The McMaster Industry Liaison Office (MILO) supports the research activities of McMaster University and its affiliated institutions, Hamilton Health Sciences and St. Joseph’s Healthcare, by facilitating collaborative research with industry partners and disseminating these results through commercialization.

MILO staff work with the research community to:

- Advance collaborations and obtain funding
- Evaluate and protect intellectual property
- Market and license technologies
- Commercialize research and form startup companies
Reconnecting, Reigniting, and Reinvesting

McMaster University has been at the forefront supporting efforts to help combat the COVID-19 pandemic over the past few years. As the effects of the pandemic wear off and we slowly return to our normal, we would like to outline some of the great work that came out of McMaster over the past fiscal year. Everyday across our campus, our faculty and students are making a difference maximizing our benefit to society and changing lives around the world.

As part of our initiative to support research and commercialization, MILO staff helped launch the McMaster Seed Fund (MSF) this September. MSF is an early-stage investment vehicle designed to foster innovative startup companies emerging from McMaster research with a potential for significant economic and/or societal impact in the Hamilton region and beyond.

The McMaster Industry Liaison Office (MILO) also supports the commercialization efforts of many researchers by assisting with applications for grants and funding opportunities. This past year, MILO staff helped secure more than $2M in proof-of-principle funding for researchers with $1.1M from the Idea to Innovation (I2I) program and $1.2M in CIHR grants.

McMaster University continues to rank as one of Canada’s most research-intensive universities. These research efforts and the impacts they have extend well beyond our campus grounds. McMaster faculty and students are helping transform innovative ideas into solutions that grow our economy and improve the lives of those around us. Our office is excited to continue providing support for researchers and promoting partnerships and collaborations with other institutions and government bodies to help bring our innovative solutions to the world.
This year’s Showcase will be a chance to reconnect in person and bring our community together after being physically apart for so long, and promises to be bigger and better than ever! This year’s Innovation Showcase will be bigger and better than ever! As always, our goal is to highlight cutting edge research, commercialization successes and ones to watch at McMaster; and bring together business, academia and the public to connect and grow the ecosystem.

In addition to our faculty and students showcasing their innovative research through talks and a poster competition, investors, entrepreneurs and industry representatives will share their expertise on best practices for moving technologies to the market.

We are also looking forward to the opportunity to celebrating our patent awardees and announcing the VPR Innovator and Lifetime Innovator nominees and winners.
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App Development @ Mac

Mobile applications are emerging as both an important part of the research process and, in some cases, a product of research. If you’re working on mobile applications or software, reach out to Sabrina Kirby at MILO for support on application publication requirements, generic terms of use, privacy policy, and more.

McMaster researcher Sandra Moll (Faculty of Health Sciences) has created a technology-based tool that was developed as an adjunct to the Beyond Silence program - a mental health literacy training program. The application is customized for healthcare employees and provides real-time mental health literacy education and support. The app is designed to promote behaviour change (help-seeking and help-outreach) related to critical aspects of mental health literacy.

Website: [www.beyondsilence.ca](http://www.beyondsilence.ca)

McMaster researcher Peter Rosenbaum (Faculty of Health Sciences) and partners at CanChild have developed the Gross Motor Function Measure (GMFM) application, a clinical tool designed to evaluate changes in gross motor function in children with cerebral palsy. The app can be helpful in both clinical and research settings to evaluate changes in gross motor function over time or with intervention in children.

Website: [CanChild GMFM App](http://www.canchild.ca)

McMaster researcher Courtney Kennedy (Faculty of Health Sciences) has created the GERAS Fit-Frailty app, a user-friendly tool for assessing frailty. It can be completed by older adults or their caregivers and can be used as a frailty screening tool by healthcare professionals in a clinical environment. The application aims to improve the detection and management of frailty in routine clinical practice, as studies have shown that frailty can be treated successfully – especially with early intervention.

Website: [Geras Centre: FFAM App](http://www.geras.ca)
Launched in September 2021, the McMaster Seed Fund (MSF) was created to address the early-stage funding gap that many of our innovators face as they move their ideas from lab to market. MSF is an investment vehicle that supports McMaster’s research-based start-ups that have the potential to create significant economic or societal impact in the Hamilton region and beyond. With MILO’s management and network, an MSF Investment Committee, whose membership is made up of serial entrepreneurs, early-stage investors, and C-level executives — all external to the university, has been engaged to vet and recommend the highest potential companies to receive the seed investment.

