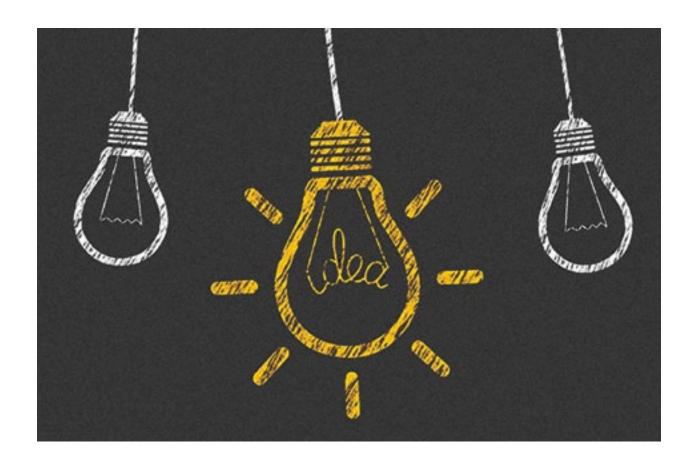
Western University: **Growing The Ontario Economy**











Contents

Growing the Ontario Economy: By the Numbers	3
Supporting Commercialization, Direct-to-Market Sales and Entrepreneurship	4
WORLDiscoveries®	5
WORLDiscoveries® Collaborations: Success Stories	6
WORLDiscoveries Asia®	7
Western Entrepreneurship	7
Rising Stars: Inspiring young entrepreneurs who will define the future	9
Frailblazers: Lifelong alumni entrepreneurs who model success for all Canadians	10
Creating a Culture of Innovation	11
Working with Industry	13
Intellectual Property Policies and Procedures	14

Growing The Ontario Economy

Western University (Western), with its three affiliated university colleges (Brescia, Huron, and King's), offers a diverse and unique learning experience.

As a leading full-service, research-intensive, residential university, Western is known for its commitment to the best student experience, discovery research, innovation and transforming lives through knowledge mobilization across a broad array of disciplines.

Western's mandate - derived from the University of Western Ontario Act and historical developments over more than 130 years - is to provide the highest quality learning environment to help students, staff and faculty achieve their full potential which, in turn, will drive Ontario's competitiveness and prosperity and Ontario's contribution to our global society.

By the Numbers



Annual economic impact (Southwestern Ontario):
Approximately
\$3.6 billion



Employment rates six months after graduation (2019): **89.7%**



Employment rates two years after graduation (2019): **94.6%**



Annual licensing revenue (FY2019): \$5.8 million - among top 5 in Canada over the last decade



Cumulative royalty revenue (since 2009): \$50.2 million



Active patent applications: **748**



Active licenses: 188 increased 60% in last 5 years; moved from 13th to top 10 among Association of University Technology Managers (AUTM)



Active spin-off companies: **42**



License agreements: **37** (FY2019) – record number; tripled in last 5 years; moved from 12th to 7th in AUTM compared to 2014



Disclosures: 63



Disclosure acceptance rate: more than **45%**



Direct to market sales: **318** (since 2015)





Supporting Commercialization, Direct-to-Market Sales and Entrepreneurship

Western University is on the cutting edge of technology transfer and commercialization, the value-creation process of transferring discovery and research to marketable services or products. Beyond just filing patents, our teams seek to mobilize knowledge through licensing technologies, supporting new startups, providing education and engagement programs, and pursuing business development activities provincially, nationally and internationally.

The role of technology transfer and industry liaison offices has changed dramatically in recent decades. Once known as the patent office, focused solely on managing and licensing patents to established industry, our offices have expanded to offer simplified licenses for nascent startups and provide gap funding to foster discovery that leads to commercialization. We have moved beyond material inventions to include innovations like copyright, software,

and trademarks while offering training and clinical programs. At the same time, we are cultivating a culture of change and participation while expanding our global network.

Entrepreneurship is a powerful force that drives Ontario innovation, productivity, job creation and economic growth. Recently, we mobilized the extensive entrepreneurial activities taking place on our campus into a single ecosystem open to any member of the university community. Small- and medium-sized businesses and new entrepreneurs are critical to Canada's competitiveness. Through the Western Entrepreneurship ecosystem, we will train the next generation of business leaders, keep talent in Ontario and make a significant impact on Canada's innovation gap—building Canada's expertise in the business community and supporting economic growth.







