McGill | Engine

Annual Report

SEPT 1. 2019-AUG 31. 2020

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ABOUT MCGILL ENGINE

The McGill Engine Centre out of the Faculty of Engineering, focuses on stimulating and supporting technologically based innovation and entrepreneurship at McGill University in collaboration with the McGill Dobson Centre for Entrepreneurship and the Office of Innovation and Partnerships.

MISSIONS

1. Helping to develop the next generation of McGill engineers, designers, innovators, change agents, and entrepreneurs by providing training and experiential learning opportunities, advising and coaching, funding, and project mentorship.
2. Promoting and accelerating the commercialization of inventions and software out of the Faculty of Engineering through funding, coaching, and connections.
3. Increasing engagement and R&D collaborations between innovation-driven companies and the Faculty of Engineering by providing matching and facilitation services.

VALUES

CURIOSITY

Questioning the status quo and trying to better understand the world around us.

COLLABORATION

Promote sharing and involvement of everyone to achieve common goals.

COMMUNITY

Caring about each other, staying involved, and giving back.

SUSTAINABILITY

Working in a way that integrates social, economic, and environmental dimensions equitably within the limits of a finite planet.

DETERMINATION

Persevering even when encountering difficulties or failures, believing you can be a positive change agent.

VISION

For the McGill Engine community to make a positive impact and contribute value to the innovation and entrepreneurial ecosystems, locally, regionally, nationally, and worldwide.

ANNUAL IMPACT

$216K +

IN GRANTS, AWARDS, PRIZES, STIPENDS, AND FELLOWSHIPS AWARDED

655 +

ATTENDEES IN OVER 38 EVENTS, SEMINARS & WORKSHOPS

278

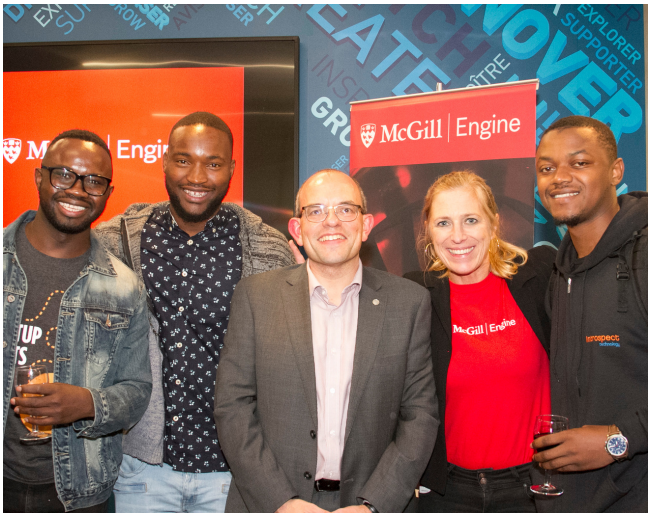
STUDENTS & PROFESSORS ADVISED/COACHED

51

PROJECT APPLICATIONS REVIEWED

240

COMPANY INTERACTIONS



MESSAGE FROM THE DEAN

At its heart, the McGill Engine Centre encourages experiential learning, enabling our students to get involved with technological innovation, collaborate with people from across McGill, and forge partnerships with industry and other external organizations. What we've seen since Engine's launch is that it is rapidly becoming a hub for students to translate their ideas into practice and create value for society. In fact, many of our students have established successful companies before they've even graduated from McGill. Thanks to the generosity of our benefactors, the dedication of our team, and engagement of the Engine community, we have been able to produce high-impact activities and programs that make a difference.

Jim A. Nicell, Ph.D., P.Eng., FCAE
Dean, Faculty of Engineering

MESSAGE FROM THE DIRECTOR

After many years of planning and preparation, we were thrilled to open the beautiful and highly functional McGill Engine space in October 2019. Over the last academic year, Engine has helped build and grow McGill's community of technological innovators and entrepreneurs, and strengthen its connections to off-campus stakeholders. Thanks to the support of the Québec government, this year's activities included the launch of the Triple IQ program to increase R&D collaborations with Québec's industry. I look forward to a bright and exciting future for the McGill Engine community.

Benoit Boulet, Ph.D., P.Eng., SMIEEE
Director, McGill Engine

ENGINE TEAM

KATYA MARC
M.ENG., MBA
ASSOCIATE DIRECTOR

VIVIAN DINIZ
PH.D. ENG.
BUSINESS DEVELOPMENT OFFICER

ELIZABETH LALLEMAND
PROGRAM ENGAGEMENT ASSOCIATE

TECHEIRS

The McGill Engine's two technological Entrepreneurs-in-Residence (TechEiRs) are available for advising and coaching to help students and faculty members get to the next level with their technologically based idea and project.

