



# STARTUP GUIDE

## Entrepreneurship at UB

Supporting the creation of startups, or newly-formed  
companies on their path to commercialization

The University at Buffalo's Business and Entrepreneur Partnerships (BEP) team is on a mission to facilitate the commercialization of UB's intellectual property (IP). BEP team members support the facilitation and creation of startups, or newly-formed companies as one path to commercialization. UB encourages innovation and has established a variety of mechanisms to support the cultivation of startup companies built around technology discovered and developed on campus.

Successful startups have a strong founding team. UB's BEP team is here to help. This team typically consist minimally of a business leader (Business Lead) and a technology leader (Technical Expert). UB offers the option for Technical Experts to recruit and gather these resources on their own, or to leverage the BEP network.

In this spirit, the following guidelines have been established to address the increasing number of entrepreneurially-minded Technical Experts expressing interest in commercializing their innovations through a startup. The guidelines have been benchmarked against peer institution ecosystems.

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## Startups Journey

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**The outstanding faculty and students at the University at Buffalo are engaged in exciting and groundbreaking research. UB's Business and Entrepreneur Partnerships helps maximize the impact of this research through mentoring of startups and simplifying engagement with private industry.**

**Albert Titus**

*Professor and Chair of Biomedical Engineering*

*UB's Department of Biomedical Engineering*

## STARTUP VENTURES PROGRAM OBJECTIVES

- Facilitate the successful dissemination of technology created at the University at Buffalo for the benefit of society, the State of New York, the creators of such technology, the University at Buffalo, and the SUNY Research Foundation.
- Attract highly talented, entrepreneurial faculty, staff, and students to assist in entrepreneurial and commercialization activities.
- Generate a reasonable financial return to the University and produce future revenues in the form of gifts and research collaborations from entrepreneurs and companies who have benefited from technologies created at the University at Buffalo.

### **⚠ New Company Formation is a High-Risk Proposition**

Our guide provides some best practices to put you on a path forward that may help mitigate risks. That said, some common challenges can cause academic startups to fail.

#### **INEXPERIENCED MANAGEMENT**

Lack of good management experience is one of the top reasons that startups fail. A strong, experienced, cohesive team is required for a successful startup company.

#### **TIMING**

Even when a commercial need exists, the company may miss the market. Sometimes the market is not ready for a product, the product is too late to the market or the need has already been filled by a different technology or better product.

#### **NO COMMERCIAL NEED**

Sometimes the science is innovative and exciting but does not correlate to a critical commercial need, or current solutions are still better than the new technology.

#### **LACK OF FUNDING**

A startup needs sufficient capital to overcome technical challenges, reach critical business milestones and progress to the next phase of development.

#### **MARGINAL, NICHE MARKET**

If the target market is smaller than expected, the company may not meet its financial targets. This is why proper market research and customer discovery is important in the pre-formation process.