WORLDiscoveries® (WD) is the business development arm of London's extensive research network and the bridge between local invention and global industry.

A partnership between Western, Robarts Research Institute and Lawson Health Research Institute, WD draws upon a mix of industry connections, sector-specific market knowledge and business development expertise, to help researchers and local inventors commercialize their discoveries through licensing, direct-to-market sales and new company spin-offs.

WD's vision is to find a mutually beneficial market-focused partnership for every innovation in its portfolio. WD strives to accomplish this by encouraging and promoting a culture of innovation at its partner institutions and by identifying and facilitating the protection, development and timely transfer of research products and services for the use and benefit of the partner institutions, their members and society.

WD follows a six-step process in turning member innovations into profitable consumer-ready products. Creators are involved in every step of the commercialization process and receive annual summaries and financial statements related to the commercialization progress made over the past year.

Spin-off companies working with WD receive support and mentoring for approximately 24 months after incorporation, tailored to the specific needs of the company.

In 2015, WD launched its proprietary innovative e-commerce and impact-tracking portal InnoVerify™ − a secure, streamlined marketplace that expedites the delivery and access of digital innovation to the public. The InnoVerify platform provides our academics and clients with direct access to a growing body of digital creative works including surveys, software, toolkits and membership access to restricted content. Innovators are now able to easily sell their digital products or restricted membership access online, add products for sale on their website using the InnoVerify codes, provide registered access to demos and track interest through an entirely branded process from start to finish.

Also of note, WD maintains a portfolio where 60 to 70% of its creations and technologies are licensed or optioned (compared to 40% five years ago). This drives a vision to move technologies off the shelf, and to make necessary business decisions on technologies that have been shown to market and haven't had traction, allowing more time to focus on high priority technologies.



WORLDiscoveries® Collaborations: Success Stories



Established in 1998 out of Western's Faculty of Engineering, **EK3** (now Cineplex Digital Networks) produces and manages narrowcasting and digital signage. Cineplex Inc. purchased EK3 in 2013 for \$78 million.



DYNA6.1 software developed by Civil and Environmental Engineering Professor **Hesham El Naggar** is used worldwide for the design of machine foundations. DYNA6.1 is double precision for more accuracy and more stability of numerical processing and can analyze the effects of single or multiple machines.



Qingping Feng, Professor of Physiology, Pharmacology and Medicine, has discovered that a cellular protein, annexin A5, holds promising properties for the treatment of sepsis, which kills millions every year. Yabao Pharmaceutical Group, a Chinese firm, has signed a license agreement to develop a drug treatment for the life-threatening condition using Feng's research.



Aaron Fenster, Schulich Medicine & Dentistry professor and Robarts Research Institute scientist, has been a prodigious inventor during his career, securing 100+ patents covering a range of imaging related technologies. The prostate biopsy and therapy related technologies have been licensed to Eigen Inc. for nearly 10 years, finding commercial application in their leading MRI/TRUS-Fusion biopsy platform, Artemis™.



In 2018, The U.S. Food and Drug Administration approved the use of Azedra, a new compound developed by Progenics Pharmaceuticals Inc., for patients with rare adrenal gland tumours. Chemistry professor emeritus **Duncan Hunter** developed the compound with his Western lab team and applied for the patent 30 years ago.



Schulich School of Medicine & Dentistry professor **Ting-Yim Lee's** CT perfusion software has transformed the way physicians assess and treat stroke patients.

Through a partnership with GE Healthcare, the software has been installed in over 8,000 medical imaging centres.



The brainchild of **Ruth Martin**, Associate Dean in Western's Faculty of Health Sciences, the Abilex device, produced and sold by Trudell Medical International, helps those who have lost their ability to swallow and speak, to exercise the muscles and rebuild the muscles in the jaw, mouth, and tongue.



Desired Sensation Level software developed by **Susan Scollie**, Director of Western's National Centre for Audiology, helps clinicians around the world provide millions of infants and children with the gift of hearing thanks to individually customized hearing aids created with the software.