MICHAEL AVEDESIAN
ENG., PH.D., FCAE, FCIC

ANDREW CSINGER
B.ENG, PH.D, IDP-C

ADVISING & COACHING

In addition to the TechEiRs, Katya Marc, the Associate Director of the McGill Engine Centre, also advises and coaches students and professors. She offers drop-in hours for students and faculty members who have questions about technological entrepreneurship and innovation, want feedback on their business ideas, are looking for connections with other resources, potential partners and investors, and advice with anything relating to entrepreneurship or innovation!

Since the Centre opened, we have partnered with over six organizations and McGill resources to host weekly drop-in hours at the Centre to help connect students with more resources.

40

PROFESSORS ADVISED

238

STUDENTS ADVISED

FUNDING

In addition to providing project mentorship, tools, and training to support students and professors in translating their ideas and fundamental research to the marketplace, the McGill Engine Centre provides funding for project implementation. There are several funding programs for faculty members, undergraduate students, graduate students, and postdoctoral researchers.

TECHACCEL GRANTS

The TechAccel Grants help students jump-start and accelerate their technologically based ideas that have business or social impact potential. Teams develop their entrepreneurial skills through a seven-part online training platform and one-on-one business mentorship and project funding for product, process, or service development. The program allows participants to define the core purpose of their startup, clarify their vision to their team and potential investors, speak with actual stakeholders to help test the team's hypotheses, and have the ability to present an overview of the startup venture in a convincing and clear way as part for a succinct pitch presentation. The grants come out of the Engine Innovation Fund, which is funded by charitable gifts from alumni and other community donors.

$43K +

IN FUNDING GRANTED

140%

APPLICATION INCREASE FROM 2018

63 %

APPLICATION SUCCESS RATE

15

STARTUP VENTURES / PROJECTS ACCEPTED INTO THE PROGRAM

49

STUDENTS PARTICIPATED IN THE PROGRAM

TECHACCEL GRANTEE TESTIMONIALS

"The TechAccel Grant allowed us to transition our project from just an idea to something we work on every day. Without the grant I probably would not have learned as much due to lack of funds and incentive. I am glad we found this opportunity."

Celeste Nantel, Co-Founder of Acrylic

"Cookiestruct has been supported by McGill Engine since Winter of 2019. Thanks to Engine, we were able to get not only the grants, but also the exposure within the McGill community and beyond, which is paramount for any start-up."

Jiayuan Wang, CEO of Cookiestruct

TECHACCEL GRANTEES

SUMMER 2020

7 SQUARE

Helps real estate investment companies find low-risk investments by finding high appreciating residential properties in Canada.

ACRYLIC

Intends to design and sell abstract acrylic artwork that has been produced via a semi-automated process (using both robotic and software automation).

AFROBEATS

Digital marketing company that aims to connect Afrobeats artists to editors, content curators, tastemakers on various streaming platforms.

COOKIESTRUCT

Offering customers 3D-printed, custom-made advanced cookie cutters that can make cookies for any occasions ranging from birthdays to anniversaries and weddings.

CURBSIDE

Mobile application to help commuters find on-street parking spots, and displays on an interactive map both the availability and the probability of occupancy of nearby parking spots using AI models.

HYDROLUX

Working to produce and distribute green hydrogen to warehouses to supply fuel cell powered forklifts. Hydrogen forklifts are tougher, faster and safer than traditional forklifts.

LFANT MEDICAL

Montreal-based biotechnology startup dedicated to revolutionizing the point-of-care detection of infectious diseases.

ORA-3D

Aiming to provide a smart and automated solution for effortless dental care by redesigning the decades old model of a toothbrush and automating it to intelligently provide a smart brushing experience.

STOCATE

Online platform that supports the buy local movement by connecting local sellers with potential buyers.

SIDEKIK

For-profit mobile application that connects virtual tour guides to travelers by utilizing augmented reality.

TECHACCEL GRANTEES

WINTER 2020 & FALL 2019

AFFLUENCIAL

Democratizing tailored financial advising, planning and investing so that individuals can have access to quality wealth management regardless of their net worth.

ANGLESMART

Aiming to provide a smart and automated solution for effortless dental care by redesigning the decades old model of a toothbrush and automating it to intelligently provide a smart brushing experience.

COOKIESTRUCT

Offering customers 3D-printed, custom-made advanced cookie cutters that can make cookies for any occasions ranging from birthdays to anniversaries and weddings.

MYGNESIUM TECHNOLOGIES

Aims to develop novel ultra-lightweight magnesium (ULMg) alloys for applications where weight reduction is critical by developing eco-friendly and affordable-cost alloys with superior properties.

OZZIE

Low-cost self-driving robot that can deliver food to students on campus in under 5 minutes.