As expected, MSF’s first round of investment was highly competitive and saw two promising start-ups (out of 12 applicants) selected for the inaugural investments.

Synmedix, founded by Eric Brown (professor, biochemistry and biomedical sciences), received $300,000 to validate its novel antibiotic platform in its first in-human study with a world-class clinic specializing in diabetic foot wound care in Hamilton. Insight Medbotics Inc, co-founded by Mehran Anvari (professor of surgery), received $435,000 to further the company’s MRI-guided imaging device through its late-stage clinical trials and support production of the medical device.

To learn more about applying for or becoming involved with MSF as an advisor, mentor, or donor, please visit the MILO website.
Synmedix is a biotechnology company that is addressing the unmet and global need for new or re-formulated antibiotics that can treat multidrug-resistant infections. The company is focused on commercializing a novel and proprietary antibiotic platform discovered in the Brown Laboratory (Department of Biochemistry and Biomedical Sciences). This platform dramatically enhances the activity of antibiotics through the action of bicarbonate, leading to improved efficacy of a broad spectrum of antibiotics and is applicable to antibacterial drug discovery and development.

BCX-4 is a combination product containing Azithromycin and bicarbonate that is efficacious against a wide variety of drug-resistant bacterial pathogens and well-suited in the treatment of polymicrobial infections. The Brown research group found that bicarbonate ion influences the potency of numerous antibiotics by increasing drug uptake by bacterial cells. This increased uptake not only enhances the efficacy of antibiotics, but also expands the activity of many drugs to both gram-negative and gram-positive pathogens. In addition, the ability to drive increased uptake of drugs by bacterial cells overcomes the intrinsic or acquired form of pathogenic resistance. Compositions and methods are patent protected and are being applied towards the development of new topical and oral formulations to treat infections related to diabetic foot ulcers, burns, and other chronic diseases and acute injuries. Synmedix has been able to leverage this investment with the FedDev/TIAP and SOPHIE programs to further fund their product development and partnering strategies.

Insight Medbotics Inc (IMI) is a startup whose vision is to drastically improve the quality of breast cancer care for women. The company’s first product, IGAR™ - Image Guided Automated Robot, enhances precision and accuracy for early detection of breast cancer. IGAR™ is an MRI-guided robotic device that positions biopsy or therapy devices with unprecedented precision and significantly improves patient comfort and clinical efficiency relative to existing options. IGARTM was developed at the Center for Surgical Invention and Innovation (CSII) at St. Joseph’s Healthcare Hamilton. The company has successfully completed a multi-site study where 21 patients had a successful IGAR biopsy, demonstrating equivalent safety and improved accuracy in an MRI environment as compared with those receiving a manual biopsy. Additionally, IGAR provides the benefits of patient comfort, ease of use for the physician, and enhanced workflow efficiency for the healthcare system. Furthermore, the ability for pre-operative programming and real-time in-bore micro adjustments presents the possibility for use in tele-operability and supporting patients living in remote locations.

Patents have been granted in Canada, US and Australia protecting the robotic operating system, further patents pending protect the automatic in bore, MR guided system.

IMI was formed as a spin-out from the Centre for Surgical Invention and Innovation, a Centre of Excellence for Commercialization and Research hosted at McMaster University and led by Mehran Anvari, professor of surgery. The company is also co-founded by MDA, a world leader in robotics and creator of the Canadarm. To learn more, visit Insight Medbotics’ website.
McMaster is known for its strong collaborations with industry, non-profit organizations, and government agencies. These collaborations and research partnerships help organizations across the globe solve complex problems, improve their products and processes, and develop new policies and guidelines.

In October 2021, NSERC launched the Alliance Missions grants, a special call to fund projects that address critical science and technology challenges with the goal of accelerating the translation of Canada’s world-class research results into economic opportunities, and/or informing policy that could have an impact on Canada’s economy. McMaster was awarded six Alliance Missions grants with a combined value of over $3.7M, representing a 50% application success rate — almost double the national average.

This past year, researcher Alemu Gonsamo (School of Earth, Environment & Society) was awarded an NSERC Alliance project in partnership with the World Wildlife Fund Canada (WWF-Canada). The project aims to develop a carbon estimation system which quantifies annual net carbon flux of all forest ecosystems in Canada and will be deployed by conservation authorities. The system will improve our understanding of how land management actions impact forest ecosystem carbon balance and aims to inform a national greenhouse mitigation strategy. Notably, it will monitor actions taken to enhance and protect natural carbon sinks in Canada by integrating arterial intelligence and space-based laser scanning technologies to forest ecosystem studies.