W RLDISCOVERIES* | ASIA

WORLDiscoveries® Asia (WD Asia) has a mission to build strategic partnerships in the field of intellectual property (IP), commercialization and research and development collaboration in Asia. Up to 2016, WD Asia, with offices in Hong Kong and Nanjing was instrumental in the successful closing of 12 material deals in Asia, resulting in over \$3 million CAD in revenue generated through IP licensing and research sponsorship.

In 2017, WD Asia received funding support from the former Ontario Ministry of Research, Innovation and Science. The purpose of the program was to leverage WD Asia as a service to Ontario institutes and organizations keen to explore the Asian markets for technology-based partnership opportunities.

WD Asia delivered outstanding results under the funding initiative - formally representing 24 new Ontario organizations and 91 new technologies (surpassing its original goals of 20 and 70 respectively) and successfully brokered three new Ontario-China deals, valued at more than \$7 million USD.

WD Asia is now a university-backed professional services provider dedicated to promoting and building a variety of partnerships for Ontario's research community and high tech industry in Asia. The partnerships remain centered on IP, but include licensing deals, equity financing, research sponsorship, manufacturing and distribution.

Based on the success in Ontario and China, WD Asia recently received additional federal funding to explore opportunities in other Asian markets outside of China.





Through a collaborative, campus-wide effort, we are developing the Western Entrepreneurship ecosystem – providing students, faculty, staff and alumni with a transformational entrepreneurial experience.

At Western, we have erased the notion that entrepreneurial mindsets cannot be learned. Through a combination of teaching, research, programming, collaboration and support, Western Entrepreneurship focuses not on products, but on people, and is dedicated to embedding the skills necessary for our members to think like an entrepreneur for their entire life.

Members of the campus community will have the opportunity to harness the resources and expertise from across the university to articulate a vision; develop an idea; advance and test a prototype; receive guidance and advice from Western faculty and staff; and access the expertise and connections of the Canadian entrepreneurial and investment communities.

Western Entrepreneurship Building

Plans are underway to construct a Western Entrepreneurship Building on campus, a visible reminder of the university's commitment to the success of campus and community entrepreneurs.

Propel Entrepreneurship Centre

Propel was launched in 2014 as part of the Campus-Linked Accelerator program, an initiative of the Ontario Government and administered through the Ontario Centres of Excellence. Propel is partnered locally with LEAP Junction at Fanshawe College and provides coworking space, mentorship, seed funding, events and acts as an advocate for local startups in the community.

Propel Summer Incubator

The Propel Summer Incubator (PSI) is a sales-focused startup incubator for promising Western entrepreneurs. Since 2015, PSI has graduated 60 startups and has provided close to \$500,000 in seed funding.

Western Accelerator

In partnership with Libro and StarTech.com, the Western Accelerator provides students, faculty and recent alumni with an intense, rapid and immersive education in entrepreneurship. Its goal is to accelerate the lifecycle of high-potential ventures and compress a year's worth of learning into four months. With three cohorts per year, the Western Accelerator accepts eight high potential startup companies per term, providing each with \$12,000 in funding in addition to tailored mentoring and training.





Pierre L. Morrissette Institute for Entrepreneurship

Recognized globally as a premiere resource for entrepreneurship research and education, the Pierre L. Morrissette Institute for Entrepreneurship at Western's Ivey Business School helps students develop the skills to launch new businesses, supports existing entrepreneurs as they take their organizations to the next level and is world-renowned for high growth and entrepreneurial learning research.

Certificate in Entrepreneurship

Created to engage students in the knowledge and practice of entrepreneurship, the Ivey Business School's Certificate in Entrepreneurship aims to enhance their ability to achieve their professional, economic and personal dreams. Since 2005, 371 HBA students and 260 MBA students have completed the Certificate in Entrepreneurship.

Entrepreneurship Research Centre

Research is a key element in providing entrepreneurs with the skills they need to succeed. The Ivey Business School's Entrepreneurship Research Centre serves as a forum for faculty and doctoral candidates to collaborate on research ideas, develop teaching cases and advance manuscripts for publication in leading peer-reviewed journals.

