



Western New York Commercial Association of Realtors

University at Buffalo's Impact on Our Region

Christina P. Orsi

Associate Vice President for Economic Development

The University at Buffalo

Scope, Scale, and Impact

30,500+ **Students** (50 States, 106 countries)

5,400+ **Full Time Employees**

2,400+ **Total Faculty**

\$387 M **Annual Research
Expenditures**

260,000 **Alumni in 150 countries**

Top 25 **US Intl Enrollment**

3 **Campuses**

100's **Novel Technologies**



Rising in the Ranks

One of the nation's great
research universities

#38 among U.S. public
universities: ***U.S. News and
World Report***

Among public and private
universities: **UB has risen
32 spots** over the past 11
years.

#1 among U.S. public
universities in New York
State: ***Wall Street
Journal/Times Higher
Education***, September 2018



Talent and innovation found in UB's Schools & Colleges



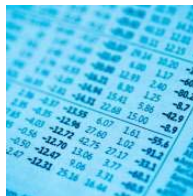
Graduate School of Education



School of Engineering and Applied Sciences



School of Law



School of Management



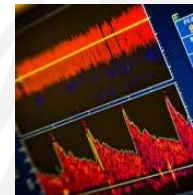
Jacobs School of Medicine and Biomedical Sciences



School of Nursing



School of Pharmacy and Pharmaceutical Sciences



School of Public Health and Health Professions



School of Social Work



Roswell Park Comprehensive Cancer Center Graduate Division



School of Architecture and Planning



College of Arts and Sciences



School of Dental Medicine

Fueling the Technical Workforce Throughout New York State

Largest public school of engineering and applied sciences **in New York State**



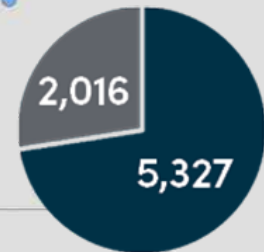
SEAS Alumni
Over 14,000 in NYS
alumni working in
engineering/applied
sciences field
throughout the state



237 full-time
faculty and growing
40% increase
in faculty body in
five years



Enrollment Growth
UNDERGRADUATE
62% GROWTH OVER 7 YRS
GRADUATE
55% GROWTH OVER 7 YRS



Fall 2018 student body
consists of **2,016**
graduate students
and **5,327**
undergraduates

Innovation happens here.

150+

Technologies ready
to commercialize

\$387M

Research expenditures

50

active
startups

2

Startup
Incubators

Making new
discoveries
and generating
new ideas in
high-tech areas
every
day.



BUSINESS AND ENTREPRENEUR PARTNERSHIPS

*Building partnerships to spur innovation,
solve challenges and spark growth*



University at Buffalo

Business and Entrepreneur
Partnerships

Research and Economic Development



Connect, Commercialize, Grow



Tap into our deep bench of knowledge & expertise.



Access UB's specialized facilities & equipment.



Explore what's available for funding your idea.



Discover how we connect talent with opportunity.



University at Buffalo

Business and Entrepreneur
Partnerships

Research and Economic Development

How

Connect to funds,
facilities, programs
and people.

Centers of Excellence

- Center of Excellence in Materials Informatics (CMI)
- Center of Excellence in Bioinformatics and Life Sciences (CBLS)

Programs & Funding

- Innovation Hub
- EDI
- Center for Advanced Technology in Big Data and Health Sciences (UB CAT)
- Buffalo Institute for Genomics and Data Analytics (BIG)
- Western New York Incubator Network (WIN)
- STARTUP NY
- I-Corps Site Program

Facilities & Specialized Equipment

- UB Incubators and Co-working Space (Incubator @ Baird, Incubator @ CBLS)
- GBC/OBC CORES, BIOREPOSITORY, CCR





