

Hamilton Health Innovation Check-up: Meeting Minutes

April 2022

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STANDING AGENDA TOPICS:

- **Guest Speaker Discussion:** insights around the experience and expertise of an invited speaker, focusing on a subject that may be of interest to the broader community
- **Communicate:** share recent successes, upcoming events, innovation pipeline and new products, health innovation trends, etc.
- **Collaborate & Accelerate:** welcome new members to community, partnership opportunities, discover programming and resources available to the community, discuss market gaps and challenges, learn about potential funding opportunities, new RFPs issued, etc.

Facilitator & Note Taker
Virtual Location

Alex Muggah, Director, Synapse Consortium
Join Zoom Meeting: <https://zoom.us/j/405351918>
Dial in: +1-647-558-0588,,405351918#
Register here:
<https://us02web.zoom.us/meeting/register/uZQodOyppzoiQnRwfvVuEJtEMUpKPUZPzg>

Next Monthly Check-up: May 30th 9:00 – 10:00am | McMaster Innovation Park (via Zoom)
Please sign up to our [mailing list](#) to receive meeting minutes and other important updates.

Finding collaborative partners for health companies and researchers can be difficult. Synapse has created the [Hamilton Health Ecosystem Directory](#) and the [Health Innovation Partnership Portal](#) (HIPP) to facilitate finding new partners within Canada's leading health research and educational ecosystem located in in Hamilton, Ontario.

Minutes for our monthly check-up meetings are not published and are for reference purposes only. We do our best to ensure all information is accurately portrayed, and that no privileged/private information is inappropriately disclosed. Past meeting minutes can be access through a public Dropbox, using the following [link](#).

For additional information on any subject, to contact a presenter directly, or should you have an adjustment to make to the notes made here, please contact: Alex.Muggah@SynapseConsortium.com. Updates will be reflected in a revised version of the monthly minutes.

As a result of the COVID-19, all in-person conferences and meetings have been cancelled. We are trying to track down events that will be held virtually and will try to keep our calendar up to date.

If you have an event that you would like listed here, please contact us at: info@synapseconsortium.com

Hamilton Health Innovation: Calendar Highlights

Check out Synapse's [online calendar](#)

April

- May 5-7: [Innovations in the Science of Cannabis Conference](#) (DeGroot Centre for Medicinal Cannabis)
- May 9-13: [Career Expo: Starting Your Career Journey](#) (Life Sciences Career Development Society)
- May 10: [Connections @The Clinic: Featuring Eveline Passman of Tenomix](#) (McMaster Clinic)
- May 10-12: [EFFERVESCENCE 2022](#) (Effervescence MTL)
- May 11: [Digital Therapeutics: Is Canada Ready for Next Frontier in Digital Health?](#) (Digital Health Canada)
- May 12: [How Cell and Gene Therapies Can Transform the Treatment of Solid Tumours](#) (OICR)
- May 17-18: [Canada's Medtech Conference](#) (Medtech Canada)
- May 18: [2022 Celebration of Success Awards Presentation](#) (LSO)
- May 24: [The Race for Lab Space in Ontario](#) (Sustainable Labs Canada)
-  May 25-27: [MaRS Impact Health](#) (MaRS Discovery District)
- May 30: [Hamilton Health Check-up](#) (Synapse Consortium)
- May 31- Jun 2: [Canada SynBio Conference 2022](#) (Ontario Genomics)

May & Beyond

- Jun 13-16: [BIO International Convention](#) (BIO)
- Jun 1-2: [E-Health Conference and Tradeshow 2022](#) (Health Infoway, CIHI & Digital Health Canada)
- Jun 13-16: [BIO International Convention](#) (BIO International)
- June 13: [Connections @The Clinic](#) (McMaster's The Clinic)
- Jun 20-23: [Collision 2022 Conference](#) (Collision)
- Jun 22: [Access IO with Lakeridge Health and Ontario Shores Healthcare](#) (Access IO)
-  Jun 27: [Hamilton Health Check-up](#) (Synapse Consortium)
- Aug: [Startup Survivor Pitch Competition](#) (The Forge)
- Sep 19-22: [Creating Communities of Innovation](#) (AURP)
- Sept 22: Annual President's Golf Classic (Mohawk Foundation)
- Nov 10-11: [Clinical Trials Conference 2022](#) (Clinical Trials Ontario)
- Dec 10: [I'm Every Woman: A Concert of Greatest Hits](#) (Hamilton Health Sciences Foundation)

Looking to engage the Hamilton Health Ecosystem?