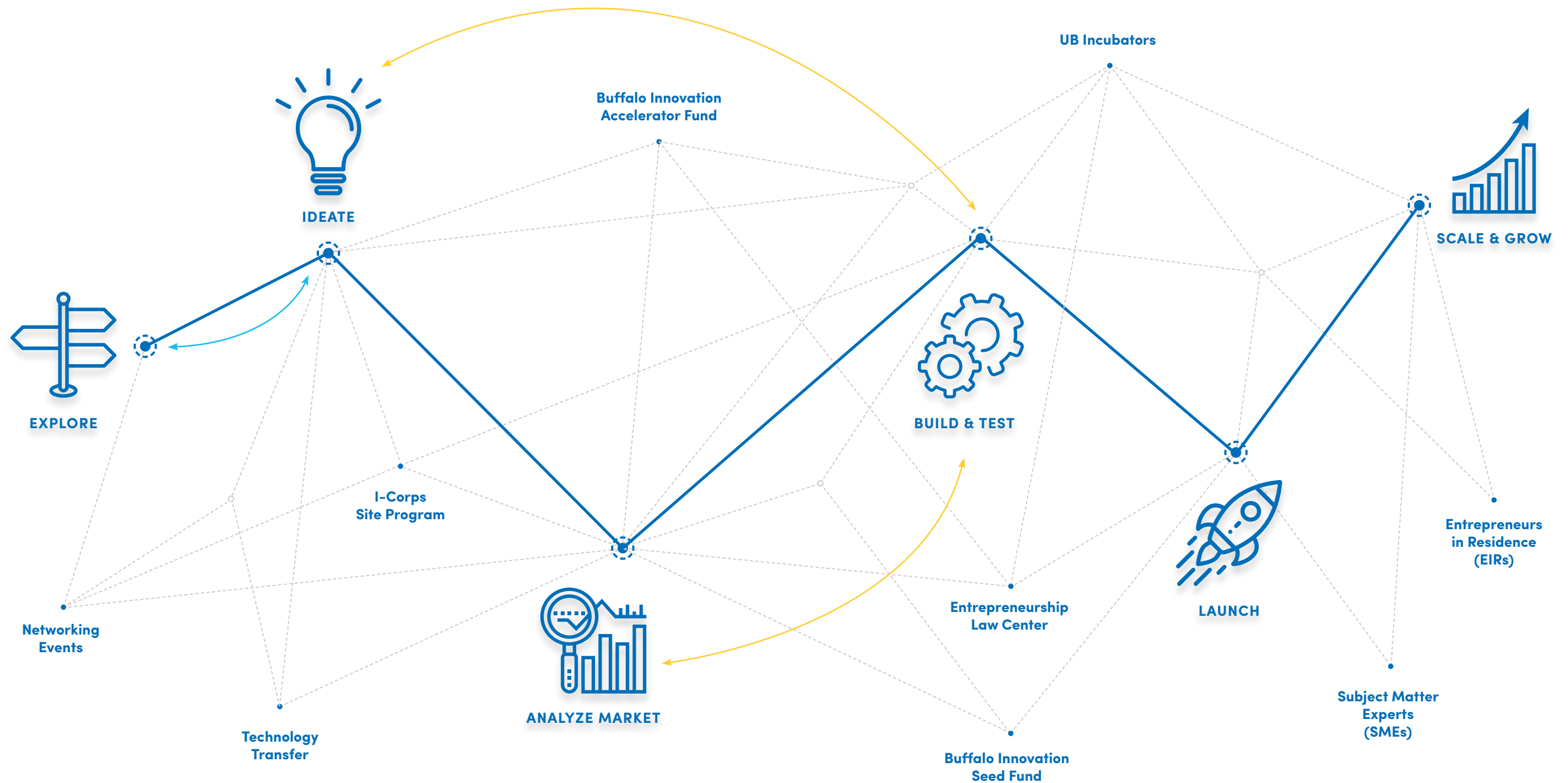
#### **BAD LUCK**

Sometimes events outside of the entrepreneur's control can negatively impact a company.

Startups built around UB technology develop along the following path. Programs and services are in reach and help you along the way.

**A TALE OF TWO PATHS**

For some technologies, a startup company is the optimal way to bring the technology to market. For others, a licensing agreement with a larger corporation may be preferable.





EXPLORE

# ENTREPRENEUR, MEET IDEAS

## GET INVOLVED

Students, faculty, and staff can get involved in the wider Buffalo startup community before they even consider starting their own company. In fact, it is highly encouraged. Even if a company never comes out of the interactions, the startup ecosystem is a great place to test ideas, challenge assumptions, and find different viewpoints.

### Research

The startups that come out of the University at Buffalo often times come out of the innovative research being done by our faculty. We encourage any and all faculty, students, and staff that believe they have a commercializable novel innovation to contact a member of the startups team or tech transfer to see how we can help you.

### Networking

Seasoned entrepreneurs bring a unique perspective to conversations on the research and development of new technologies that can be difficult to reproduce on campus. All members of the university are encouraged to take advantage of opportunities to participate in Buffalo's growing entrepreneurial community.



IDEATE

# IDEAS, MEET ACTION

## VALIDATE TECHNOLOGY

After the initial idea has been formulated, it is tested. If it's a deep science technology, some basic science is done, and some preliminary experiments are run to validate the initial thesis. If these initial experiments are successful, the idea can be taken to the University at Buffalo's Tech Transfer Office for disclosure, so the commercialization process can be started.

## Invention Disclosure

As soon as a discovery is made, the Technical Expert should make an invention disclosure to our Tech Transfer Office, which is part of the Business and Entrepreneur Partnerships (BEP). These confidential, internal, non-public disclosures help protect the intellectual property, and serve as a formal communication of a potential invention. A Commercialization Manager will be assigned based on the type of technology being disclosed.

Invention disclosure should be done whether or not the IP is able to be protected. The disclosure will help the Business and Entrepreneurship Partnerships team know how to best move the technology toward commercialization.

*This disclosure should be done before you publish your findings or present them externally.*

## Meeting with the Technology Transfer Experts

A BEP Technology Transfer Commercialization Manager will meet with the inventor(s) to go over the disclosure and get a better understanding of the invention. Together, they will brainstorm ways to add value to the discovery as early in the commercialization process as possible.

- Identifying Other Applicable Markets
- Non-Traditional Sources of Technology Advancement Funding
- Ideas for Validating and Testing the Technology

Commercialization Managers will outline initial action steps for both parties. A faculty meeting usually takes place within a few weeks of an invention disclosure.



ANALYZE MARKET

# TECHNOLOGY, MEET MARKET

Once the disclosure is made to the Tech Transfer Office, they will run their own analysis of the technology, its commercial potential, and its viability in the market.

## Review & Assessment

Assuming a positive initial finding, the Commercialization Manager will complete a "market opportunity assessment" of the invention for technical merit, maturity, intellectual property protection potential, and market impact. This helps determine what steps can further develop the technology before licensing. The Commercialization Manager researches and identifies the best protection method for the technology, and makes a preliminary assessment of the market landscape and dynamics in an effort to understand the invention's commercial potential.

*Depending on the complexity of the technology, the assessment step can take several months.*

## Intellectual Property Protection

In the event that the Commercialization Manager determines that the invention is best protected by a patent, the Tech Transfer Office team makes the initial patent filing decisions, and, if necessary, identifies outside patent counsel with the expertise in the relevant field. The Technical Expert works closely with the Commercialization Manager and the patent counsel to draft relevant, valuable, and enforceable claims based on the nature of the invention, the relevant markets, and the anticipated business model for commercializing the invention. Any subsequent patent decisions are made in concert with the inventor and Technical Transfer.

Non-patentable inventions may be protected by other means such as copyrights or contracts. Commercialization Managers will be able to guide you on the best way to protect non-patentable inventions.

*This process begins as early as a month after the invention disclosure, and can take up to several years before a final patent is secured, depending on the technology. Provisional patents can be granted much earlier.*

\*In unique situations, a waived technology (a technology that is not deemed protectable) could still be worth commercializing. The Technical Expert should get in touch with the Startups Team at BEP if they have an interest in getting a startup off the ground.