STARTUP INTERNSHIP PROGRAM

The McGill Engine created a new initiative this summer to help provide mentorship and learning experiences for McGill students over the summer. Ten McGill Faculty of Engineering affiliated startups were selected to train and supervise an intern over the summer. Each intern position was filled by a McGill University Undergraduate student within the Faculties of Arts, Engineering, Management, Law, and Science. The interns had the opportunity to collaborate remotely with both the startup and a mentor at the Engine Centre to ensure they had a well rounded learning experience over the summer.

Thanks to our generous alumnus donor John D. Thompson and to the Government of Canada's Student Work Placement Program (SWPP)/TECHNATION Canada Career Ready Program, we were able to create the new Startup Internship Program to provide our students with an experiential learning opportunity within our startups over this summer.

$45K +

IN STIPENDS AWARDED

75%

OF STIPENDS AWARDED WERE SUBSIDIZED BY TECHNATION

250 +

INTERN APPLICATIONS RECEIVED, 10 WERE SELECTED

STARTUP TESTIMONIALS

"Engine's internship program accelerated our work over the summer. Not only did we get to work with an incredible intern but also made significant progress in developing our prototype. We wouldn't have come this far had we not taken advantage of Engine's Internship program."

Sarim Malik, Co-Founder Neat

"We had an amazing experience being part of the inaugural McGill Engine Startup Internship Program. The staff and team at the Engine Hub have been very supportive from the moment we expressed interest in the program to date. At NIA, we are excited to have been part of the program, and to have had a McGill Software Engineering student learn and grow with us.

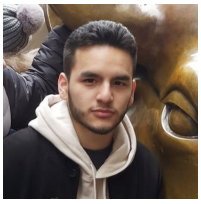
Monica Mhina, Co-Founder of NIA

STARTUP INTERNSHIP PROGRAM

INTERN SUMMARY

Arneet Kalra,
Software Developer @ Recycling Pioneers

Maya Hardy,
Marketing and Sales @ Lunavoy



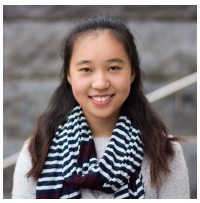
Matteo Nunez,
Full Stack Dev @ Afrobeats Central

Meg Heesaker,
Business Development & Marketing @ Stocate

Jonathan Ng,
Full Stack Dev @ Curbside

Nelson Zeng,
Web Dev @ The Sweater Guys

Rahul Behal,
Full Stack Dev @ Neat



Ran Tao,
Data Scientist @ Blue City Technology

Sami Kahil,
Web/Software Dev @ Cookiestruct

Suhas Udupa,
Software Engineering @ NIA

STARTUP SUMMARY

Recycling Pioneers

Lunavoy

Afrobeats Central

Stocate

Curbside

The Sweater Guys

Neat

Blue City Technology

Cookiestruct

Nia

CANSBRIDGE ENGINE FELLOWS

The McGill Engine has entered into a strategic partnership to deliver scholarships to entrepreneurial McGill Faculty of Engineering students. The scholarships are offered to three promising undergraduate students enrolled in McGill's Faculty of Engineering. This year's Cansbridge Engine and Cansbridge-Empower fellows are profiled below.

ADAM MELNYK, CANSBRIDGE-ENGINE

Adam is a visual problem solver, food design enthusiast, and bioengineer-in-training. He has expanded his creative pursuits into the field of biotechnology as a co-founder of Montreal-based biodevices startup, LFAnt Medical.

DAVID LIN, CANSBRIDGE-ENGINE

David is a serial entrepreneur with over 5 years of experience in entrepreneurship as both sole Founder and Co-founder in 3 previous startups within the fitness, education, and tourism industries.

KAYE WONG, CANSBRIDGE-EMPOWER

Kaye is in her final year in Chemical Engineering with a minor in environmental engineering. Some areas of particular interest to her are sustainability and accessibility.

ABOUT THE CANSBRIDGE FELLOWSHIP

ASIAN INTERNSHIP

A $6,000 grant to gain international exposure as they work and live in Asia over a summer.

BAY AREA NETWORK

Resources dedicated to sourcing Cansbridge Fellows to top-tier Bay Area startups & companies.

SAN FRANCISCO CONFERENCE

The conference provides immersive workshops with industry professionals, entrepreneurs, and investors.

CANSBRIDGE NETWORK

Network of Fellows enable people to meet their future co-founders and teammates.

IAN MCLACHLIN PRIZE

Established in 1998 by Ian McLachlin, B.Eng. 1960, to encourage students in the Faculty of Engineering to undertake new ventures with business or social impact potential. Awarded to students enrolled in the Faculty of Engineering with high academic standing who have begun, have made progress towards, or have completed an entrepreneurial project with business or social impact potential. Aissam and Neath were the award winners for their project Artizanko.