In 2021-22, McMaster saw an increase in Mitacs funding, receiving over $8.5M for more than 60 partnered projects supporting research internships, and ranking 3rd in internship units submitted in Ontario. Aiming to further increase Mitacs funding, Alexa Mainguy, a new Mitacs Advisor, joined MILO at the beginning of 2022 to support social innovation project development and provide additional support to McMaster’s Mitacs portfolio.

One successful Mitacs Accelerate proposal, led by researcher Cliff van der Linden (Department of Political Science), is a joint effort with Vox Pop Labs, seeking to develop a method for making valid, representative estimates of public opinion regarding COVID-19. The project will help strengthen understandings of the pandemic’s broad social, economic, contextual, and behavioural implications. These understandings will contribute to the development of effective public policy responses to both the ongoing pandemic and future public health crises.
SOPHIE Funding

This past year has brought on some exciting funding opportunities and partnerships supporting commercialization. An example includes a $6 Million grant from the Federal Economic Development Agency of Southern Ontario (FedDev) awarded to the Innovation Factory and led by the Synapse Consortium. This grant has led to the Southern Ontario Pharmaceutical and Health Innovation Ecosystem (SOPHIE) program, which helps commercialize and scale innovative technologies produced by life science firms across Ontario.

SOPHIE provides life science firms with opportunities to leverage facilities, expertise and infrastructure of world-class academic and clinical institutions located in Hamilton, including McMaster University, Mohawk College, Hamilton Health Sciences and St. Joseph’s Healthcare Hamilton. Successful SOPHIE applicants can access up to $100,000 in non-dilutive grant funding to support their commercialization project with an academic or clinical partner.

For more information on the SOPHIE program, visit the Synapse Life Sciences Consortium website or email Alexa Mainguy at MILO.

iHub

FedDev Ontario awarded $10 Million to McMaster to support an integrated automotive, aerospace and advanced manufacturing network known as iHub.

This state of the art facility leverages another $16.8 million from industry partners including Ford, Honda, Bombardier, Stellantis (Fiat Chrysler) and MHI – RJ Aviation Group, a subsidiary of Mitsubishi Heavy Industries.

McMaster engineers Ali Emadi, Saeid Habibi, Mark Lawford, Ravi Selvaganapathy and Stephen Veldhuis are leading the initiative. Together, they aim to develop, test and incorporate the latest technologies required for the production of next-generation electric and autonomous vehicles and energy-efficient and intelligent aircraft.

The funding is expected to support more than 230 small and medium sized enterprises (SMEs), spanning the manufacturing corridor from Windsor to Oshawa, facilitate commercialization of 100 new products and services, and create significant employment — supporting up to 170 direct jobs.

Located at McMaster Innovation Park (MIP), iHub will enhance Ontario’s position as a global destination to develop, test and commercialize hybrid, electric and autonomous vehicles and intelligent aircraft technologies while accelerating the path to net zero emissions.
MILO is excited to announce a new partnership with adMare BioInnovations that will bring business and scientific expertise, as well as access to early-stage capital to McMaster researchers and startups in the life sciences sector.

adMare is a Canadian non-profit organization that works to identify and de-risk promising discoveries in health and drug technologies and offers a broad range of services, including research infrastructure and funding for new research and development projects with strong commercial potential.

In the Fall, we were pleased to collaborate with MGD Health ICE to host a visit from adMare BioInnovations. With a combination of scientific and commercialization experience at global biotech and pharma, Drs. Amie Phinney, Joseph Mancini, and Claudio Sturino shared their expertise and discussed in smaller groups or with individual researchers the critical considerations when translating therapeutic academic discoveries to clinic.

MILO will continue to offer opportunities for our researchers and entrepreneurs to meet with and learn from the adMare team.
Licensing & Partnerships

MILO manages McMaster's and affiliated hospitals' IP portfolio and has an expanding number of innovations and technologies available for licensing. Whether licensing to a start-up company or an existing company, McMaster's goal is to maximize the chances of successfully transferring the technology to benefit society, while prioritizing the University's missions of research and education.