Business Families Centre

Business families face unique and complex challenges. Ivey's Business Families Centre helps family-controlled businesses remain entrepreneurial, a key factor in ensuring long-term viability.

New Venture Program

Ivey's New Venture program takes entrepreneurs on a journey through the entrepreneurial process – from refining an idea, to developing a business plan and pitching to an external review panel. The team-based approach provides students the chance to apply their business knowledge in the development of a commercial enterprise. More than 2,500 MBA and HBA students have completed the New Venture program since its inception in 2005.

OuantumShift™

A rigorous five-day developmental experience, QuantumShift™ annually challenges up to 50 of Canada's most promising entrepreneurs (nominated through KPMG Enterprise) to improve their leadership style, inspire their business partners and maximize their growth opportunities. To date there are 650 Quantum Shift Fellows.

FamilyShift™

Managing a family business is unique, and complex. In partnership with KPMG Enterprise, this program focuses on strategies and tactics for addressing leadership, growth and family business ownership issues. During the week-long program, participants are taken through a deliberate series of Ivey case studies, break-out groups, interactions with guest speakers and experts, and coaching sessions, all designed to address the unique challenges faced by principals of family businesses.

Business Development Bank of Canada's (BDC) Growth Driver Program

BDC's Growth Driver Program, taught exclusively by Ivey Entrepreneurship faculty, is designed for leaders of mid-sized businesses with growth potential and ambition. Ivey Entrepreneurship's experts have now worked with over 100 business leaders to take their businesses to the next stage of success.

Entrepreneur 1.0 Program

A partnership between TechAlliance (the regional innovation centre for London and area) and the Pierre L. Morrissette Institute for Entrepreneurship at Ivey, Entrepreneur 1.0 is an annual 10-week course enabling participants to acquire the practical tools and knowledge to manage business challenges and develop the support network every entrepreneur needs. To date, 400 local entrepreneurs have graduated from the program.

Extracurricular Programming

Ivey provides students with pitching, networking and learning experiences through extracurricular programming that includes: business plan competitions, entrepreneurship bootcamps, internship programs, workshops and mentorship and networking opportunities.





Rising Stars: Inspiring young entrepreneurs who will define the future



Boho Bars

Boho Bars are energy bars that are gluten-free, dairy-free and made with plant protein and clean ingredients. The company was founded by Nicole Haney, a graduate of the Western Accelerator / PSI 2018 Summer

Program. Since 2018, Nicole expanded her startup from a handful of retailers in London, Ont. to over 300 retailers across Canada including Farmboy, Sobeys and Well.ca. These partnerships have increased Boho Bars revenue by 200%, making it a quarter million dollar company.



Booch Organic Kombucha

Booch handcrafts authentically brewed kombucha tea in small batches, using the best quality local, organic, and fairly-traded ingredients. Founded four years ago by Western Health Sciences

graduate Shannon Kamins, today Booch has products in more than 400 retail locations across Canada.



EvelynnBNS

EvelynnBNS is a Canadian-made clothing line that prides itself on being a social enterprise that gives back to children. Founded by Nicole Snobelen, a graduate of the Western Accelerator and PSI 2018,

EvelynnBNS provides a portion of sales to cover the cost of materials for The Abby Fund, where volunteers meet with children in the hospital to design their dream dress or superhero cape, which is then brought to life.



LoanConnect

A PSI 2016 graduate, Adam Rice founded LoanConnect, Canada's premier online loan search platform that aggregates lenders across the country into one easy-to-use site for borrowers. In 2018, the company

was accepted into the Holt Fintech Al Accelerator and continues to grow from its London, Ont.-based office with over 10 employees and has plans to double its staff size as they build a newer and faster platform.



Miistro.com

Miistro.com is an online platform connecting music students to teachers in minutes founded by Zach Havens, a graduate of the Western Accelerator / PSI Summer Program. Growing every month

in sales, Zach partnered with a development company (Eighty8 Ventures) to design and create a custom web app that would improve the customer experience at Miistro.com, which has now expanded beyond London, Ont. to serve Kitchener, Waterloo, Toronto and Ottawa.