ARTIZANKO

Artizanko is a zero waste packaging solutions company for local enterprises. Currently, we are collaborating with local producers to innovate compostable packaging for their products. Our goal is to have packages that are inexpensive, compostable, heat and water resistant.

AISSAM SOUIDI

Chemical Engineering student who is determined to innovate creative solutions that can impact and disrupt the status quo. He is passionate about environmental sustainability, green technologies, and circular economy. During his time at McGill, he has developed a strong leadership experience, having founded and led many campus groups such as the McGill Rocket Team, and Volunteers for a Smile.

NEATH NGUON

Neath is a future chemical engineer who is passionate about entrepreneurship, Neath aspires to become one of the key players in the Asia tech industry. At McGill University, she is involved with organizations such as the Chemical Engineering Student Society and Engineering Investment Group. Additionally, with her dedication to serve underdeveloped communities, she hopes to continue to deliver lasting impacts in the future, especially back home in Cambodia.

ENGINE DOBSON PRIZE

The McGill Engine Prize, funded by our generous donors, the late Jim Brodeur and his wife Barbara Brodeur, is offered to support a technologically based venture competing in the final round of the McGill Dobson Cup competition. To be eligible for the McGill Engine Prize in the McGill Dobson Cup, at least one team member must be a current full-time student or professor in McGill's Faculty of Engineering and the venture must be technologically based. The winning team was awarded $5,000 and announced during the Dobson Cup Awards online ceremony which took place on July 30, 2020.

MINUTESFLUIDICS

Our mission is to provide high-quality diagnostic equipment to North American hospitals for the rapid, inexpensive, and high-throughput screening of MRSA in admitted patients. We are a team of three final year Bioengineering students.

DOMENICO LOPEZ

U4 Bioengineering

ALEXANDER BEVACQUA

U4 Bioengineering

ALI NAJMALDIN

U4 Bioengineering

TECHACCELR GRANTS

The TechAccelR Grants are intended to help professors in the Faculty of Engineering accelerate their research-based ideas that are reported as inventions but need further validation prior to commercialization. The grants come out of the Engine Innovation Fund, which is funded by charitable gifts from alumni and other community donors.

TECHACCELR GRANTEES

ONE-STEP CELL ISOLATION AND EXPANSION ON MULTI-FUNCTIONAL MICROCARRIERS

Professor Corinne Hoesli (Chemical Engineering), Omar Bashth, Master's student (Chem.Eng.), and Mohamed Elkhodiry, PhD candidate (Chem.Eng.)

Emerging cell-based therapies for cancer, diabetes and other diseases have been hailed as the next revolution in medicine. The high cost-of-goods of these therapies is prohibitive for publicly funded health care systems such as Canada's. We propose to develop a technology for cell separation and expansion in bioreactors that could reduce costs by reducing the number of steps required during bioprocessing.

Prof. Corinne Hoesli

RECYCLING PHOSPHORUS BY UPGRADING MUNICIPAL BIOSOLIDS

Professor Sidney Omelon (Mining and Materials Engineering)

We are approaching peak phosphorus (P). Similar to oil, P-fertilizer is extracted from a non-renewable resource called "phosphate rock" (PR) that is concentrated in few geographical locations. Due to PR value and future outlook, Europe recently placed PR on its critical materials list. Germany and Switzerland have mandated future P-recovery from municipal wastewater treatment plants. Canada has no operating PR mines, and no P-recovery strategy. The only P-fertilizer production facility in Canada will soon close. We are addressing this challenge of an impending PR, and therefore P-fertilizer availability problem.

Prof. Sidney Omelon

WILLIAM AND RHEA SEATH AWARDS IN ENGINEERING INNOVATION

The William and Rhea Seath Awards (WRSAs) which support innovative research and development have been made possible thanks to the generosity of Faculty of Engineering alumnus, the late Mr. William Seath (B.Eng. 1952). These Awards recognize outstanding students and professors, who are conducting research and development with potential for commercialization. Two equal awards of $25,000 each were given in the 2019-2020 competition.

2019-2020 GRANTEES

ADVANCED PROCESS FOR SCALABLE PRODUCTION OF VIRAL VECTORS FOR GENE AND CELL THERAPY

Preclinical experiments as well as clinical trials require large quantities of high quality viral vectors. Our team is improving upon the production and supply of adeno-associated virus and lentivirus vectors in order to support R&D and preclinical studies in cell and gene therapy.

Prof. Amine Kamen

DEVELOPMENT OF AN INNOVATIVE COMPOSITE PREPREG RECYCLING SYSTEM

Carbon fibre prepregs are the most widely used raw material for making high-performance composite structures. Manufacturing practices, however, generate large amounts of prepreg waste, which pose both a financial burden on the manufacturer and a negative environmental impact. Our team is deploying a commercially viable recycling tool that transforms prepreg waste collected directly from an aerospace manufacturer into a high-performance compression moulding compound.