“ Participating in the I-Corps Site Program started to open our eyes to a commercialization path. The program pushed us to ask for feedback, forced us to listen and incorporate that feedback to improve our technology and way of thinking. Once we understood the market, it allowed us to make the decision to continue and form a company. ”

**Team Channavix**

Arin Bhattacharjee, PhD | Associate Professor, Pharmacology and Toxicology  
 Elsa C. Daurignac, PhD | Research Assistant Professor, Psychiatry

**Tech Transfer Deep Dive**

If the Commercialization Manager makes the determination that the Technical Expert’s invention is patentable and commercializable, the Tech Transfer Office will get 90 days to do a deep dive on the technology, so they can determine its license-ability.

At the same time, if the Technical Expert is interested in starting a company around this technology, they will be put in touch with the Startups Team at BEP. The Technical Expert will apply to go through the [I-Corps Program](#) and be tasked with finding a Business Lead that both the Technical Expert and BEP agree upon.

The Technical Expert should understand that this is done in case Tech Transfer determines during their 90-day deep dive that the best course of action is to create a new company around the technology. If a licensing opportunity is found with an existing company, Tech Transfer, the inventor, the Technical Expert, and the Business Lead will sit down to determine what the most viable commercialization path for the technology is.

**TECHNOLOGY EXPERT STARTUP COMPANY POLICIES**

<b>Technology Criteria</b>	All intellectual property rights to be licensed by UB are not encumbered <i>i.e. Technology is solely owned by UB and not the subject of any other agreement</i>
<b>Technology Expert Obligations</b>	All UB employees who are company co-founders have completed a conflict of interest (COI) management plan as mandated by their respective department(s).  Tech Transfer Office and the startup founders will agree on near-term milestones that the startup must hit to maintain the license.
<b>Startup Obligations</b>	Startup company must engage legal counsel to represent their interests. (If the inventor of the technology chooses to join the startup company as the Technical Expert, they will not be part of the negotiation.) UB’s Entrepreneurial Law Center can and will negotiate on behalf of the startup to and through in-licensing.  Startup company has appropriate corporate governance documents (e.g., shareholders’ agreement, operating agreement, etc.). UB has template corporate governance agreements that may be used by UB startup companies.



BUILD & TEST

# MARKET, MEET OPPORTUNITY

If the market opportunity assessment is promising, and the IP is solid, the assumptions about the efficacy of the technology and the viability of its commercial potential can begin to be tested. Technologies moving toward commercialization via the startup path can start considering early grant funding through the Buffalo Innovation Accelerator Fund.

## Pre-Formation Funding

In the very early stages, entrepreneurs might be able to raise funding from friends and family. But keep in mind that bringing a tech product to market (commercialization) often requires multiple rounds of funding.

### BUFFALO INNOVATION ACCELERATOR FUND

The Buffalo Innovation Accelerator Fund is a technology commercialization accelerator fund administered by the University at Buffalo and supported by Empire State Development. The fund supports technology development projects that will facilitate the formation of an investible start-up company to further develop and commercialize the technology, or enable an innovation to become more attractive for licensing and/or partnering with established companies.

More information is available here: [buffalo.edu/accelerator-fund](https://buffalo.edu/accelerator-fund)



LAUNCH

# STARTUPS, MEET REALITY

Launching a startup venture is a time-consuming, difficult, and mostly thankless process that is more likely than not to end in failure. Successful ventures require a team of dedicated individuals to move their technology toward a product-market fit and eventually commercialization. Hard work, passion, and intelligence are all assumed, but dedication and focus are what will bring a company through the darkest times.

That said, BEP's Startup Ventures Team can help PIs find a business lead, navigate the process of incorporating a company, and eventually license the technology to the new startup, so it can begin its journey toward commercialization.

## Company Formation

Should the Startup path be determined as the best commercialization course, the BEP Startups Team will work with the technology lead to establish the company. At minimum, the management team of a successful startup is comprised initially of:

### **BUSINESS LEADER** (Business Lead)

The business leader is responsible for filing the incorporation documents, negotiating the license agreement, preparing a business plan, recruiting additional talent, and raising capital for the startup. UB's Entrepreneurial Law Center can provide no-cost assistance with legal matters.

[View Business Lead Rubric in Appendix](#)

### **TECHNOLOGY LEADER** (Technology Expert)

The Technical Expert is the one that develops the technology for commercialization as part of the startup's team, not necessarily the inventor of the technology. BEP's Startup Team can assist the Technology Expert in finding a Business Leader with relevant expertise and networks in the technology and/or market.

### **FACULTY MEMBER OR ADDITIONAL TECHNOLOGY EXPERT**

Such as a postdoc or graduate student, is frequently the Interim Technology Leader.

A tech startup can be simply defined as a newly formed technology company, but in practice, it's much more than that. We do not advise that a Technical Expert attempt to run a startup without a Business Lead. A tech startup needs the right team and technology in place at the right time to create exponential growth and value.





**When my business partner and I formed NanoHydroChem LLC, we executed the EXL Express License with UB's Technology Transfer office. EXL Express is straightforward, favorable to UB startup companies, and allowed us to spend money developing our product instead of paying attorney fees.** ”

**Mark T. Swihart**

*UB Distinguished Professor and Chair  
Chemical and Biological Engineering*

## Negotiation

BEP Technology Transfer Commercialization Managers lead license negotiations once a potential licensee is found (whether existing corporation or new startup) and determine which type of agreement, such as a license or option, best fits the situation.