Orgashell

Orgashell is a travel accessories company focused on creating organizational solutions for the modern traveler, founded by Gamal Assaad, a graduate of Western Engineering, a PSI 2018

graduate and Seed Your Startup 2018 pitch competition participant. A successful Kickstarter campaign raised 110% of Orgashell's goal in December 2018 and the company is set to launch a new product next year.



STMNT

STMNT allows consumers to rent clothes from local boutiques, filling a gap for those need-it-now, not-in-my-closet, one-time-wear clothing needs. Beyond making a statement on your back, the company also looks to make

one about the environmental and social impact created worldwide by the fashion industry. Founded two years ago by sisters and Western graduates Jenessa and Madison Olson, today STMNT is Canada's number one destination for digital clothing rentals.



Sugar and Co.

Sugar and Co. is a scientifically sustainable beauty brand focused on body sugaring products and education. The products were developed in labs at Western and the company was founded by Western

Accelerator alumni Sara Pauli, Samantha Pauli and Joanne Curiel-Tejeda. Sugar and Co. has continued to expand in London, Ont. serving more clients through their permeant store location and has their products in over 20 beauty schools across North America.



Trailblazers: Lifelong alumni entrepreneurs who model success for all Canadians



Kijiji

Kijiji founder Janet Bannister, HBA'92, connects people – from buyers and sellers online, to entrepreneurs looking for financial backers. Kijiji quickly became one of the most visited sites in Canada,

tripling revenue in one year and launching the site in the U.S., Belgium, Switzerland and Austria. In Canada alone, 2 million ads are posted weekly on Kijiji. As a venture capitalist, Janet continues to spot potential in people and ideas, helping to launch and grow Canadian businesses.



Voices.com

Co-founded by Stephanie Ciccarelli, BMusA'06, and her husband David in 2005 and headquartered in London, Ont., Voices.com is the largest global online marketplace for audio and voiceover products with nearly half a

million business clients and voice actors in 139 countries and a staff of more than 100. In 2017, the company received an \$18-million investment from Morgan Stanley Expansion Capital, one of the largest investments in the history of London's tech industry.



Wealthsimple

Wealthsimple is one of the largest online investment managers in Canada with more than 175,000 customers and \$5 billion in assets. The financial technology company offers an alternative to traditional

ways of managing investments and caters to consumers comfortable with online banking and investing. Founder and CEO Michael Katchen, HBA'09, credits a business competition he won at Ivey for setting off a chain of events that launched his career.



Sleep Country

Sleep Country is Canada's leading mattress and bedding retailer operating under three retail banners: Sleep Country Canada, Dormez-vous? and Endy. Co-Founded in 1994 by

Christine Magee, HBA'82, the chain has grown to over 275 stores and 17 distribution centres across Canada. Sleep Country also works closely with Canadian charities to donate new and gently



Pelmorex Corp.

In 1989, Pierre L. Morrissette, MBA'72, LLD'10, founded Pelmorex Corp., a leader in operating multiplatform TV, web and mobile services in weather-related information under the brands The Weather Network,

MétéoMédia, eltiempo.es and Clima, reaching over 55 million users internationally. In 2016, the company expanded with Pelmorex Data Solutions and a year later acquired Addictive Mobility, a Toronto-based data management and media buying platform.



GoodLife Fitness

Since 1979, GoodLife Fitness has been helping to transform the health and wellness of Canadians every day. Founder David Patchell-Evans, BA'77, LLD'12, discovered the healing power of exercise while recovering from a

debilitating motorcycle accident as student. With more than 1.5 million members and 405 clubs across Canada, GoodLlfe is the largest fitness company in Canada and the fourth largest fitness club chain in the world.



Sarah Richardson Design Inc.

For more than 15 years, Sarah Richardson Design Inc. has been transforming commercial and residential spaces. Her growing line of signature products includes custom furniture, a fabric collection

for Kravet, and two partnerships with international brands. This thriving design business was founded by entrepreneur, designer, writer, producer, and TV personality Sarah Richardson, BA'93.