Prof. Pascale Hubert

THE DIPIERRO INNOVATION FELLOWSHIP

The McGill Engine Innovation Fellowships Program supports the recipient and the team on the development of a technology in order to bring it closer to the marketplace and allow the DiPierro Innovation Fellow to gain further knowledge and experience in business and technology commercialization.

2019-2020 GRANTEES

Dr. Hamed Rafezi

Prof. Ferri Hassani

DRILL BIT CONDITION MONITORING SYSTEM FOR MINING APPLICATIONS

The proposed application aims to further develop our patent-pending technology for tricone drill Bit Condition Monitoring System (BCMS) in surface mining. The mining industry is moving toward automation and autonomous machinery for increasing the efficiency, precision and safety in production. Bit wear and subsequent failure of drill in the hole create major delays in removing the detached cone(s) from the hole to avoid damage to the rock crusher equipment. A successful automated blasthole drilling condition monitoring and control system is a vital step forward. Fully autonomous drilling will be achievable with our technology for recognizing when the drill bit is worn and requires replacing.

INDUSTRY PARTNERSHIPS

As part of our mission of increasing engagement and R&D collaborations between innovation-driven companies and the Faculty of Engineering, our team had 240 interactions with companies through matching and facilitation services.

$6.3M
R&D FUNDING FROM INDUSTRY

$5.2M
FUNDING FROM NSERC PARTNERSHIP PROGRAMS

$2.6M
MITACS PROJECT FUNDING

Thanks to recent funding from the Quebec government to encourage R&D collaboration between universities and Quebec companies, the McGill Engine launched a new funding program, the Triple IQ program, that is, Implementation of Innovation in Industry in Quebec/Implantation de l'innovation en industrie Quebecoise (IIIQ).

The following five projects were awarded a total of $180,000.

MODELLING AND CO-SIMULATION OF MECHANICAL SYSTEMS FOR VIRTUAL ENVIRONMENTS

R&D Team Leads
Prof. Jozcef Kovecses and CMLabs

MAGNETIC BEAD LAMP AND FLOCCULATION-BASED DETECTION FOR POINT-OF-CARE BACTERIAL/VIRAL DISCRIMINATION

R&D Team Leads
Prof. Sara Mahshid and Galenvs

NONDESTRUCTIVE ULTRASONIC QUALITY TESTING OF ENDOVASCULAR DEVICES

R&D Team Leads
Prof. Richard Leask and Agile MV

LOW-COST, HIGH-YIELD TRANSCEIVERS FOR OPTICAL ACCESS NETWORKS ENABLED BY ANALOG SIGNAL PROCESSING

R&D Team Leads
Prof. David Plant and FONEX Data Systems

A NONDESTRUCTIVE CONTACTLESS APPROACH TO ASSESS THE EFFICACY OF VARIOUS HEMOSTATIC AGENTS ON BLOOD BIOMECHANICS IN REAL-TIME

R&D Team Leads
Prof. Showan Nazhat and Rheolution

EVENTS

The McGill Engine hosts competitions, workshops, and events throughout the year to help students build connections, develop their entrepreneurial and innovation skills, and be inspired!

ENGINE'S OPENING EVENT!

OCTOBER 8TH, 2019

The McGill Engine Centre is a state-of-the art space available to use for seminars, conferences, and meetings. The renovations were finished early October and we had an event to celebrate the opening of the Centre and to highlight members of our community.

"The McGill Engine Centre revs up" - Located on the first floor of the Frank Dawson Adams Building, the Engine Centre is “right at the corner of one of the most high-traffic corridors in the entire University,” said Jim Nicell, Dean of the Faculty of Engineering. “It literally is a place where collisions are the most likely, and where unexpected encounters can lead to all kinds of new and unforeseen collaborations."

"It was truly a great experience to get to see the official opening of Engine's physical innovation space last week. Even better was to see, a few days later, how the space already began filling up with students all working on different startups. Combined with the other services, such as project grants and great mentoring, McGill and Engine are really setting the stage for the success of future creators and entrepreneurs.”
Guy Stysis, Co-Founder and CEO, Rokulo

5TH ANNUAL CELEBRATION OF INNOVATION AND ENTREPRENEURSHIP

NOVEMBER 27TH, 2019

Over the last seven years, the McGill Engine Centre has been instrumental in fostering innovative technologies. Our annual Celebration of Innovation and Entrepreneurship highlights and celebrates emerging technologically based business ideas and startups at the Faculty as well as our technology innovators. The evening is an occasion to bring together, students, faculty, accelerators, investors, and alumni. A number of awards are announced, the year's projects are showcased, and our inventors are acknowledged.