To avoid conflicts of interest, Technical Experts are not directly involved in license negotiations.

If the Technical Expert is going down the startup path, the negotiation process can begin with the Business Leader when one has been found and onboarded. The time necessary to complete a negotiation is determined by the partner and the unique characteristics of the deal.

For startups, UB does try to make this process as easy as possible by making the terms entrepreneur friendly.

[View Express License Terms in Appendix](#)

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## Incubators

University at Buffalo incubators offer affordable, flexible spaces, programs and support for technology based startups created by the Innovation Hub partner's faculty, researchers, students or staff at UB, Roswell Park Comprehensive Cancer Center, Hauptman-Woodward Medical Research Center, the Jacobs Institute or, Kaleida Health. Technology based startups, interested in affiliating with an Innovation Hub partner, are eligible to apply.

**UB INCUBATORS** | [buffalo.edu/incubators](https://buffalo.edu/incubators)

The UB Incubator @ Baird has been operating since 1988, and has helped more than 200 companies commercialize their technologies. The UB Incubator @ CBLs, opening late 2020, is a new incubation space that will help UB expand its ability to help companies reach their commercial potential.



# STARTUPS, MEET FUNDING

Once a startup venture has started down the commercialization pathway, they should simultaneously work on product-market fit and technological innovation. To do this, they will need to raise capital. Many deep technology startups begin their fundraising efforts with various government grants and other sources of non-dilutive funding. To truly scale a company however, most startups will need to raise private funding from venture capital investors.

## Traditional Funding

Bringing a new product to market can be a capital intensive process. It is most likely that a new startup will need to raise funding at some point. The BEP Startup Team can help entrepreneurs identify a fundraising strategy, and help them figure out the tactics they need to employ to successfully raise funding.

### BUFFALO INNOVATION SEED FUND | [buffalo.edu/buffalo-seed-fund](https://buffalo.edu/buffalo-seed-fund)

UB BEP manages an equity investment fund with the ability to deploy capital for pre-seed stage investments of up to \$100,000 and seed stage investments of up to \$250,000.

The seed stage investments will generally be contingent upon the company finding a private investor or venture capital firm that will match the university's investment.

### ANGEL INVESTMENT

Angel Investors are typically high-net-worth individuals who have a personal interest in investing in startup companies. They generally invest smaller amounts of money at earlier stages than venture capitalists. Because they invest in companies earlier, their time horizon on return tends to be longer than that of a venture capitalist.

Angel Investors come in a range of types and qualities. Some are working professionals (doctors, dentists, etc.) who have an appetite for risk and an interest in technology, but are not expert investors or technologists. Others are former startup founders who exited companies and only invest in their industry of expertise.

### INSTITUTIONAL VENTURE CAPITAL

Venture capitalists usually invest larger amounts of money (into the millions of dollars) into a company. In exchange, they receive more equity and more control. They often bring experienced management in to help guide and grow the company. They also start to formalize the structures of the company. For instance, if the company doesn't already have a board of directors, they will insist on forming one.

A startup's ability to raise funding from outside investors will be at least partially dictated by the milestones they have hit. A rubric on these milestones can be found in the [appendix](#).





**UB's Business and Entrepreneur Partnerships has been a valued partner every step of the way in commercializing the technologies developed in my lab. The team helped me partner with companies and also brought several funding and research opportunities to my attention.**

**Amin Karami PhD**

*Associate Professor*

*UB's Department of Mechanical and Aerospace Engineering*

## Non-Traditional Funding

In addition to the traditional funding sources listed, UB startups have access to a number of non-traditional, many times non-dilutive, funding avenues.

### **SMALL BUSINESS INNOVATION RESEARCH (SBIR) AND SMALL BUSINESS TECHNOLOGY TRANSFER (STTR)**

SBIR and STTR offer funding in the form of contracts or grants. This highly competitive program encourages domestic small businesses to engage in federal research/ research and development (R/R&D) that has the potential for commercialization. Currently, eleven federal agencies participate in the SBIR program and fund approximately \$2.5 billion in awards each year.

To successfully secure a Stage II SBIR, company will need to hit the same milestones a Seed Funding-ready startup would have to hit. A rubric of these milestones can be found in the [appendix](#).

These are only some of the opportunities. If you would like to explore these more, contact the [BEP Startup Ventures Team](#) to discuss your options.

## Product Sales

A successful commercialization leads to a product or service sold on the market returning royalties and other revenue to the university that can be used for additional research, education, and inventive activity. Alongside the success enjoyed by the Technical Expert and Business Lead, the inventor of the technology receives a 45% royalty on the first \$100,000 of net royalty plus a 40% royalty on all remaining net royalties in excess of \$100,000. Here you can find more information on the [royalty split](#).

Through the life of the license, Tech Transfer monitors compliance with any agreement and continues to manage all intellectual property activities.

HOW WE CAN HELP

# IDEAS, MEET RESOURCES

You can get more in-depth information on startup formation, funding options, and other programs from the following sources:

## Business & Entrepreneur Partnerships (BEP)

[buffalo.edu/partnerships](https://buffalo.edu/partnerships)

Business & Entrepreneur Partnerships is UB's cross functional department committed to helping the university commercialize its innovative research. Commercialization includes both licensing the university's technologies to existing corporations and helping startups born out of the research that happens on campus.

If you are an early stage startup, or if you're thinking about starting a company, you should get in touch with us, so we can help you with company formation and fundraising strategies.