In partnership with Innovation Factory and Synapse Consortium partners, leverage up to \$100,000 to work directly with an academic or hospital partner in the Hamilton ecosystem. Funding will support collaborative projects for Ontario-based life science firms requiring clinical/research expertise, evidence, or data to commercialize their innovation. Learn more about SOPHIE [here](#)



Leverage up to \$15,000 in funding to work directly with the Research Administration groups at Hamilton Health Sciences or The Research Institute at St. Joe's Hamilton to create the pre-trial protocols and documents required to undertake a commercialization project or clinical trial in one of Canada's leading research hospitals. Learn more about HEALTHI [here](#)

Time allotted | 30 Minutes

Topic: **Guest Speaker Discussion**

Insights around the experience and expertise of an invited speaker, focusing on a subject that may be of interest to the broader community

Guest Speaker Discussion

Guest Speaker(s):

- [Frank Fiorenza](#)
Product Development Manager & Product Development and National Sales Manager
[McArthur Medical](#)

[presentation slides used, and are available upon request]

Discussion

[the following is a synopsis of the discussion, and has been lightly edited for length and clarity]

Introduction & History of McArthur Medical

My name is Frank, and I am the Product Development Manager at [McArthur Medical](#). I'm a respiratory therapist by trade and previously worked at the University of Ottawa. I am on the board of advisors for the Canadian Society of Respiratory Therapists and the Respiratory Therapy Advisory Council for Algonquin College.

I invented the suite of [Flusso](#) devices sold by our company. Throughout our history we've been training clinicians, focused on distributing, presenting and educating them on medical products. We have 11 reps across the country, coast to coast. With that we have 10 registered respiratory therapists on staff, including myself.

McArthur Medical was established in 1984. We are a distributor of specialty medical devices prioritized on advancing patient care. We offer many new and innovative products for hospital, medical professionals, and home-care use. A privately owned family company, McArthur Medical has been growing consistently over the past few decades. We recently built out a 30,000 sq ft warehouse (on 50 acres of property) just south of Hamilton.

We began developing our own products in 2016, and then transitioning into manufacturing. In 2017, we bought another company to expand into hospital in home care sales, and in 2021 we started the journey of ISO 13485, which we are just finalizing our MD SAP. Lastly, we have started the process of getting our products into US and global markets.

The Flusso Device

Flusso adapters maintain a closed ventilator circuit. Flusso devices can be used with passive or active humidity systems. Their use prevents unsafe disconnection of the patient from the mechanical ventilator in a variety of situations, including but not limited to: circuit change, HME change and transfer to transport ventilator.

If you type "circuit disconnect", you'll find 591 articles, most are related to an electrical circuit (rather than physical circuits). We physically remove a patient from ventilators so frequently that we don't even keep track of it. There are many therapies/treatments that result in people being disconnected from the ventilator – with the main one being patient transport.

Our Flusso device keeps the circuit closed for 18 of the 20 items on a list of common reasons for circuit disconnects. Disconnection from a ventilator can cause harm to patient. For example, if you image rat lungs they go from being pink and nicely inflated to completely collapsing when disconnected. Once the ventilator is

Guest Speaker Discussion

reconnected, the lungs partially reinflate with areas of over distention and others remaining completely collapsed. Even if fully reinflated, there is a shock to the patient associated with this disconnect. Even healthy lungs (after an abrupt deflation) can injure them – resistance of the heart pumping, fluid leakage, etc.

A patient moving through a hospital may experience up to 20 disconnections in a 24-hour period. That is twenty opportunities for the lungs to collapse and for staff to be exposed to what is present in the circuit. COVID really brought this secondary exposure risk to light – but it was critical pre-COVID, and remains so today. We are currently involved in a study which puts Flusso into the operating rooms of a hospital. Our partner is looking to stop circuit disconnects right from the entry to the OR. We hope to stop 6,000 circuit disconnects before the patient gets to the ICU.