StarTech.com

After meeting at Western, Paul J. Seed, BA'84 and Ken Kalopsis, BA'85, founded StarTech.com in 1985. Originally known as StarTech Computer Accessories, the company had humble beginnings, manufacturing products in the

basement of a house. Today, StarTech.com is a global leader in hard-to-find connectivity accessories for IT professionals and business users that boasts more than \$300 million in annual revenue.



Creating a Culture of Innovation

Western strives for a culture where innovation and creativity is encouraged among all members of our institution so they feel empowered to be agents of change. Innovation introduces new ideas and approaches to discovery, research, and invention. We believe trying new things is a worthwhile endeavour and that static roles, standardized processes and risk aversion can stifle innovative thinking. In Western's innovation culture, ongoing learning and skills development are core aspects of the institutional experience. We have identified a new way of doing things, creating a number of improved partnerships, programs and platforms that expand Western's impact and ability to adapt to change and cultivate our competencies in commercialization and entrepreneurship.

Patent Search Workshops

One of the most important steps in bringing research and innovation to the market is effectively identifying patent novelty. Offered multiple times throughout the year and open to all members of the campus community, participants in these workshops receive hands-on training from technology transfer professionals on how to search patent databases, augment their knowledge of the patent literature, increase novelty of research, and find potential industry or academic partners working in their field of research.

Proteus Innovation Competition

London, Ont. has hosted the Proteus Innovation Competition since 2015, an intense four-month competition challenging individuals to create a viable commercialization strategy for one of three promising technologies, in hopes of winning a cash prize. The competition arose as a community partnership involving Worldiscoveries®, TechAlliance, Propel, LEAP Junction at Fanshawe College and Western Research Parks.

Proteus allows contestants to hone their business skills, work with a variety of experienced advisors, and accelerate the commercialization process on discoveries coming out of Ontario's institutions. Last year, Western partnered with McMaster University and the University of Windsor to include one technology from each university. Winning teams have gone on to form companies, receive investment and further develop and sell products.

World's Challenge Challenge

Western has held the World's Challenge Challenge for the past six years. More than 30 student teams compete annually by presenting unique ideas that address a global issue to a panel of academic and community leaders. The competition helps students develop their academic, oral presentation, and entrepreneurial skills. In 2017, Western held the first World's Challenge Challenge Global Final, pooling the talents and creativity of bright students from across Canada and around the world. The mission of the competition is to bring together students from a wide range of institutions, cultures and continents to form a strong international network and create even greater potential solutions to significant global issues.

Western Research Parks

For nearly three decades, Western Research Parks (WRP) has served as a strong link between academics and commerce, and a key contributor to the movement of an idea or a discovery from concept to the marketplace. The original Western Discovery Park, located adjacent to campus, is home to over 200,000 square feet of office, lab and industrial grade space, including the Stiller Centre for Technology Commercialization, one of Canada's most successful biotechnology incubators.

Western has expanded its Park program and contributed to the opening of two more Parks, a 10-hectare site alongside Highway 401 called the Western Advanced Manufacturing Park, and the Western-Sarnia-Lambton Research Park, 30 hectares located south of Highway 402. WRP supports and houses local startups and spinoffs from the university including LifeLike Biotissue and PolyAnalytik.

Routinely ranked among the top Parks globally, WRP was recognized as the Outstanding Research Park in the world in 2016 by the 625-member Association of University Research Parks.

MSK Innovation Competition

The MSK Innovation Competition is a collaborative venture between Western's Bone and Joint Institute and the Pierre L. Morrissette Institute for Entrepreneurship designed to encourage and cultivate entrepreneurial skills among musculoskeletal health researchers in London, Ont.

A new implant that can more effectively treat upper neck fractures by London-based startup A-Line Orthopaedics won the \$30,000 grand prize at the inaugural event in 2019. The product, Edge Upper Cervical System, has passed a number of important milestones, and the team is currently preparing a regulatory road map with the U.S. Food and Drug Administration and Health Canada.

Western was the second Ontario organization to join IN-PART, an online, global matchmaking platform that connects universities and companies to drive innovation with over 13,500 research and development experts, 4500 companies, and 98 research organizations. Through IN-PART, Western is able to identify potential commercialization and research development partners creating opportunities for licensing or gain valuable feedback on innovations.