## Innovation Hub

[buffalo.edu/innovate](https://buffalo.edu/innovate)

The Innovation Hub initiative, powered by BEP, is positioned to dramatically accelerate the commercialization of technologies generated at the University at Buffalo, Hauptman-Woodward, Roswell Park Comprehensive Cancer Center, Kaleida Health and the Jacobs Institute to start and grow more technology companies in Buffalo Niagara.

## Blackstone LaunchPad powered by Techstars

[buffalo.edu/entrepreneurship](https://buffalo.edu/entrepreneurship)

Blackstone Launchpad leads the effort to nurture a culture of entrepreneurship across campus. They do this by engaging with faculty, staff, and alumni to create experiential learning opportunities for students centered around early stage entrepreneurship, as well as hosting competitions, workshops, events, and encouraging students to engage in entrepreneurial activities that will benefit them whether they choose to create their own startup or work for an established company after graduation.



“  
**Over the past few years,  
UB’s Business and  
Entrepreneur Partnerships  
team has built an ecosystem  
for entrepreneur support at  
UB that simply did not exist  
when I joined the University  
two decades ago.**”

Mark T. Swihart

*UB Distinguished Professor and Chair  
Chemical and Biological Engineering*

#### UB INCUBATORS | [buffalo.edu/incubators](https://buffalo.edu/incubators)

University at Buffalo incubators offer affordable, flexible spaces, programs and support for technology based startups created by the Innovation Hub partner’s faculty, researchers, students or staff at UB, Roswell Park Comprehensive Cancer Center, Hauptman-Woodward Medical Research Center, the Jacobs Institute or, Kaleida Health.

#### TECH TRANSFER’S EXPRESS LICENSE | [buffalo.edu/tt](https://buffalo.edu/tt)

The Express License gives entrepreneur-friendly terms to startup companies licensing technology from the University at Buffalo. The financial terms of this agreement are covered more in the appendix.

#### EXTERNAL BUSINESS RESOURCES | [buffalo.edu/ihubexperts](https://buffalo.edu/ihubexperts)

Entrepreneurs in Residence (EIR) are experienced, successful entrepreneurs who are employed by UB to help early stage startups with acute issues that they may have. Staff and faculty at UB who are thinking about starting a company or have an early stage company should contact one of our EIRs. Subject Matter Experts (SME) are brought in on an as-needed basis. They have deep expertise in very specific things, such as SBIR Grant Writing, FDA Regulatory Planning or Financial Modelling.

#### I-CORPS SITE PROGRAM | [buffalo.edu/icorps](https://buffalo.edu/icorps)

The Innovation Corps (I-Corps) program is a free NSF initiative that assists researchers to explore their technology’s market fit. The I-Corps Site Program at UB provides resources to individuals and teams in the form of seed funding, entrepreneurial mentoring, curriculum, or other assets needed to transition ideas and technology into the marketplace.

#### ENTREPRENEURSHIP LAW CENTER | [buffalo.edu/startuplaw](https://buffalo.edu/startuplaw)

The Entrepreneurship Law Center will provide legal services to entrepreneurs and startups from UB who are not yet ready or able to engage outside legal counsel. This could include the writing of incorporation documents or founder agreements.

#### BUFFALO INNOVATION SEED FUND | [buffalo.edu/buffalo-seed-fund](https://buffalo.edu/buffalo-seed-fund)

Buffalo Innovation Seed Fund is an early-stage, evergreen venture capital fund dedicated to funding and growing the next generation of outstanding businesses in Buffalo. We are committed to starting and growing more technology companies in Buffalo / Niagara.

#### BUFFALO INNOVATION ACCELERATOR FUND | [buffalo.edu/accelerator-fund](https://buffalo.edu/accelerator-fund)

The Buffalo Innovation Accelerator Fund is a technology commercialization accelerator fund administered by the University at Buffalo and supported by Empire State Development. The fund supports technology development projects that will facilitate the formation of an investible start-up company to further develop and commercialize the technology, or enable an innovation to become more attractive for licensing and/or partnering with established companies.



# INNOVATORS, MEET DETAILS

## Express License Terms

### Upfront Fee

\$1,000 (one thousand dollars) due on license signing.

### Royalty

Royalty rates are based on net sales of Licensed Products or Services (LPS). They vary by the country, the technology area, and the intellectual property (IP) being licensed. Technologies with an easier path to market have a higher royalty rate, as do LPS with stronger IP (i.e. patents, copyright, or material rights). Any LPS will pay a higher royalty rate in a country with patent protection. Your royalty will be determined on a country-by-country basis according to the chart below.

Type of Technology	LPS Using Patent, Copyright, Material Rights	LPS Using Know How Only
Software or copyrighted materials	7.5%	Not Applicable
Material only	5%	Not Applicable
Drug or vaccine	1%	0.5%
Medical device or software requiring 510k approval	3%	1.5%
Medical device or software requiring pre-market approval (PMA)	2%	1%
All others	4%	2%

### Annual Minimum Royalties (AMR)

The Annual Minimum Royalty Payment of \$1,000 (one thousand dollars) is due on or before the first day of each calendar year after the First Commercial Sale. Each Annual Minimum Royalty Payment will be creditable against actual Royalty due for the applicable calendar year.

### Late Payment Terms

In the event of late payments by the Licensee, the Licensee will pay the Foundation, in addition to the payment due, interest using the lesser rate of: a) 12% per annum; or b) the maximum rate allowable under the applicable law.

### Sublicensing Fees

Sublicensing is allowed. You can discuss what this looks like with Tech Transfer.

### Milestone Fees

This applies to drug or vaccine-based startups only.