Airborne contaminants are not discriminatory, then you can be exposed to what's affecting the patient. One Flusso can protect +70 healthcare workers. Using Flusso eliminates ventilator disconnects, reducing exposure to the hospital environment. According to a study done by Carleton University, using Flusso produces no environmental exposure, as compared to when Flusso is not used which saw a dose of 25-46% of nitrous oxide (that was being used to treat patients) is released into the air. Another study at Sick Kids showed that sustained inflation through ventilation of the lung can injure previously healthy lungs, as well as impact the ventricles of the heart from increase lung pressure due to over inflation.

The Ah-HA moment.

For me, I my ah-ha moment came while working with patients who were on a ventilator. I would disconnect the patient from the ventilator, stick it under the pillow, and then reconnect them afterwards. Something that should take a few seconds would take 30-60 seconds. We had \$60,000 ventilators, and an ad hoc approach to disconnects is how we're solving it.

Flusso bypass adaptors allow for the introduction of a secondary ventilation source without having to disconnect the primary. The internal valve works using fluidics (controlled by pressure generated by the ventilator). It's extremely small, lightweight, and has a tethered cap.

All Flusso devices are agnostic to therapies, and are not dependent on specific machine, mode or circuit. It's a completely universal solution. It has a unique valve that works based on the principal that the pressure of the 1st port is greater than the pressure of the 2nd port.

They are made in Canada – which was important to us, that we kept everything made in Ontario. Upon release in 2018, it got the medical design award in New York City, and 3rd place at Innovation Prize in Paris. It was listed on Premier and Vizient buying groups in the US, and we just secured a procurement deal with Mohawk-Medbuy here in Ontario.

Introducing a Little Brother Device - Flusso TFI

We improved the design with [Flusso TFI](#), which is tailored to infants and babies, as well it facilitates bronchoscopy (taking pictures down bronchial tubes).

Instead of pressure, the practitioner can squeeze the tube, to avoid short disconnects. This is also made in Canada – and a few months ago, we were prequalified for Innovative Solutions Canada (we're continued looking for partners in the government). Flusso TFI is the 2022 winner of [Medical Design Excellence awards in New York City](#), the only Canadian and respiratory innovation solutions at ceremony.

What's Next – Where do we go?

Guest Speaker Discussion

We had an interesting journey to get back on track when COVID hit. We are involved with the Ontario Together Fund, that has provided support for developing both devices. Global expansion also has huge potential. We've been involved with Tech Alliance and IRAP, and are just now in exploring the process to export as we enter US and global markets. As we begin to engage the US, we are already in a few major institutions (University of California, Hershey Medical Center, Children's Hospital of Orange County), as well as several paramedic services that are using Flusso at the front line.

Furthermore, we continue to conduct additional research to support additional Flusso specific publications. In my opinion, any patient on a mechanical ventilator should be using the Flusso suite of devices; so next is developing the research to support clinicians getting on board with adopting and deploying the technology.

Questions & Answers

Question: How often can you reuse the Flusso devices?

Answer: You cannot reuse a Flusso Device, but it can be used by a single patient use for a maximum average of 7 days. Once the patient journey is over, then you can discard the device. That said, if a patient is on long-term ventilation, then protocols dictate that like every other accessory after 7 days it will need to be changed. We will eventually work on extending the duration past 7 days.

Question: What are the challenges you are facing? Are there any opportunities where you might need input or support from the community?

Answer: The problem with innovation is that it solves a problem to which there is no solution. When you come with something new, stakeholders and clinicians see the need but making the solution mainstream can be a challenge. For us, there are two main things we could use support 1) more research – partners that could deal with Flusso specifically; and 2) a true hospital partner. The blessing and the curse of COVID was that sales spiked, but as COVID tapers you get branded as a COVID product. Trying to get away from the shadow of COVID.

Question: What are you experiencing with regards to distribution channels with hospitals?

Answer: We are selling directly to hospitals in Canada through our direct sales force. We have 8 independent dealers that have come together under one umbrella. Each has their own niche because of the difficulty with an innovative device is you have to show and educate in order to sell.

We also recently signed a global distribution agreement with a company out of the U.S. They are active in 120 countries, so we are going to partner with them from a distribution and regulatory standpoint. It is still going to take us over a year to stand this up, but alone it would likely take us about 4-5 years.

Question: What is the background of the name Flusso?

Answer: I came up with the name and the logo. The word *luso* means “fluid flow” in Italian, and so because we are manipulating gas flow, that's where it originated from.