Graduate Student Innovation Scholars Program

Western's Graduate Student Innovation Scholars (GSIS) program equips grad students with improved career skills both in and outside of academia. Awarded to students who have exhibited the creation and development of new ideas, personal entrepreneurship, promising career growth and a solid work ethic, GSIS offers a financial award and a series of lectures on topics ranging from intellectual property and patents to technology assessment and entrepreneurship. Participants have gone on to roles in academia, industry, entrepreneurship and government.

Medical Innovation Fellowships

The first-of-its-kind in Canada, the Western Medical Innovation Fellowship (MIF) was established in partnership with the University of Minnesota Innovation Fellows program in 2015. Highly qualified individuals are recruited from PhD graduates, medical students and residents.

Since 2015, MIF alumni have founded eight technology companies; nine patent applications have been filed; and over \$1 million in funding has been awarded to date for their startup companies. Alumni have gone on to become co-founders in companies, medical doctors, and leaders in government agencies and industry.

Western Innovation Fund

The Western Innovation Fund (WIF) awards fund projects up to \$100,000 that will advance innovative research results towards application and commercialization. Since its inception, WIF has awarded nearly \$5 million in funding for over 40 different projects. Over 40% of projects awarded go on to receive additional funding through grants, further investment or commercialization revenue. Overall, WIF has seen a 166% return across all projects and a 401% return on those projects that received follow-up funding.

Innovation Ambassador Program

Western's Innovation Ambassadors are self-identified researchers from across campus who have experience and expertise in entrepreneurship, commercialization or knowledge mobilization. Their mission is to connect great ideas from their respective areas into Western's Entrepreneurship ecosystem. Western currently has over 50 Ambassadors representing every faculty across campus who are involved in organizing biannual interdisciplinary faculty networking events and annual theme-focused cross campus conferences.

Vanguard Awards

Since 2015, this annual celebratory event recognizes local researchers, who, through partnership with WORLDiscoveries®, have achieved various market-readiness milestones. First time disclosers receive a customized letter and a pin in recognition of taking the first step in the commercialization journey. Award categories include Innovator of the Year, License Agreement Awards, Patent Issued Awards and Direct-to-Market Awards.



"WORLDiscoveries and the GSIS program revealed to me a new side of interdisciplinary innovation and commercialization at Western. In my field, mobilizing ideas into the commercial, business or industrial sector can be daunting. The innovation ambassador program helps by creating a campus-wide

support network and connecting like-minded individuals in a welcoming environment to share ideas, ask questions and form collaborations."

Tyler S. Beveridge, Innovation Ambassador; Assistant Professor, Department of Anatomy and Cell Biology, Schulich School of Medicine & Dentistry; former Graduate Student Innovation Scholar.



"The GSIS program is one of the most important entrepreneurship programs for graduate students at Western, enabling them to develop themselves as exceptional leaders and entrepreneurs. One of the most important aspects of this program is the focus on IP. After graduating from Western, I co-founded a

healthcare startup and I use the skills I developed during the program to evaluate and create new IP."

Abdul Wahab Kabani, Western PhD graduate; former Graduate Student Innovation Scholar and Medical Innovation Fellow; CTO and co-founder of his own spinoff company. MATR



"The MIF program is an innovation breeding ground and a key component to grow and flourish our entrepreneurship ecosystem. The program was the start of my entrepreneurship education and the opportunities that have arisen since have been transformative to my life and career path."

Asha Parekh, Western PhD graduate, Medical Innovation Fellow, and co-founder and CEO of Front Line Medical



"The Proteus competition was an extremely positive experience that allowed me to combine my research expertise in medical innovation with business training from mentors at WORLDiscoveries, to make a compelling pitch for a real-world surgical technology. Proteus has served as a springboard for me

to connect with the broader entrepreneurship community at Western, and develop skills to become a strong candidate for my current role as a Medical Innovation Fellow."

Adam Paish, Western PhD graduate; Proteus participant and winner; former Graduate Student Innovation Scholar; current Medical Innovation Fellow





Working with Industry

At Western, partnering with industry helps in the creation of an innovation culture for faculty and students across campus, supports Canadian companies and ensures Western stays at the leading edge of research globally.