Over this past year, we executed 461 licenses that generated more than $6.6M in royalty and/or licensing revenue. The MILO team worked diligently with researchers and industry partners to license a variety of patented technologies and copyrighted works, and advance various joint development projects. MILO also assisted in the creation of eight spin-off company opportunities and connecting researchers with industry, angel and venture capital investors, and other legal, financial, or business experts.

Zentek is an IP development and commercialization company focused on next-gen healthcare solutions in the areas of prevention, detection and treatment. Zentek is currently focused on commercializing ZenGUARD™, a patent-pending coating shown to have 99% antimicrobial activity, including against COVID-19, and the potential to use similar compounds as products against infectious diseases.

Researchers Yingfu Li (Department of Biochemistry and Biomedical Sciences) and Leyla Soleymani (Department of Engineering Physics), in collaboration with other researchers and clinicians, have developed an aptamer-based test effective in identifying COVID-19 and other forms of infection. The test can be used with a small sample of saliva and can provide accurate results within minutes. This allows for the possibility of conducting point-of-care testing in a doctor's office and having results within the same visit.

The work has been licensed to Zentek who plans to invest more than $1 million in the next five years as they continue to work with McMaster researchers and other partners to scale up production of the test components so they can be manufactured at a commercial level, and to adapt the technology for other forms of infection.

The efforts are part of Canada's Global Nexus for Pandemics and Biological Threats at McMaster that aims to bring together decision-makers, system leaders, businesses, communities and the public to develop and deploy relevant and timely solutions to prevent, prepare for and protect against pandemics and biological threats. To learn more, visit Zentek's website.
Over the last few years, McMaster companies — from small to large scale startups — have achieved significant milestones:

**Triumvira Immunologic**

Triumvira Immunologic is an immunotherapy company co-founded in 2015 by Jonathan Bramson (Department of Pathology and Molecular Medicine) at McMaster University and Bloom Burton & Co. with the vision of developing novel T cell therapies that are safer and more efficacious than current cancer treatments, including chimeric antigen receptor (CAR) and engineered T cell receptor (TCR) therapies. This past year, Triumvira completed an extension of its Series A financing, bringing their total funding to $100M, which will enable the company to continue and expand its Phase 1/2 clinical trial for patients with solid tumors, including breast, gastric, ovarian, pancreatic, gall bladder and non-small cell lung cancers. To learn more, visit [Triumvira’s website](#).

**Enedym**

Enedym is a technology start-up company focused on reducing the cost of electric propulsion motors significantly whilst powering a new paradigm in the electric motor industry via novel switched reluctance motor (SRM) drive technologies. The company was founded by engineering professor Ali Emadi, who also holds the Canada Excellence Research Chair (CERC) Laureate at McMaster. The company has rights to over 60 issued and pending patent applications originally developed under Emadi’s research program funded by the Canada Excellence Research Chair in Hybrid Powertrain. Over the past year, Enedym has entered into strategic partnerships and secured financing, including a $2.4M grant from Sustainable Development Technology Canada (SDTC) and an additional $15M investment round to move their Ventium technology forward for the wind turbine industry. To learn more, visit [Enedym’s website](#).
Elarex

Founded in 2019, McMaster start-up company Elarex Inc. is helping vaccine manufacturers solve the cold chain problem by reducing spoilage, enabling accessibility to developing countries where infrastructure is unreliable/unavailable, and improving the stability of future vaccine candidates. The company was co-founded by McMaster engineering professor Carlos Filipe and McMaster alumni Robert DeWitte.

Their solution is a straightforward, patented mixture of natural products that are considered safe by the US FDA and do not require freeze drying. Many types of vaccines, small molecules, enzymes, biologics, DNA and RNA are amenable and can benefit from the stabilization offered by this technology.

This past year Elarex was awarded a $1.2M grant from the Bill & Melinda Gates Foundation to accelerate the development of liquid thermostable mRNA vaccines for low and middle income companies. This grant has enabled the company to address the challenge of stabilizing mRNA within lipid nanoparticles, leading to a new formulation and expanding the company’s product portfolio.

Elarex has also received a total of $300,000 in funding from the National Research Council of Canada, the Southern Ontario Pharmaceutical and Health Innovation Ecosystem, and the Ontario Centre of Innovation, and has created six new highly skilled jobs within the company in the past year. To learn more, visit Elarex’s website.