CONNECT

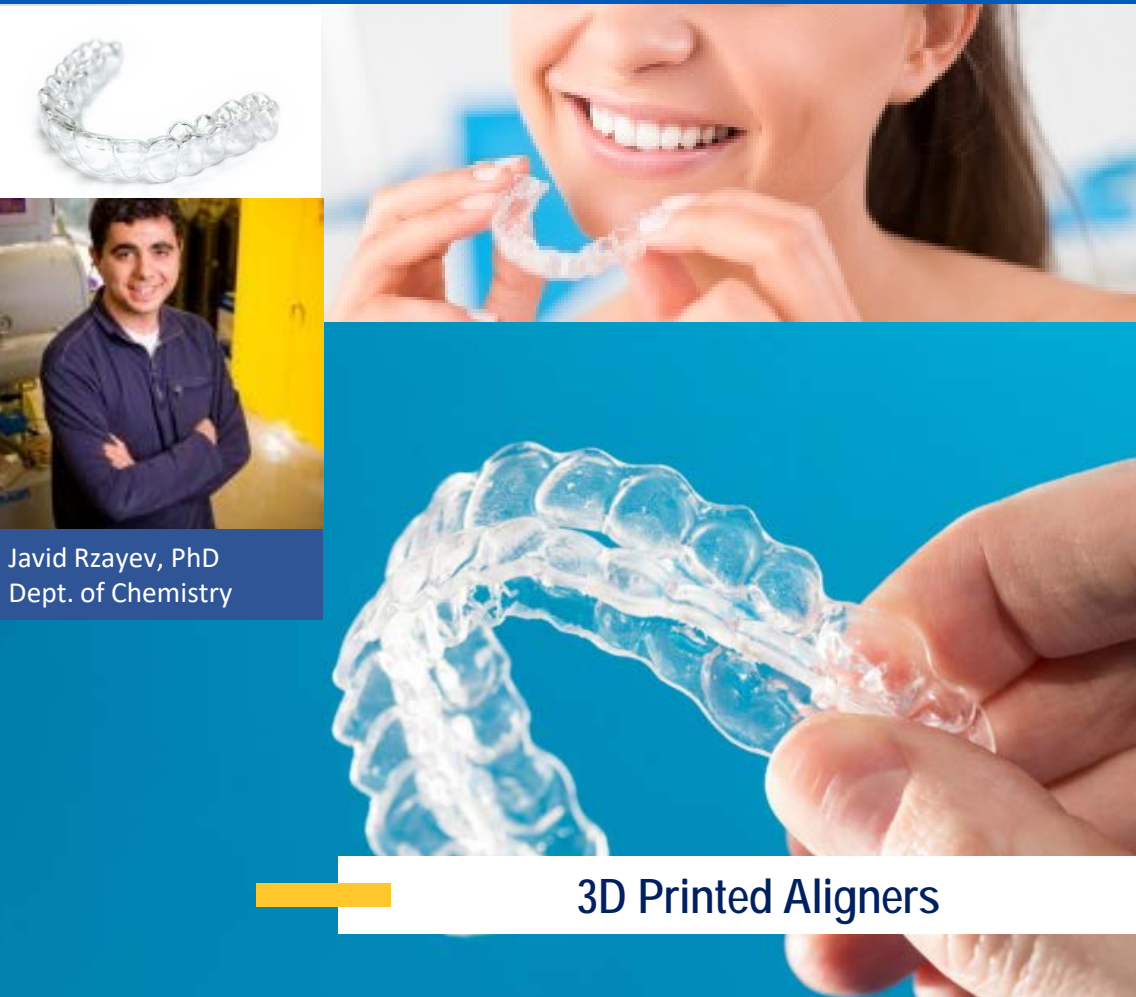


UB understands the needs of start-ups. They were incredibly responsive, helped us reduce research costs and meet tight timeframes. They made us a more competitive and sustainable company.”

Jonelle Toothman
Co-Founder and CEO
NeXtGen

Connecting
100's
of businesses
to technology,
innovation,
knowledge,
talent, and
funding, **every**
year.





Javid Rzayev, PhD
Dept. of Chemistry

3D Printed Aligners

Making
connections.
A win-win for
all involved.