Innovobot was the event sponsor and they are fostering innovation across industries for the benefit of society.

EVENT HONOREES

2018-2019 WRSA AWARD WINNERS

Prof. Thomas Szkopek
Prof. Vivian Yargeau
Ibrahim Fakih, Ph.D candidate
Hamed Rafezi, Ph.D. candidate
Prof. Ferri Hassani

2018-2019 WRSA AWARD REVIEW COMMITTEE

Dr. Ronald Chwang
Doug Farnell
Dr. Pedro Alvarez
Prof. Gordon W. Roberts

NSERC GRANTS

Prof. Odile Liboiron-Ladouceur
Bahaa Radi, Ph.D. candidate
Reza Nezami, Postdoc
Prof. Thomas Szkopek
Prof. Viviane Yargeau
Dr. Ibrahim Fakih

CANSBRIDGE-ENGINE FELLOWS

Katherine Sirois
Nayem Alam

IAN MCLACHLIN PRIZES

Neath Nguon
Aissam Souidi

EVENT HONOREES CONTINUED

TECHACCEL GRANTEES

LUNAVOY
David Lin

BASEDASH
Max Musing

DAWASWIFT
Odero Otieno

COOKIESTRUCT
Jiayuan Wang,
Alexander Gupta

AXON
Wilfred Mason
Raffi Hotter
Thomas Ribeiro

THE SWEATER GUYS
Dexter Storey
Michael Cantacuzene
Dom DeFelice

ROKULO
Anthony Laye
Guy Stysis

ZIMDIGESTER
Tino Makuvire
Nicholas Toronga

OZZIE
Louis-Jacques Bourdages
Raffi Hotter
Simon Tartakovsky
Harsh Patel
Etienne Denis
Daoud Piracha
Anna Brandenberger
Jad Hamdan

EVENT HONOREES CONTINUED

2019 ISSUED PATENT TITLES & INVENTORS

FLEXIBLE POLAR ENCODERS AND DECODERS

Prof. Warren Gross, Gabi Sarkis, Pascal Giard, and Camille Leroux

SYNERGISTIC COMBINATION OF A PHENOLIC-RICH MAPLE SYRUP EXTRACT AND AN ANTIBIOTIC

Prof. Nathalie Tufenkji and Vimal Maisuria

METHODS AND DEVICES RELATING TO HIGH GAIN AMPLIFIERS

Prof. Gordon Roberts and Ming Yang

METHODS AND SYSTEMS RELATING TO ENHANCING MATERIAL TOUGHNESS

Prof. Francois Barthelat, Seyed Mohammad Mirkhalaf Valashani, and Ahmad Khayer Dastjerdi

MULTILAYERED BONE GRAFT AND METHOD OF MAKING SAME

Prof. Francois Barthelat, Michael Tanzer, and Sacha Cavelier

FINITE ELEMENT METHODS AND SYSTEMS

Prof.Dennis Giannacopoulos, Yousef El Kurdi, and Prof. Warren Gross

COMBINED MAGNETOMETER ACCELEROMETER MEMS DEVICES AND METHODS

Prof. Mourad EI-Gamal, Mohannad Elsayed, Paui-Vahe Cicek, and Frederic Nabki

MULTI-MODE UNROLLED POLAR DECODERS

Pascal Giard, Gabi Sarkis, Prof. Warren Gross, and Claude Thibeault

OXYGEN FUNCTIONALIZED GRAPHENE NANOFLAKE, A STABLE AND SURFACTANT-FREE GRAPHENE NANOFLAKE NANOFLUID AND METHOD FROM MAKING SAME

Prof. Jean-Luc Meunier, Prof. Dimitrios Berk, Ulrich Legrand, Norma-Yadira Mendoza Gonzalez, and Pierre -Alexandre Pascone

METHOD OF FORMING AN ACOUSTIC TRANSDUCER

Peter Gaskell, Robert-Eric Gaskell, Prof. Thomas Szkopek, and Jung Wook Hong

METHODS AND SYSTEMS FOR NETWORK ADDRESS LOOKUP ENGINES

Prof.Warren Gross and Naoya Onizawa

To see all 2019 patents click here!

THE 7TH ANNUAL JOHN D. THOMPSON ENTREPRENEURIAL DEVELOPMENT SEMINAR

JANUARY 21ST, 2020

The Annual John D. Thompson Entrepreneurial Development Seminar is offered thanks to the generosity of McGill alumnus John D. Thompson (B.Eng. 1957). This seminar was created to inspire Faculty of Engineering students to think about entrepreneurship as a potential career path. In addition, it aims to grow the entrepreneurial culture and spirit across McGill.

