Urban Co-Works location in 2023.



Andrea Retzky, Retzky.



Andrea H. Retzky leads Retzky., a communications consultancy, with 30 years’ experience across the public, private, and nonprofit sectors. She also serves as the Storyteller-in-Residence at the NYC Innovation Hot Spot and the New York National Science Foundation’s I-Corps Hub. Andrea previously led client engagements for leading public relations firms and served as director of corporate partnerships and marketing at the Fund for Public Schools. Andrea began her career in Washington, D.C., as a press secretary for U.S. Representative Joe Kennedy and U.S. Senator John Kerry. She graduated from Cornell University with honors, with a B.S. in Communications.

Jeff Ritchie, Hamilton College

Jeff Ritchie, CRA, CFRA is the Founding Director of the Office of Sponsored Programs at Hamilton College. Jeff came to Hamilton College from Lewis University in Chicago, where he created that institution’s Office of Sponsored Programs. In his role as founding Director at both of these institutions, Jeff created a full range of policies and procedures to guide the research enterprise, including the areas of proposal development, post-award financial accounting, and research compliance. Jeff is currently Board Emeritus (and former Chair) of the Research Administrators Certification Council, which provides the Certified Research Administrator (CRA), Certified Pre-Award Research Administrator (CPRA) and Certified Financial Research Administrator (CFRA) credentials. In his spare time, Jeff tries to be a gentleman farmer at the Hamilton College campus garden, and enjoys reading and following his beloved Green Bay Packers.



Arber Ruci, NY I-Corps (CUNY)



Arber Ruci is an entrepreneur and patented inventor. He is the founder of a computer vision AI startup spinning out from his academic research lab at the City University of New York. Additionally, he serves as the Entrepreneur-in-Residence for the New York I-Corps Hub where he is a National I-Corps Instructor. Arber is the co-PI of two NSF PFI awards at CUNY and has served as Industry Mentor to three National I-Corps teams. From 2019 to 2022, Arber served on the Board of Directors of the New York State Business Incubator Association. Previously he was the Director of the New York City Innovation Hot Spot, an Empire State Development Funded Center, as well as the CUNY iHub Business Incubator in Harlem, NY.

Mercedes Susi, Union College

Mercedes Susi is the Director of College Grants & Sponsored Programs at Union College. She earned a bachelor's degree in sociology and a master of public administration from Clark University. She is responsible for proposal development and award administration for grants from government and private sources that support faculty research, institutional priorities, and academic initiatives at Union. Since joining the College in 2016, Mercedes has contributed to strengthening the research infrastructure at Union through the creation of a framework for grant seeking that centers on aligning funding opportunities with a faculty member's career trajectory combined with providing tailored proposal writing strategies and through the development and implementation of a range of policies and procedures.