- ✓ New Material R&D, IP, Commercialization Path
- ✓ Commercial Focused Research Opportunity
- ✓ Exposure to Industry
- ✓ Interdepartmental Project
- ✓ Multiple Agreements
- ✓ Additional Funding
- ✓ Licensing Execution
- ✓ Mechanical Testing
- ✓ Global Impact
 - ✓ *Accessible, low cost, effective solution*

Circuit Clinical

Meet the company that won investors over after tapping into UB's entrepreneurial smarts.

FOUNDED
2014

LOCATION
Buffalo, NY

INDUSTRY/BUSINESS
Research

WNY EMPLOYEES
25 employees

ABOUT THE COMPANY

Circuit Clinical focuses on finding patients to participate in clinical research projects. The company has established a network of doctors, medical groups and accountable care organizations with access to about 1 million patients.



UB's leadership is so **pro-growth and pro-partnership**; it's certainly at the vanguard of what's happening with the economic vitality of Western New York."



Irfan Khan, MD FACC FHRS,
Chief Strategy Officer,
Circuit Clinical

How UB built a winning partnership



Data Analytics
Leveraging the
Center for
Computational
Research



Partnership
with Buffalo Institute
for Genomics and
Data Analytics (BIG)



START-UP NY
Company



Office on UB's
Downtown
Campus



UB Center for
Advanced Technology
Award
Recipient



Life Sciences
Career
Experience
Program Interns



It is great to see how the thinking has changed in Buffalo about starting new companies and supporting entrepreneurship. I am integrating UB students into as many of these activities as possible."

Dan Magnuszewski

Computer Science and Engineering Graduate
Co-founder and Chief Technical Officer of ACV Auctions

- ✓ Founded by UB alumni
- ✓ Hired hundreds of UB grads
- ✓ Collaborative technology development with UB engineering faculty
- ✓ Active guest speakers & mentors to student entrepreneurs
- ✓ Startup NY tax free growth
- ✓ Flexible growth space at UB Gateway Building
- ✓ Advisor to UB Dept. of Computer Science
- ✓ WIN Embedded Consultants program
- ✓ Sponsor of UB tech and student entrepreneur activities