### Exit Fee

In lieu of taking equity, the Foundation will receive an exit fee (cash payment) representing a percentage of the company value as determined by outside parties during a Liquidity Event (talk to Tech Transfer about the definition) or initial public offering (IPO). It is structured to prevent flipping of the startup (quick sale before additional value added) and to encourage the acquisition of additional outside funding.

### Patent Cost Reimbursements (PCR)

Startups are responsible for both past and future patent costs associated with the license. A deferment of payments is possible under certain terms. You can discuss this with the Tech Transfer Office.



## Buffalo Innovation Accelerator Fund Readiness Rubric

The measures outlined are minimum measures of startup readiness. A startup must meet or exceed the measures outlined to be considered viable.

MEASURES	BUFFALO INNOVATION ACCELERATOR FUND
<b>Founders Goals for Scalability &amp; Growth</b>	N/A
<b>Management Team</b>	N/A, I-Corps should be more than just the PI
<b>Market Fit</b>	I-Corps completed with MKC referral. Large market potential/supported market by sizing analysis. Some evidence of customer pain.
<b>Product / Technology</b>	Analytical predictions supported by lab scale experiments
<b>Intellectual Property</b>	Peer reviewed publications on underlying science. University disclosure filed.
<b>Funding / Resources</b>	If research-derived, ideally strong funding pedigree. Reasonable use of funds.
<b>Customer Development</b>	1st customer thesis developed/documentated
<b>Business Entity &amp; Documents</b>	N/A
<b>Go-To-Market Plan</b>	Contemplated
<b>Financial Model</b>	Rationale for significant cost savings and/or improved customer economic value
<b>Business Model</b>	Completed BMC – not fully validated
<b>Regulatory Plan</b>	Aware of requirements & timeline
<b>University License / Compliance</b>	Conflict of Interest policy compliant, Tech Transfer Office is supportive.
<b>Due Dilligence Prep</b>	N/A
<b>Approval From</b>	ERC, Technology Transfer Office

## Pre-Seed Fund Readiness Rubric

The measures outlined are minimum measures of startup readiness. A startup must meet or exceed the measures outlined to be considered viable.

MEASURES	PRE-SEED
<b>Founders Goals for Scalability &amp; Growth</b>	High growth or quick exit
<b>Management Team</b>	Written plan to bring Management Readiness Score to 30 points. At least one full-time employee, plan for full-time CEO. Active Board of Advisors willing to share expertise & access to networks. Dedicated mentor(s) and IHUB Startup Director believes team can demonstrate POC and complete seed funding.
<b>Market Fit</b>	Strong evidence of customer pain from primary & secondary sources. Detailed market sizing analysis and competitive analysis. Preliminary use case/value creation analysis & pricing. Dedicated mentor(s) and IHUB Startup Director agree fit is compelling.
<b>Product / Technology</b>	Low fidelity prototype or POC completed. Primary technical risks identified and appear to be manageable. Product and technology roadmap contemplated.
<b>Intellectual Property</b>	One or more patents filed
<b>Funding / Resources</b>	Limited funding, but with plan/awareness. Startup will ideally have won one or more SBIR or STTR grants. Reasonable use of funds.
<b>Customer Development</b>	Target and addressable markets established Minimum of 10 target customers identified with plan to engage Validated customer acceptance criteria
<b>Business Entity &amp; Documents</b>	<ul style="list-style-type: none"> <li>• C Corp</li> <li>• Articles of Incorporation</li> <li>• Founders' Agreement</li> <li>• Corporate Bylaws</li> <li>• IP Assignment</li> <li>• NDA</li> </ul>
<b>Go-To-Market Plan</b>	Documented
<b>Financial Model</b>	5 year P&L
<b>Business Model</b>	Completed BMC - evidence of significant supporting customer discovery activity
<b>Regulatory Plan</b>	Starting to formulate a plan - completed FDA boot camp if appropriate
<b>University License / Compliance</b>	Tech Transfer Office license or option in place
<b>Due Dilligence Prep</b>	Polished pitch deck, strong executive summary as prelude to business plan. Evidence of customer support and other investor interest.
<b>Approval From</b>	IHUB Startup Director, Mentor(s)/EIRs (as appropriate), IAC Champion(s) and/or SME



## Buffalo Innovation Seed Fund Readiness Rubric

The measures outlined are minimum measures of startup readiness. A startup must meet or exceed the measures outlined to be considered viable.