VoxNeuro

VoxNeuro is a data-driven Canadian neuroscience and health tech company, co-founded by linguistics professor John Connolly. The company has developed technologies to measure multiple cognitive functions to support proactive brain health, informed clinical decision-making and customized care. Over the last year, the company has achieved a number of significant milestones, including:

1. Regulatory approvals from FDA and Health Canada for Champ, a system to help diagnose concussion, traumatic brain injury, and dementia;
2. Issued US patent entitled “Systems and methods for cognitive health assessment” that furthers the company’s competitive advantage; and
3. Creation of a US-based expert clinical study program to assist and advice on expansion across a range of neurological pathologies.

To learn more, visit: VoxNeuro’s website.
Naturally Synthetic is commercializing a novel, inventive chemical process developed in Jake Magolan’s lab (Department of Biochemistry and Biomedical Sciences). This patent pending technology has applications in the manufacturing of rare cannabinoids and related phenolic natural products for the global R&D, pharmaceutical and consumer packaged goods markets.

In late 2021, Peregrine Precision Systems Inc. and Naturally Synthetic entered into a partnership to commercialize chemically synthesized rare cannabinoids and other natural ingredients. Over the past year, Naturally Synthetic has demonstrated the synthesis of several cannabinoids at bench-scale with >99% purity and with low input costs. With the company’s synthetic technology, it is anticipated that this will provide a reliable, scalable, low-cost, and environmentally sustainable way to manufacture many cannabinoids in Active Pharmaceutical Ingredient (API) quality. This strategic partnership provides the experience and knowledge to develop a commercial scale process technology for the large-scale production of chemically synthesized cannabinoids. To learn more, visit Naturally Synthetic’s website.

Llif Healthcare is a data company which is solving two important problems in healthcare: the demand by physicians for practice data feedback and a tool to help analyze practice as it relates to best evidence and practice variability. Based on Shawn Mondoux’s work at St. Joseph’s Healthcare Hamilton, Llif utilizes the vast amount of electronic health record (EHR) data generated every day and provides physicians and hospitals with better analytics to improve patient outcomes. Initially developed for an emergency department setting, this tool is based on several years of research and peer-reviewed publications.

The company’s first product - ED MD dashboard, which is securely hosted on the cloud through a partnership with Medstack, is already being used in two hospital systems in the region. Following a validation process, Llif is poised to expand into other healthcare sectors in both the outpatient and inpatient settings at peer hospitals in the region and throughout Canada. With the next round of financing, the company plans to create tailored integration functionality with the world’s leading EHRs; thus, allowing Llif to integrate more seamlessly and require less resources for data-extraction and a more nimble expansion of services. Healthcare systems need novel ideas for improved patient outcomes, increased physician retention, and more efficient resource utilization — Llif is poised to partner with hospitals to realize these outcomes.
Invention Disclosures

MILO has been working to foster a culture of commercialization; highlighting successes and partnering with other groups across campus to provide educational workshops. While these efforts are open to all across campus, we are targeting new faculty hires, post-doctoral fellows, and graduate students. This has resulted in an increasing number of disclosures from interdisciplinary groups and greater interest in start-up company formation. MILO has seen an increase in the submission of copyright disclosures for inventions pertaining to software and online technologies.

Disclosure Contributions by Faculty

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<tr>
<th>Faculty of Science</th>
<th>Faculty of Engineering</th>
<th>Faculty of Health Sciences</th>
<th>Other Faculties/Hospitals</th>
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<tbody>
<tr>
<td>20 Disclosures</td>
<td>39 Disclosures</td>
<td>40 Disclosures</td>
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Commercialization Metrics (Fiscal Year 2022)

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<tr>
<th>Fiscal Year</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
<th>3 Year Total</th>
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<tr>
<td>Commercialization Revenue ($) (royalties, licensing fees, equity)</td>
<td>4,682,000</td>
<td>4,262,000</td>
<td>6,590,000</td>
<td>15,534,000</td>
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</table>

* values rounded to nearest thousand
McMaster Industry Liaison Office (MILO) | McMaster University | Annual Report 2022

MILO Metrics - Fiscal Year 2022

- **87** Disclosures
- **94** Total patent applications filed (all countries)
- **461** Total licenses executed
- **32** Patents issued
- **$6.6M** in royalty and/or licensing revenue
- **8** Start-up companies created
- **$400K** in knowledge mobilization revenue
- **517** Active licenses

McMaster continues to outpace its peers with the highest number of new licenses executed per year in Canada (AUTM Survey). This is driven by licensing of a wide variety of quality-of-life questionnaires, teaching tools, and measurement instruments for non-exclusive use by companies, government agencies, healthcare providers and educational institutions.