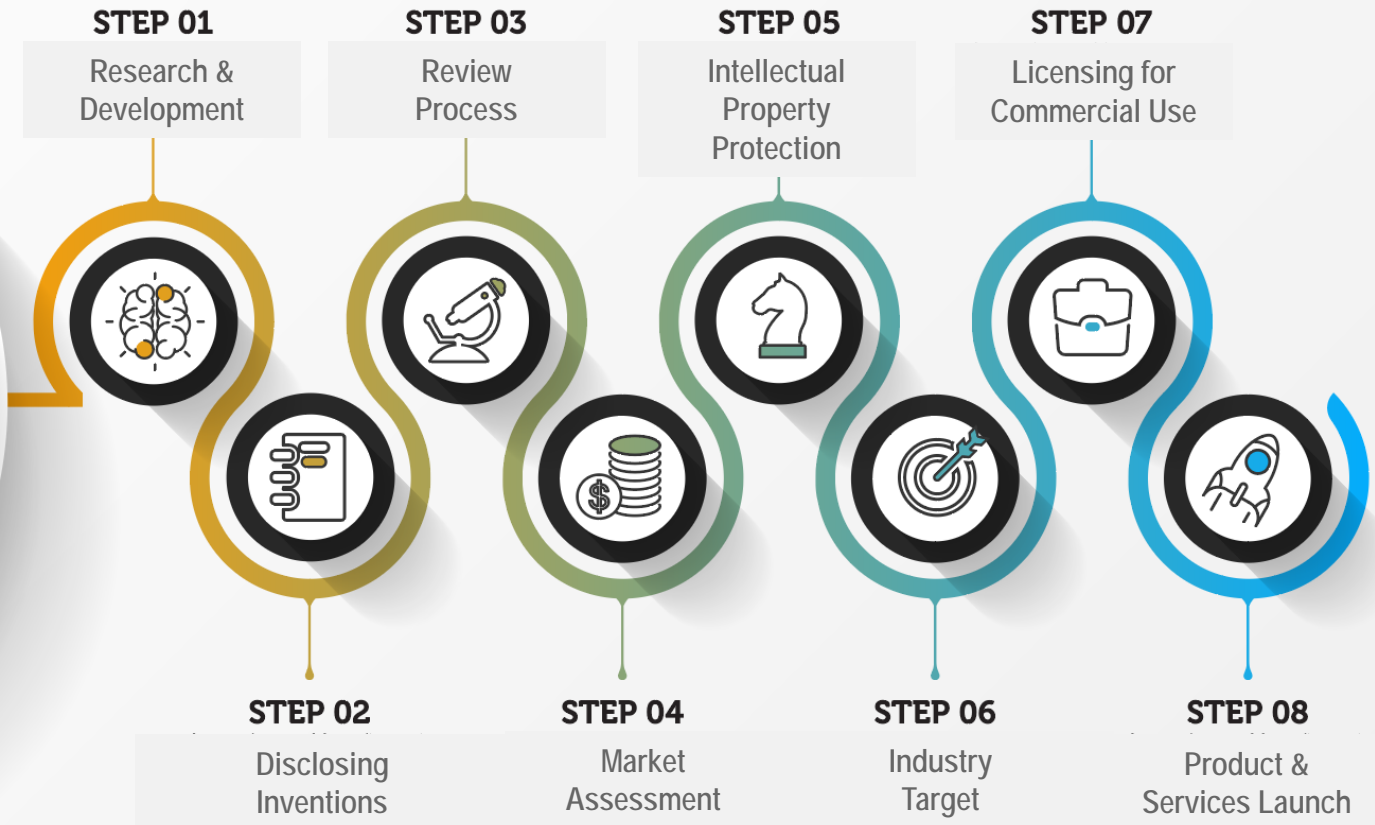


COMMERCIALIZE INNOVATION HAPPENS HERE

Moving innovation to impact



COMMERCIALIZE



GOAL

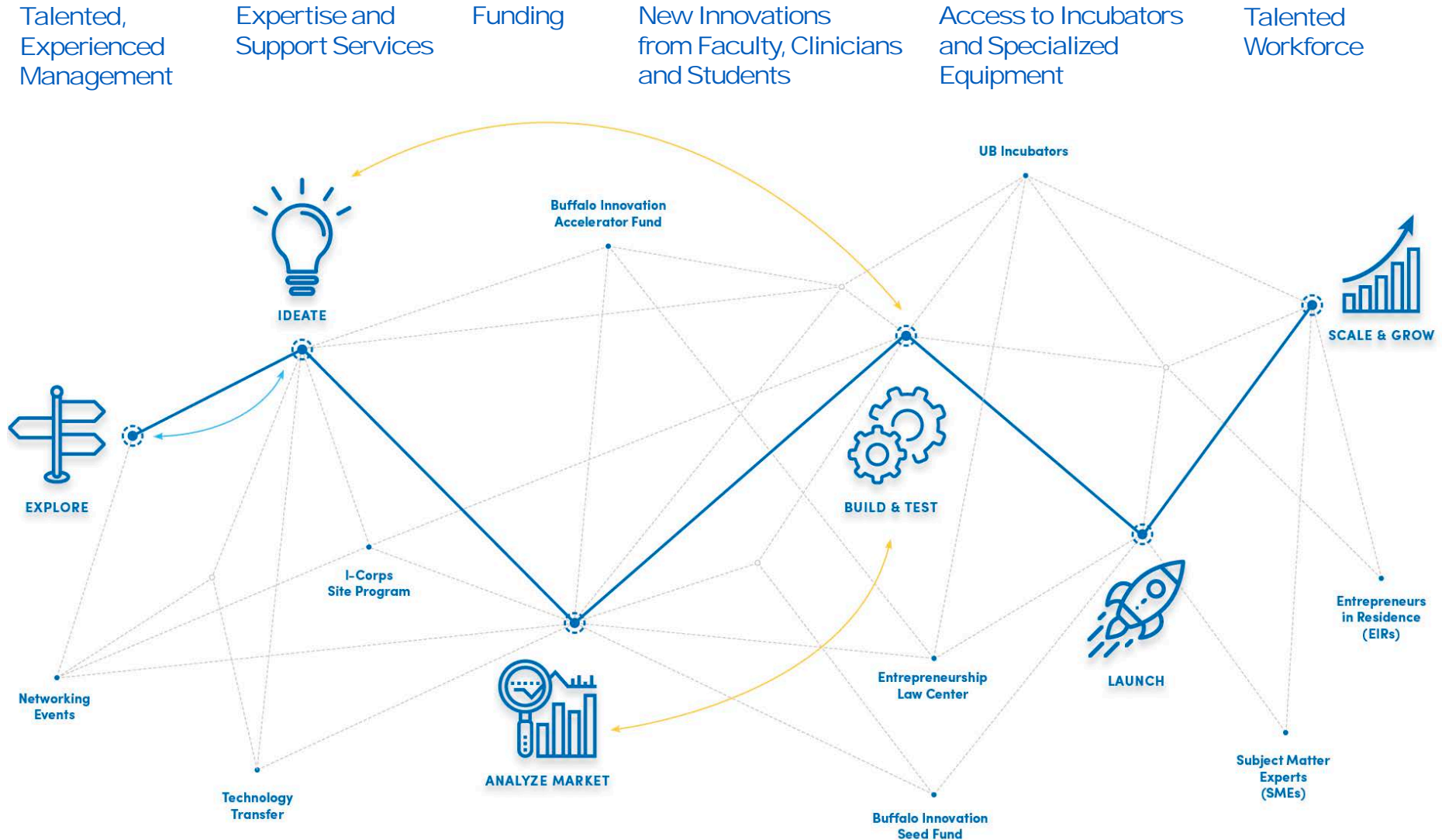
Dramatically accelerate the commercialization of technologies generated from UB and its partners to start and grow more technology companies in Buffalo Niagara.