MEASURES	SEED
<b>Founders Goals for Scalability &amp; Growth</b>	Potential for high growth
<b>Management Team</b>	Two or more full-time CxO's, Active Board of Directors. IAC believes team has reasonable path to: first customer and/or first institutional investor and/or first strategic partner. Service providers (legal/accounting) in place with sufficient experience to help complete institutional financing.
<b>Market Fit</b>	One or more customers is actively engaged or willing to become engaged in validating key aspect(s) of the product/technology. Comprehensive use case/value creation analysis. Channel to customer contemplated. Detailed competitive analysis completed and validated by others. IP landscape analysis completed.
<b>Product / Technology</b>	High fidelity prototype completed. Initial product and technology roadmap with clear evidence that opportunity can be a company as opposed to a product.
<b>Intellectual Property</b>	Initial PTO office actions seem promising or some 3rd party review of patent landscape suggest promising freedom to operate
<b>Funding / Resources</b>	Ideally, startup can attract matching funds from angel or other investors Reasonable use of funds
<b>Customer Development</b>	One or more customers is actively engaged or willing to become engaged in validating key aspect(s) of the product/technology. Ideally: early sales (as appropriate) and basic CRM implemented.
<b>Business Entity &amp; Documents</b>	<ul style="list-style-type: none"> <li>• C Corp</li> <li>• Articles Of Incorporation</li> <li>• Founders' Agreement</li> <li>• Bylaws</li> <li>• IP Assignment</li> <li>• NDA</li> <li>• Employee Contracts</li> <li>• Shareholder Agreements</li> <li>• Contractor/Consultant Agreements</li> </ul>
<b>Go-To-Market Plan</b>	Comprehensive with line of site to first customer(s), key vendors & mfg assets. Strong track record of meeting planned milestones.
<b>Financial Model</b>	5 year P&L and cash flow
<b>Business Model</b>	All sources of revenue fully contemplated. Channel discovery completed, manufacturing plan developed. Robust national and international strategies clearly articulated.
<b>Regulatory Plan</b>	Plan reviewed and signed off by regulatory SME where appropriate
<b>University License / Compliance</b>	Tech Transfer Office license or option in place, compliant with all license terms.
<b>Due Dilligence Prep</b>	Polished and practiced pitch deck, business plan, strong evidence of customer support, "clean" cap table.
<b>Approval From</b>	IAC Committee, Strong Mentor/EIR support

## Series A Readiness Rubric

The measures outlined are minimum measures of startup readiness. A startup must meet or exceed the measures outlined to be considered viable.

MEASURES	SERIES A
<b>Founders Goals for Scalability &amp; Growth</b>	High growth
<b>Management Team</b>	Minimum Management RL score of 38 points. Fundable CEO. Board of Directors with 2 or more "arm's length" Directors. Quarterly board meetings with minutes.
<b>Market Fit</b>	Demonstrated customer intent to purchase. Detailed customer segmentation analysis, market sizing analysis, competitive/value creation analysis, value chain analysis, comprehensive IP landscape analysis and channel analysis (ideally tested). Demonstrated use case(s)/economic value prop analyses.
<b>Product / Technology</b>	Minimum: high fidelity prototype & 3rd party validation. Detailed product and technology roadmap.
<b>Intellectual Property</b>	Detailed IP strategy
<b>Funding / Resources</b>	Co-founders will ideally have invested their own money. Startup can attract matching funds >=2x Reasonable use of funds.
<b>Customer Development</b>	CRM implemented - numerous customer opportunities in pipeline. Channel to market fully contemplated CAC/LTV?
<b>Business Entity &amp; Documents</b>	<ul style="list-style-type: none"> <li>• C Corp</li> <li>• Articles Of Incorporation</li> <li>• Founders' Agreement</li> <li>• Bylaws</li> <li>• IP Assignment</li> <li>• NDA</li> <li>• Employee Contracts</li> <li>• Shareholder Agreements</li> <li>• Contractor/Consultant Agreements</li> </ul>
<b>Go-To-Market Plan</b>	Comprehensive, Includes manufacturing readiness plan
<b>Financial Model</b>	Detailed 5 year P&L and cash flow. Comprehensive price and cost analysis.
<b>Business Model</b>	Key aspects of business model can all be validated. Agreements with strategic partners are in place.
<b>Regulatory Plan</b>	Comprehensive
<b>University License / Compliance</b>	Fully executed license with commercially reasonable terms. Compliant with all license requirements.
<b>Due Dilligence Prep</b>	Polished pitch deck, business plan. Defendable valuation supported by comparables. VC targets identified. Customer referrals. "Clean" cap table.
<b>Approval From</b>	IAC Committee with SME and mentor/EIR input



## Management Readiness Rubric

This rubric is a measure of how ready your management team is to start a company and raise outside capital. A score of 30 is the minimum needed for institutional seed investment. A score of 38 is the minimum needed for institutional Series A investment.

CATEGORY	5	4	3	2	1	0	SCORE
<b>Management Team</b>	All or Most C-Level Executives		2 or More C-Level Execs, or Full-Time		Few to None Full-Time		
<b>Founder Investment</b>	> \$250K		\$50K – \$250K		< \$50K – \$0		
<b>Prior Entrepreneurial Experience</b>	Several Team Members are Prior Founders		1 Prior Founder or Several Key Contributors		Some or No Experience		
<b>Prior CEO Experience</b>	Yes		No, But P&L or Other C-Level Experience		No Senior Management Experience		
<b>Prior Capital Raised</b>	Institutional Venture Capital		Angel Investment		Other or None		
<b>Experience in Intended Industry</b>	C-Level		Other Management		Limited or None		
<b>Prior Sales Experience</b>	Significant Sales or Business Development Within Industry		Significant Sales or Business Development Outside Industry		Limited or None		
<b>Founding CEO's will step down if needed</b>	Happy, When a Highly Qualified Candidate is Found		Yes, but CEO will work for PI / Chairman		Perfer to Stay and Learn or Never		
<b>Governance</b>	Active Board of Directors, Numerous Compensted Outside Directors		Active Board of Directors, Meetings with Outside Directors		Active Board of Advisors		

## Business Lead Rubric

The following rubric can be used to judge a possible Business Lead.