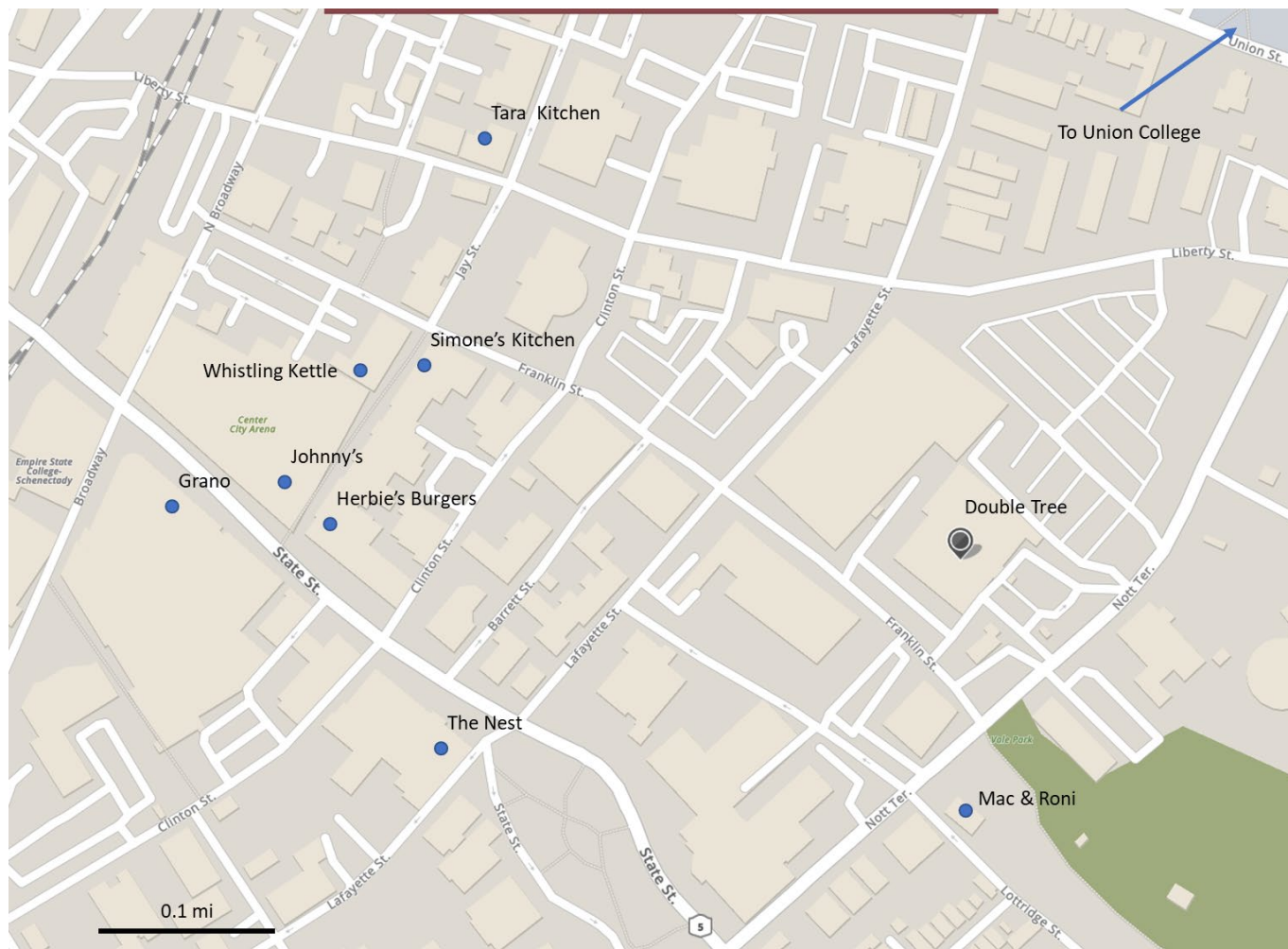
Ariella Trotsenko, NY I-Corps (CUNY)



Ariella Trotsenko is the Director of Entrepreneurial Training Programs at the CUNY Innovation & Applied Research Incubator. She has taught Lean Startup to early stage founders through various NSF, EDA, and DoD funded courses, including I-Corps and SBIR/STTR. Ariella serves on the Board of Directors of the Business Incubator Association of New York State (BIANYS) where she promotes activities of local and state-funded incubators and influences policy on regional economic development. Outside of her work, Ariella serves as an advisor to two diagnostic companies through the NYS Biodefense Commercialization Fund, and has her own company focused on health and wellness services. Previously, Ariella worked for Congressman Hakeem Jeffries as a Legislative Fellow in Washington DC and is a proud alumni of the CUNY system at both Macaulay Honors College and Baruch College.

Information about the Schenectady area: <https://www.union.edu/about/area>

Some favorite local dining places:



(map source: MapQuest)

GRANO Farm-to-table Italian cuisine, daily fresh-made pasta. 426 State St.; (518) 280-3059; granoschenectady.com

JOHNNY'S Casual Italian-American family dining. 433 State St.; (518) 982-5657; johnnysdowntown.com

HERBIE'S BURGERS Classic burger eatery featuring organic ingredients and vegan options. 175 Jay Street; (518) 280-1814; herbiesburgers.com

MAC & RONI Fast casual Italian eatery with customizable pastas, salads & wraps. 83 Nott Terrace; (518) 344-6134; macandroni.com.

SIMONE'S KITCHEN Modern Mediterranean flavors served in bowls, pitas and more. 108 State St.; (518) 746-4919; ordersimones.com

TARA KITCHEN Authentic Moroccan cuisine, featuring assorted appetizers, lunch and dinner plates, and tagines. 431 Liberty St.; (518) 708-3485; tarakitchen.com

THE NEST Contemporary Southern cuisine, including fried chicken, chicken and waffles, biscuits and assorted small plates, with outdoor seating. 512 State St.; (518) 672-3018; thenest518.com

WHISTLING KETTLE Tea shop and Café that serves scones, sandwiches, soups, crepes, and salads. 138 Jay Street; 518-630-6933; cafe.thewhistlingkettle.com (closes at 6:30 pm)

College Park Hall Map