PARTNER INSTITUTIONS



NYS Investments through the Buffalo Billion

The Innovation Hub initiative supports moving ideas from classroom and lab to market through startup formation & growth. Successful growing technology companies require several key components:



FACILITY

Today, UB currently has one incubator on North Campus

UB Incubator @ Baird provides:

- ✓ Affordable Membership / Rental Rates
- ✓ Flexible Space Options and Terms to enable quick growth and graduation
- ✓ Locate with like-minded entrepreneurs
- ✓ Co-working space
- ✓ Shared amenities
- ✓ Access to Conference Rooms (AV equipped) & Event Space
- ✓ Access to Programs, Events & Support Services

UB Incubator @ Baird

North Campus (space available)



UB Incubator @ CBLS Opening 2020

Center for Bioinformatics & Life Sciences

FACILITY

Make an additional
25,000 square feet of lab
and 15,000 office/shared
space available to
startups

Renovating now to provide:

- ✓ Flexible event/program space
- ✓ Collaborative work space
- ✓ Co-working space
- ✓ Shared amenities
- ✓ More accessible & visible
- ✓ Wet labs & Dry lab
- ✓ Extensive shared equipment already in place for start-ups
- ✓ Mentoring and support services



Garwood Medical Devices

Improving infection control through disruptive technology

Garwood have exclusively licensed a technology developed by UB researcher Dr. Mark Ehrensberger that can disrupt bacterial biofilms. In partnership with UB they are developing a medical device that can act on any metal implant in the body, with the aim of preventing and treating orthopedic implant infections, reducing patient morbidity and mortality, preventing unnecessary surgeries and saving billions of dollars worldwide per year.



This technology would not exist without UB. We have a terrific working relationship with them. With their partnership, we will bring disruptive, life-saving products to the marketplace.”

Wayne Bacon
President & CEO
Garwood Medical Devices

How UB built a winning partnership



Data Analytics
Leveraging the Center for
Computational Research
(CCR)



Partnership
with Buffalo Institute for
Genomics and Data
Analytics (BIG)



**UB Center for Advanced
Technology in Big Data and
Health Sciences (CAT)**



**Center of Excellence in
Materials Informatics
(CMI)**



**Technology
Licensed from
Tech Transfer**

Neurovascular Diagnostics

Neurovascular Diagnostics a biotech startup in Buffalo NY that is developing a low-cost, blood diagnostic to detect unruptured brain aneurysms.