The event started off with a presentation from the event's keynote speaker followed by students competing in a tech-idea pitch competition judged by the keynote plus two additional judges, and concluded with a networking cocktail.

KEYNOTE SPEAKER & JUDGE

SAMER SAAB
B.ENG., MBA

Founder and CEO of Explorance, a Montréal-based Journey Analytics provider with business units in Chicago, Chennai, Melbourne, Amman, London, and Amsterdam.

JUDGES

DEBORAH CHERENFANT
PRESIDENT OF JCCM

MARIO VENDITTI
CEO OF INNOVOBOT

TECHIDEA PITCH COMPETITION WINNERS

STAMP

1st Place - $500 Prize

Natasha Jacobson (Mech.Eng, PhD candidate), Trevor Cotter (Mech.Eng., PhD Candidate)
Soft Tissue Active Mechanical Properties device.

ARTIZANKO

2nd Place - $250 Prize & Audience Favorite

Aissam Souidi (Chem.Eng., undergrad), Maria Sarah (Economics), Ivana Wang (South American Studies)
Zero waste packaging solutions for artisans & producers.

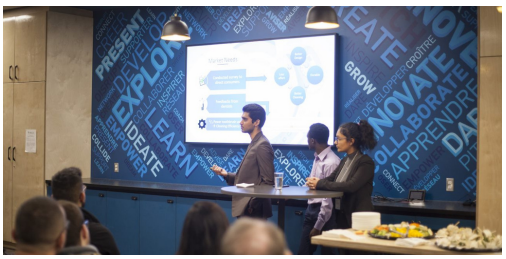
PRIMEAID

3rd Place - $100 Prize

Alexander Gruenwald (Software Eng., undergrad), Rahul Atmanathan (Mech.Eng., undergrad), Rahul Behal (Chem.Eng., undegrad), Kaustav Das Sharma (Computer Eng., undergrad)
SaaS for emergency rooms.

TECHIDEA PITCH COMPETITION FINALISTS

ANGLE SMART



Shlesha Van (Mech.Eng, undergrad), Dian Basit (Elec. Eng., undergrad), Ben Mwaniki (Chem. Eng., undergrad). New electric toothbrush.

PIRIKO

Leander Zemke, Dylan Sandfelder (Comp.Sci., undergrad), Yunxi Chen (Comp.Sci., undergrad), Shiqiao Zhu (Comp.Sci., undergrad), Jonatiel Chirwa (Comp.Sci., undergrad), Siqi Wu (Civil Eng., undergrad) Enabling students to better interact with their university campus.

WOMEN IN ENTREPRENEURSHIP PANEL

FEBRUARY 4TH, 2020

Engine teamed up with POWE (Promoting Opportunities for Women in Engineering) to host a panel where three female McGill Engineering alumni shared their experiences and answered questions about becoming an entrepreneur. A networking cocktail followed the discussion for students to have the opportunity to connect with each panelist!

PANELISTS

NAUREEN ANWAR

CEO of NameShouts, a free web app which helps you pronounce a person's name correctly.

BOYANA STEFANOVA

Community Builder at MAIN, Québec's first network of business accelerators and incubators.

LAURA AL KHOURY

Co Founder of Yuma, a weekly meal subscription for employees starting at $7/meal.

ENTREPRENEURSHIP-IN-ACTION SPEAKER SERIES

SEPTEMBER 24TH, 2019 - FEBRUARY 18TH, 2020

This speaker series provided an opportunity to hear from entrepreneurs, accelerators, incubators, and investors about their experiences and offerings, in order to learn, be inspired, and make connections with them.

SPEAKERS

JUSTIN HUNT

CEO of Blaise Transit, making public buses the most convenient transportation option for everyone.

ODERO OTIENO

Co-Founder and CEO of DawaSwift, a mobile money, medicine delivery, taxi hailing and data science company.

SHAWN ERRUNZA

Co-founder of Jintronix, transforming rehabilitation and providing an innovative, accessible and value driven model for the delivery of physical and occupational therapy.

MICHAEL SIMLA

Co-Founder of Lumenwerx, designs and manufactures innovative LED light fixtures.

OMER DOR

Co-Founder of Sports IQ, a sports modelling startup building next-generation products for the sports entertainment and sports betting industries.

ASAD LESANI

CEO and Co-Founder of Blue City Technology, a startup developing a novel technology to improve mobility and safety in the road networks.

PRE-STARTUP SKILLS WORKSHOP SERIES

SEPTEMBER 16TH, 2019 - MARCH 10TH, 2020

This workshop series provided a crash course in technological entrepreneurship and innovation. Participants learned how to select and use the design thinking and lean startup methodologies for enhancing innovation and discovering your customers. They also learned about intellectual property, how to analyze competition, and the resources and tools available to them through McGill's libraries for patent searching and market research.