To assess technologies and research from McMaster faculty, MILO Business Development experts examine the invention disclosures to determine the patentability. The evaluation process involves a variety of factors that are considered to ensure successful IP protection and commercialization. These include:

- IP protection and prior art searches (patents, copyright, trademark, etc.)
- Freedom to operate and invention patentability
- Market analysis and industry analysis (market size, market potential, competitors, etc.)
- Potential risks (time needed to market, money and infrastructure needed for development, etc.)

The technology then undergoes further analysis to determine potential commercialization pathways and whether the technology is suitable for licensing, or start-up creation. Once patented, MILO helps the researchers identify potential companies and partners that may be interested in the technology. In the case of start-up formation, MILO supports the team by connecting them with relevant mentors with expertise in their fields.
Technologies Available for Licensing

**Novel High-Throughput Method for Vitamin D Screening**
Inventors: P. Britz-McKibbin & W. E. Helmeczi
A novel high throughput method for assessing vitamin D status from blood specimens.
[Read More]

**Novel Diagnostic Biomarker for Diarrhea- Predominant IBSD**
Inventors: D. Clark
A novel non-surgical diagnostic biomarker capable of distinguishing IBS-D from IBD.
[Read More]

**A Stochastic Model for Simulating Immune Response**
Inventors: T. Adams, D. Christian
First stochastic, dynamic model of the immune system responses to vaccine injection
[Read More]

**Electrochemical Biosensor for PEDv**
Inventors: L. Soleymani, Y. Li, A. Victorious, Z. Zhang, R. Pandey, D. Chang
A simple saliva-based PEDv biosensor for rapid identification of PEDv.
[Read More]

**New Chemistry to Recycle Vulcanized Rubbers Back to Organic Polymers**
Inventors: S. Zheng, M. Liao, Y.Chen, M. A. Brook
Recovery of organic materials from sulfur crosslinked rubbers for sustainable reuse of automotive tires and other applications.
[Read More]

**Constrained Shrinking of Pre-Stressed Films to Achieve High-Resolution Nanoscale Patterns**
Inventors: P. Ravi Selvaganapathy S. Abosree
Nanoscale formation pattern for high-resolution uniform patterns in industrial applications (i.e. semiconductor manufacturing, microsystems, and optoelectronics).
[Read More]

[Click Here to View All Available Technologies]
Issued Patents

A METHOD OF TREATING OBESITY
Inventor(s): Waliul Khan, Palanivel Rengasamy, Gregory Steinberg
Patent Number: 11,278,549
Countries: United States

ALL-SOLUTION-PROCESSED BENCHTOP FABRICATION OF MULTI-SCALE ELECTRODES FOR ENZYME-FREE GLUCOSE DETECTION
Inventor(s): Robert Chris Adams-McGavin, Christine Gabardo, Leyla Soleymani
Patent Number: 11,181,500
Countries: United States

AN ENHANCED SYSTEM AND METHOD FOR CONDUCTING PCA ANALYSIS ON DATA SIGNALS
Inventor(s): Saeid Habibi, Mahmoud Ismail, Samir Ziada (decd.)
Patent Number: 11,022,633
Countries: Canada, United States

ASSAY TO MEASURE FACTOR XA INHIBITORS
Inventor(s): Paul Kim, Chengliang Wu
Patent Number: 11,034,993
Countries: United States

CD133-BINDING AGENTS AND USES THEREOF
Inventor(s): Sheila Singh
Patent Number: 11,220,551
Countries: United States

COMBINATION MEMORY T CELL ACT AND VACCINIA VIRUS IMMUNOTHERAPY
Inventor(s): Omar Salem, Scott Walsh, Yonghong Wan
Patent Number: 11,045,496
Countries: United States

ELASTOMETRIC ISOLATOR
Inventor(s): Michael Tait
Patent Number: 2,864,006
Countries: Canada

METHOD AND SYSTEM FOR MAKING MICROCOILS AND PRODUCT THEREOF
Inventor(s): Kari Dalmioki-Veress, Elie Raphael, Thomas Salez, Rafael Schulman
Patent Number: 11,198,958
Countries: United States