Time allotted | 15 Minutes

Topic: **Communicate**

Recent successes, upcoming events, innovation pipeline, new products, health innovation trends, etc.

Discussion	Presenter
<p>Innovation Factory’s HEALTHI program renewed by NRC-IRAP</p> <p>Innovation Factory is excited to share that the successful Hamilton Ecosystem to Accelerate & Leverage Trials of Health Innovation (HEALTHI) program has been renewed and expanded by the NRC Industrial Research Assistance Program (IRAP). The program is delivered in partnership with the Synapse Life Science Consortium.</p> <p>This year, 15 companies will be able to leverage up to \$15,000 in funding to work directly with the Research Administration groups at Hamilton Health Sciences or The Research Institute at St. Joe’s Hamilton to create the pre-trial protocols and documents required to undertake a commercialization project or clinical trial in one of Canada’s leading research hospitals.</p> <p>Learn more about HEALTHI here or reach out to HEALTHI Program Manager, Michael Jones at (Michael.Jones@innovationfactory.ca)</p>	<p>Karen Linesman (Innovation Factory)</p>
<p>McMaster Seed Fund supports two startups in first round of funding with \$735,000</p> <p>Two McMaster startups – Syndemix and Insight Medbotics – have received a combined \$735,000 to move their innovations closer to reality in the first round of investments of the McMaster Seed Fund.</p> <p>Synmedix — a biotechnology company founded by Eric Brown, Distinguished University Professor of biochemistry and biomedical sciences — received \$300,000 to further its novel antibiotic platform. The technology, developed in Brown’s lab, enhances the efficacy and spectrum of many antibiotics through the action of bicarbonate and can be broadly applied to antibacterial drug discovery.</p> <p>Insight Medbotics Inc (IMI) — a medical devices company co-founded by Mehran Anvari, professor of surgery — received \$435,000. The company aims to establish itself as the pre-eminent company in MRI surgical robotic imaging and diagnostics for breast cancer.</p> <p>Karen Mossman, vice-president, research, says the first call for McMaster’s Seed Fund was met with great enthusiasm: 18 proposals were submitted from a variety of disciplines within the faculties of Engineering, Science and Health Sciences; 12 were invited to pitch to the investment committee; and four were invited for additional due diligence.</p> <p>“The MSF was designed to foster our culture of commercialization and social innovation across the university in an effort to positively impact society and it’s certainly living up to its mandate,” says Mossman.</p> <p>Damian Lamb, co-founder and managing director at Genesys Capital, serves on the 11-member investment committee. The Mac grad says he’s not only impressed with the commercial potential and breadth of McMaster’s research, but also the university’s focus on commercialization and its commitment to the Seed Fund.</p>	<p>Leigh Wilson (McMaster MILO)</p>

Discussion	Presenter
<p>“McMaster, over the last decade, has made exceptional efforts to develop an ecosystem for commercialization and the Seed Fund is an integral part of that,” he says. “Seed funding is fundamentally different than grant funding and is critical to get inventors to their next port of call in bringing their ideas to market.”</p> <p>Read the full Brighter World article here</p>	
<p>Ontario invests \$40 million to grow global life sciences sector at Hamilton's McMaster Innovation Park</p> <p>Hamilton could become the “catalyst” that will see Ontario become a global hub for biomanufacturing and life sciences growth.</p> <p>Invest Ontario is providing OmniaBio Inc. with about \$40 million in a loan as part of a new \$580-million biomanufacturing facility at McMaster Innovation Park on Longwood Road. The goal for the Ontario government is to double venture capital investment in the province’s life sciences sector to \$725 million annually from its current five-year average of \$361 million by 2030.</p> <p>Michael May, chair of OmniaBio Inc. and president of CEO of CCRM, which has research facilities in downtown Toronto at the MaRS Centre, said there will be “at least” 250 highly skilled, good-paying jobs with the project.</p> <p>He said the 250,000-square-foot biomanufacturing facility, the largest of its type in the country, will be built in two phases. The first building will be completed in 2024, with the other one finished in 2025.</p> <p>Read the full Hamilton Spectator article here</p>	<p>Scott Rasmussen (MIP)</p>
<p>Two Hamilton innovators win national Arthritis Ideator Awards</p> <p>Two Hamiltonians were among 4 winners (and eight finalists) in a national competition which provides funding for innovative projects that help people suffering from arthritis.</p> <p>The Arthritis Ideator Program — run by the Arthritis Society — received 21 submissions from innovators, entrepreneurs, and startups across Canada working on solutions to help improve the lives of people with the disease. Lianna Genovese and Matthew Rosato invented devices to assist those suffering from arthritis. Two of the winning the awards were Guided Hands by ImaginAble Solutions and WithinStride by PROVA Innovations, both from Hamilton, Ontario.</p> <p>The Arthritis Ideator Program is awarding a total of \$200,000 — with the top three projects receiving a \$50,000 prize, as well as a People’s Choice Award of \$50,000 based on popular votes.</p> <p>For more information, click here</p>	<p>Alex Muggah (Synapse)</p>
<p>Ontario Together Fund Supports NERv Technology’s Domestic Manufacturing</p> <p>Through the Ontario Together Fund, the Ontario provincial government has committed \$559,200 to support the domestic manufacturing and commercialization of NERv Technology’s breakthrough post-operative monitoring solutions as part of the company’s \$1.118 million</p>	<p>Alex Muggah (Synapse)</p>