TOPICS

Workshop #1 – Technological Innovation and Entrepreneurship 101

Workshop #2 – Market Research and Analysis of Competition

Workshop #3 – Foundations of IP and Patent Searching

Workshop #4 – Customer Discovery

16

WORKSHOPS

85+

ATTENDEES

ALL EVENTS

Mitacs Information Session	Sept 12, 2019
Cooperathon Information Session	Sept 16, 2019
Pre Startup Skills: Technological Innovation and Entrepreneurship 101	Sept 16, 2019
Pre Startup Skills: Technological Innovation and Entrepreneurship 101	Sept 19, 2019
Pre Startup Skills: Foundations of IP and Patent Searching	Sept 23, 2019
Pre Startup Skills: Foundations of IP and Patent Searching	Sept 23, 2019
Entrepreneurship Speaker Series: Blaise Transit	Sept 24, 2019
Pre Startup Skills: Market Research & Analysis of Competition	Sept 30, 2019
Entrepreneurship Speaker Series: DawaSwift	Oct 1, 2019
Pre Startup Skills: Market Research and Analysis of Competition	Oct 3, 2019
Cansbridge Fellowship Information Session	Oct 7, 2019
McGill Engine Centre Opening	Oct 8, 2019
Pre Startup Skills: Customer Discovery	Oct 10, 2019
Entrepreneurship Speaker Series: Jintronix	Oct 16, 2019
Pre Startup Skills: Customer Discovery	Oct 26, 2019
Entrepreneurship Speaker Series: LUMENWERX	Nov 19, 2019
Celebration of Innovation and Entrepreneurship	Nov 27, 2019
TechAccel Grants Information Session	Jan 13, 2020
Pre Startup Skills: Tech Innovation and Entrepreneurship	Jan 15, 2020
7th Annual John D. Thompson Entrepreneurial Seminar	Jan 21, 2020
Pre Startup Skills: Market Research	Jan 22, 2020
Design NSERC Chair Information Session	Jan 27, 2020
McGill Engine/MDC/Cube/Factory Tour	Jan 28, 2020
Pre-Startup Skills: Foundations of IP and Patent Searching	Jan 29, 2020
Women in Entrepreneurship Panel	Feb 4, 2020
Pre-Startup Skills: Customer Discovery	Feb 6, 2020
Entrepreneurship-In-Action with Omer Dor	Feb 11, 2020
Pre Startup Skills: Tech Innovation and Entrepreneurship	Feb 11, 2020
Entrepreneurship In Action: Asad Lesani	Feb 18, 2020
Pre Startup Skills: Market Research	Feb 11, 2020
Pre-Startup Skills: Foundations of IP and Patent Searching	Feb 25, 2020
Pre Startup Skills: Customer Discovery	Mar 10, 2020
Reisman Foundation Reception	Mar 11, 2020
Startup Internship Workshop # 1 Tech Innovation & Entrepreneurship	June 9, 2020
Startup Internship Workshop # 2 Design Thinking	June 11, 2020
Startup Internship Workshop # 2 Intellectual Property	June 12, 2020
Mitacs Information Session	July 21, 2020
TechAccel Fall 2020 Information Session	Aug 26, 2020

THE ENGINE CENTRE NEEDS YOUR SUPPORT!

CALL FOR VOLUNTEERS

Volunteers are an essential part of the university community; your participation and financial support are key elements in ensuring that coming generations of students achieve their goals.

WE ARE LOOKING FOR

01 **TECHACCEL MENTORS**

02 **GUEST SPEAKERS & JUDGES**

03 **WRSA PROPOSAL REVIEWERS**

LEARN MORE HERE!

FINANCIAL SUPPORT

The Innovation Fund lies at the heart of Engine's mission of encouraging entrepreneurial and innovative thinking. The fund supports team based, innovative projects through the TechAccel grants, that help students to jump start and accelerate technologically based ideas that have business or social impact potential.

The Innovation Fund is being supported by alumni:

Jim & Barbara Brodeur (B.Eng. '56)
Ian Mclachlin (B.Eng. '60)
Pasquale Di Pierro (B.Eng. '76)
Fonex Data Systems Inc.
The Anna & Louis Viglione Foundation (B.Eng. '78)
Michael Barski (B.Eng. '68)
Mark Levine (B.Eng. '91)
Arthur Levine (B.Eng. '61)
Howard Stotland (B.Eng. '66)
Robert Walsh (B.Eng. '65)

The Innovation Fund needs your support through:

1. An annual contribution
2. A named endowment within the Innovation fund

For more information please contact:
Mr. Krish Dasgupta, Director, University Advancement
krishanu.dasgupta@mcgill.ca