METHOD FOR DIAGNOSING AND MONITORING INFLAMMATORY DISEASE PROGRESSION
Inventor(s): Sanjay Agarwal, Warren (Lauren) Foster, Jocelyn Wessels
Patent Number: 11,221,327
Countries: United States

METHOD FOR ENABLING TRUST IN COLLABORATIVE RESEARCH
Inventor(s): Thomas Doyle, David Koff, Reza Samavi, Andrew Sutton
Patent Number: 11,244,076
Countries: United States
METHOD FOR STABILIZING VARIOUS MOLECULES WITHOUT REFRIGERATION USING WATER SOLUBLE POLYMERS – DEMONSTRATION USING PULLULAN

Inventor(s): John Brennan, Carlos Filipe, Sana Jahanshahi-Anbuhi, Yingfu Li, Robert Pelton
Patent Number: 11,067,569
Countries: United States

METHOD OF LONG-TERM PRESERVATION OF CHEMICAL AND BIOLOGICAL SPECIES USING SUGAR GLASSES

Inventor(s): M. Monsur Ali, Carlos Filipe, Sana Jahanshahi-Anbuhi, Vincent Ho Yin Leung
Patent Number: 11,040,015
Countries: United States

NEURAL NETWORK STATE OF CHARGE ESTIMATION (FOR BATTERIES)

Inventor(s): Ephrem Chemali
Patent Number: 11,171,498
Countries: United States

NON-CYCLOPENTADIENYL GROUP 4 TRANSITION METAL OLEFIN POLYMERIZATION CATALYSTS FEATURING A RIGID TRICYCLIC LIGAND BACKBONE.

Inventor(s): David Emslie, Kelly Williams
Patent Number: 11,214,636
Countries: United States

PHENYLBORONIC ACID BASED MICELLES FOR SUSTAINED MUCOADHESIVE DRUG DELIVERY TO THE OCULAR SURFACE

Inventor(s): Stephanie Kedzior, Benjamin Muirhead, Graeme Prosperi-Porta, Heather Sheardown
Patent Number: 3344232; 7038054; 2,996,910;
Countries: Europe, Japan, Canada, United States

SPECKLE REDUCED LASER PROJECTION WITH COLOR GAMUT OPTIMIZATION

Inventor(s): Qianli Ma, Chang-qing Xu
Patent Number: CN 110543074 B
Countries: China

SUPPRESSING FALSE POSITIVES (TYPE I ERROR) DURING ANALYSIS OF SAMPLE BIOLOGICAL MATERIALS

Inventor(s): Allison Guitor, Andrew McArthur, Hendrik Poinar, Michael Surette, Gerard Wright
Patent Number: CA3107221C
Countries: Canada

SYSTEMS AND METHODS FOR COGNITIVE HEALTH ASSESSMENT

Inventor(s): Rober Boshra, John Connolly, Kyle Ruiter
Patent Number: 11,278,230
Countries: United States

T CELL-ANTIGEN COUPLER WITH VARIOUS CONSTRUCT OPTIMIZATIONS

Inventor(s): Jonathan Bramson, Christopher Helsen
Patent Number: 11,110,123 & 11,111,298
Countries: United States

T CELL-ANTIGEN COUPLER WITH VARIOUS CONSTRUCT OPTIMIZATIONS

Inventor(s): Ksenia Bezverbnaya, Jonathan Bramson, Galina Denisova, Anna Dvorkin, Christopher Helsen, Kenneth Mwawasi
Patent Number: 11,198,737
Countries: United States
MILO Team

Leadership
Gay Yuyitung
Executive Director

Research Contracts
Amber Metham
Associate Director
(Research Contracts)

Ryan Vieira
Research Contracts Advisor
(Life and Health Sciences)

Ross Huyskamp
Research Contracts Advisor
(Science and Engineering)

Suzanne Ferenczi
Research Contracts Advisor (Humanities, Social Science, Business)

Ryan Caldwell
Business Development Specialist
(Mitacs)

Alexa Mainguy
Business Development Specialist
(Mitacs)

Daniela Cali
Research Contracts Coordinator

Administrative Services
Heather Morrison
Manager, Finance & Operations

Caeli Sclodnick
IP Administrator

Volunteers & Students
Sydney Valentino
Manjot Grewal
Andrew (Doren) Singh
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