CATEGORY	5	4	3	2	1	0	SCORE
<b>Prior CEO Experience</b>	Yes		No, But P&L or Other C-Level Experience		Some Experience or No Experience		
<b>Entrepreneurial Experience</b>	As Co-Founder		Early Employee		Limited or None		
<b>Prior Capital Raised</b>	Institutional Venture Capital		Angel Investment		Other or None		
<b>Prior Industry Experience</b>	C-Level		Other Management		Limited or None		
<b>Prior Sales Experience</b>	Significant Sales or Business Development Within Industry		Significant Sales or Business Development Outside Industry		Limited or None		

This is just a guideline. Prior experience as a CEO or an entrepreneur can be a great value, but some of the best Business Leaders for early stage companies can be people who had never considered a career as an entrepreneur before. The most important thing is that they possess the following attributes:

- Confident, hands-on experience in a technical field relevant to the technology
- Ability to be a clear and influential communicator who can champion their ideas to different audiences
- A get things done attitude
- Ability to think critically and creatively while working well in a team environment
- Self-motivated, hard-working individual who thrives in ambiguous environments
- Aspires to lead in an ambitious and rapidly growing company.

They should also know that they may have to let a more seasoned leader take over the company at a certain point, usually after Series A funding has been secured.

As mentioned above, the Business Lead will be responsible for:

- Filing the Incorporation Documents
- Negotiating the License Agreement
- Preparing A Business Plan/Go-To-Market Plan
- Recruiting Additional Talent
- Raising Capital For The Startup

## Business Plan

These are some factors to consider for a business plan:

<b>Technology Innovation and Patent/IP Protection</b>	<p>The following questions must be answered. Tech Transfer can certainly help, but anyone starting a business needs to know the answer for themselves.</p> <p>Is broad patent coverage possible?          Can patent claims be enforced against potential competitors?          Are there background patents owned by others?          Will the company have freedom-to-operate to develop the product?</p>
<b>Development Risk</b>	<p>How much further does the technology need to be developed to bring it to market?          How much time and money will this cost?          What is the regulatory landscape like for the product?</p>
<b>Development Cost vs. Investment Return</b>	<p>How quickly will you be able to pay back investors? (Generally, a venture capital firm outside the biotech space will be looking for a 10X return in 5 years or less.)</p>
<b>Product Strategy</b>	<p>Does the technology lend itself to opportunities for multiple products/platforms?</p>
<b>Financial Potential</b>	<p>What market share can be obtained?          What does that look like in real dollars?          Is that amount worth the effort?</p>

## Helpful Contacts at Business & Entrepreneur Partnerships

### TECH TRANSFER OFFICE

If you have a novel technology disclosure, you can contact someone in the Tech Transfer Office. They will help you through the disclosure process and navigate IP and licensing strategies.

#### Jeffrey Dunbar, MBA

Director, Technology Transfer  
 (716) 645-8134  
[dunbarj@buffalo.edu](mailto:dunbarj@buffalo.edu)

#### Timothy Dee, MBA, DC

Associate Director, IP;  
 Commercialization Manager, Technology Transfer  
 (716) 645-8139  
[tpdee@buffalo.edu](mailto:tpdee@buffalo.edu)

#### Michael Fowler, PhD

Commercialization Manager, Technology Transfer  
 (716) 645-8136  
[mlfowler@buffalo.edu](mailto:mlfowler@buffalo.edu)

### STARTUPS VENTURES TEAM

If you have even thought about starting a company around one of your discoveries, you can contact the Startups Team. They can take you through the ins and outs of creating, managing, and growing a tech startup.

#### Martin Casstevens

Business Formation & Commercialization Manager  
 (716) 645-8133  
[mkc@buffalo.edu](mailto:mkc@buffalo.edu)

#### Sara Goodman, MELP

Program Manager  
 (716) 645-3515  
[saragood@buffalo.edu](mailto:saragood@buffalo.edu)

#### Rick Gardner

Director, Startup Ventures  
 (716) 645-8144  
[rg62@buffalo.edu](mailto:rg62@buffalo.edu)

#### Richard Peterson

Associate Director, Investor and  
 Entrepreneurial Engagement  
 (716) 645-5242  
[peterso3@buffalo.edu](mailto:peterso3@buffalo.edu)

### INCUBATOR TEAM

If you need information about one of UB's incubators, feel free to reach out to one of the team members listed below. They can help you figure out if the incubator is a good fit for your company.

#### Kimberly Kohl, MBA

Senior Finance & Operations Manager  
 UB Incubator @ Baird  
 (716) 645-8135  
[krohring@buffalo.edu](mailto:krohring@buffalo.edu)

#### Kate Helfer

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 UB Incubator @ CBLs  
 (716) 881-8938  
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#### Rachel Boruszewski

Finance & Operations Assistant  
 UB Incubator @ Baird  
 (716) 645-1395  
[raborusz@buffalo.edu](mailto:raborusz@buffalo.edu)

#### Smitha James

Associate Director; CBLs; CAT;  
 Wet Lab Space & Technology/Equipment Access  
 (716) 881-8940  
[srjames@buffalo.edu](mailto:srjames@buffalo.edu)



*The Incubator at CBLs connects faculty and businesses to life sciences resources, experts, equipment, advanced computing solutions and funding that encourages translational research and fosters a path to commercialization success.*

CBLs facilities are strategic assets for life sciences innovation and technology-based scientific discovery, providing services to facilitate faculty-led research including software development, data analytics, and access to high performance computing and cloud infrastructure.

- Center of Excellence in Bioinformatics and Life Sciences (CBLs)
- Buffalo Institute for Genomics and Data Analytics (BIG)
- Center for Advanced Technology in Big Data & Health Sciences (CAT)
- Center for Computational Research (CCR)
- Biorepository

Partner collaboration has a proven track record of accelerating growth by connecting companies with bioinformatics and data resources, including technical expertise, talent and high-tech genomics and proteomics facilities.

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