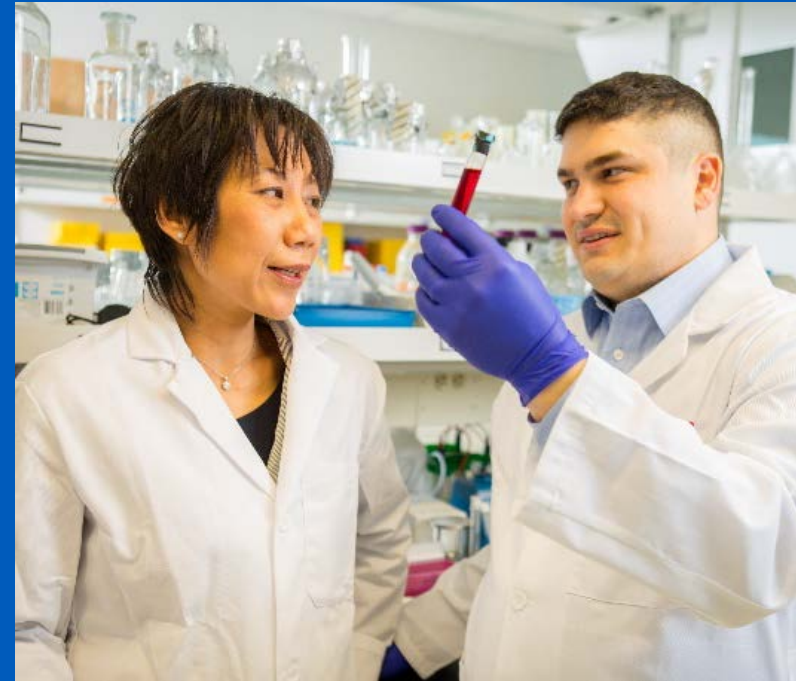


The goal is to give people an inexpensive, non-invasive way to see if they have an unruptured brain aneurysm.”

Vincent Tutino

PhD graduate in Biomedical Engineering

President and CEO of Neurovascular Diagnostics (co-founded with Hui Meng, a professor of mechanical and biomedical engineering)



How UB built a winning partnership



**UB Center for Advanced
Technology (CAT) Award
Recipient**



**Tenant in
UB Incubators**



**START-UP NY
Company**



Innovation Hub



**Partnership with Buffalo
Institute for Genomics
and Data Analytics (BIG)**

Student Entrepreneur Support

SET YOUR
ideas
IN MOTION

Blackstone LaunchPad

at UB offers training and workshops to develop the next generation of entrepreneurs.



WORKSHOPS



EVENTS



COMPETITIONS



COACHING &
MENTORING



SKILLS
DEVELOPMENT



NETWORKING

If you have an idea ...
flesh out your concept &
understand the next steps.

If you have a company ...
receive insight and
guidance on how to grow
and scale your business.

If you're curious ...
get mentored, join our
community and come to
our events.

Blackstone LaunchPad Student Entrepreneur Support

Programs



Current Metrics

12,779
Students Engaged
(51% inclusive)
Since March '16
About 10% of the UB
student population

972
Ideas Coached
Since March '16

38
New Ventures
Launched
2018-19



Aviate's technology that brings digital sound effects directly into guitars took 1st Place in the 2018 Panasci Technology Entrepreneurship Competition

We've helped **400+**
companies start or grow
their business, and access
disruptive technologies
with ease. With us as your
partner, we can move
innovations to impact.

GROW

**It's a win for
New York State
& WNY.**



It's a win for UB.



**It's a win for
industry.**



UB's Industry partners...

- ✓ supported **1,936** jobs in NYS
- ✓ supported **1,883** jobs in WNY
- ✓ provided regional **economic impact**

- ✓ **hire** UB interns and graduates
- ✓ **mentor** students'
- ✓ **share** valuable insights (give lectures & workshops)
- ✓ **serve** in advisory roles (align academics with company needs)

- ✓ access the **latest technologies**
- ✓ Advance research and development
- ✓ tap into **talent**