ADEISS

The Additive Design in Surgical Solutions – or ADEISS – Centre was formed last year as a partnership between British engineering firm Renishaw and Western. Located in Western's Discovery Park, the development and commercialization centre focuses on the creation of medical instruments and surgical solutions via additive manufacturing – known as 3D printing.

Boundary Layer Wind Tunnel Laboratory

For more than 50 years, Western's first-of-its-kind Boundary Layer Wind Tunnel Laboratory (BLWTL) has pioneered studies of wind effects on buildings and structures, defining the field of wind engineering and testing structures such as the World Trade Center, CN Tower and Confederation Bridge. Codes of Practice used throughout the world for the design of buildings, bridges and special structures continue to be based upon the work performed by BLWTL researchers and founder Alan Davenport.

Fraunhofer Project Centre for Composites Research

The Fraunhofer Project Centre for Composites Research (FPC) is a joint venture between Western and the Fraunhofer Institute of Chemical Technology in Pfinztal, Germany. The FPC develops, tests, validates and characterizes new lightweight materials and advanced manufacturing processes at industrial scale. By combining Fraunhofer's latest global technologies and Western's strengths in materials engineering, the FPC proactively addresses the needs of its industry partners.

Surface Science Western

Surface Science Western (SSW) is a consulting and research laboratory specializing in the analysis and characterization of surfaces and materials. The high quality, reliable analytical services provided to our clients have facilitated development and production, decreased costly returns, innovated processes and increased profitability. Since its inception in 1981, SSW has successfully served a number of high profile clients across a range of industry sectors including: energy, mineral resources, health services, automotive, aerospace, environmental, electronics and plastics.

University Machine Services

University Machine Services (UMS) is an ancillary service located in the Thompson Engineering Building at Western. UMS's goal is to provide assistance to the university and to industry through the design and manufacture of specialized components and equipment. Services offered include: general machining and manufacturing; CNC machining; 3D modelling and computer-aided design (CAD); fused deposition modelling; prototype development manufacturing; welding fabrication; and sheet metal.

Wind Engineering, Energy and Environment Research Institute

Western's Wind Engineering, Energy and Environment Research Institute (WindEEE) was established in 2011 as a clear recognition of novel opportunities in wind research at the university related to the emergence of the world's first three-dimensional testing chamber, the WindEEE Dome, and the potential to promote innovative research and extensive collaborations nationally and internationally.





Intellectual Property Policies and Procedures

Intellectual property is a key component of commercialization and entrepreneurship activities and is critical to the success of businesses in today's global marketplace.

A clearly defined institutional intellectual property policy protects researchers, drives discovery and encourages further research in various fields, while at the same time supporting the success of the local, regional and federal economies. WORLDiscoveries® oversees Western University's intellectual property policy, which is built on the principle that intellectual property is creator-owned.

Western's Intellectual Property Policy has the following objectives:

- to encourage and provide an incentive for creativity and innovation among university members;
- to facilitate the translation of knowledge for the greatest possible public benefit, including by commercialization through development of Intellectual Property into commercial products or processes;
- to provide the rights and obligations of the university and its members in protecting and exploiting any newly created or discovered Intellectual Property; and
- to ensure the university meets its obligations to funding sponsors.

Western's Intellectual Property Policy applies to all intellectual property created by a member (student, faculty, librarian, archivist or staff) in the course of employment, academic studies, or using university resources.

- Intellectual property is creator-owned for students, faculty, librarians, archivists and postdoctoral fellows.
 Intellectual property is university-owned for staff.
- Intellectual property developed by a member is disclosed to the university through WORLDiscoveries.
- Creators (excluding staff) can choose to assign to the university or commercialize on their own.
- If assigned to the institution, net revenue is shared between the university and creators.

Collective Agreements: IP Terms

Most, if not all, post-secondary institutions, including Western, have institutional policies related to IP but at Western, such items are also included in various collective agreements, including those with faculty.

Any changes to IP policies/guidelines/regulations at an institutional level need to also be considered by the various bargaining units.