Discussion	Presenter
<p>investment. NERv Technology is currently being funded by SOPHIE to work with Hamilton Health Sciences on a collaborative SOPHIE commercialization project.</p> <p>NERv Technology Inc. is a medical device manufacturer that aims to re-imagine care by empowering healthcare providers with data-driven solutions that improve patient outcomes. NERv works with world-renowned institutions and surgeons in Canada and the United States to develop and commercialize hardware and software solutions that provide real-time insights into surgical site healing and patient recovery following a variety of surgeries.</p> <p>The Ontario government's investment in NERv will allow the company to expand and create jobs, sustainably manufacture its solutions domestically and support the commercial launch of their innovative solutions in Canada and international markets later this year.</p>	
<p>Province supports MedTech Centre of Excellence at Medical Innovation Xchange (Financial Post, May 3, 2022)</p> <p>Medical Innovation Xchange (MIX) is pleased to announce an innovative partnership with the Ontario Ministry of Labour, Training and Skills Development through the Skills Development Fund, to strengthen the provincial health innovation and MedTech ecosystem, build successful domestic MedTech companies and ensure the talent, IP and solutions developed in Ontario can succeed while staying in Ontario.</p> <p>A \$1.6M investment will be made to support talent development and retention within the MedTech sector through a program called the Medical Innovation Knowledge Xchange (MIX-KT). The Skills Development Fund will also help to facilitate the purchase of advanced MedTech equipment to help upskill new and existing talent in the MIX Acceleration Zone (MIX-AZ), a 10,000 square foot MedTech Centre of Excellence located at MIX headquarters in Kitchener. These investments will help to train and upskill up to 400 people in the sector, create and sustain job growth as well as local product development. MIX looks forward to accepting applications for the MIX-KT later this year.</p>	<p>Elliot Fung (MIX)</p>
<p>Innovation Factory part of new i.d.e.a Fund launched by Innovation Guelph offering \$30,000 for startups focused on creating an inclusive and equitable recovery</p> <p>i.d.e.a. Fund is a program that fosters inclusion, diversity, environment and acceleration while contributing to a green recovery, and is delivered in partnership with the following Ontario Regional Innovation Centres (RICs): Innovation Guelph, Haltech, Innovate Niagara, WEtech Alliance, Innovation Factory and TechAlliance of Southwestern Ontario, to support a more sustainable economy while fostering an inclusive and equitable recovery in southern Ontario.</p> <p>This program will provide specialized industry expertise to develop growth plans and related strategies in the areas such as talent attraction, raising follow-on investment, product development and quantification of product benefits/market value propositions, commercialization of intellectual property, and market diversification. Each RIC will distribute up to a maximum of \$30,000 in matching seed funding to select innovative businesses in various sectors.</p> <p>If your company is in southern Ontario, has a project that might fit the criteria and is interested in benefiting from a financial injection of seed funding and executive-level mentorship.</p> <p>Read more about the program launch in the Betakit article here</p>	<p>Michael Jones (Innovation Factory)</p>


Discussion	Presenter
<p>Apply to LiONS LAIR 2022, Hamilton’s premier pitch competition</p> <p>Year-round support takes on many forms, but Innovation Factory’s LiONS LAIR rallies all the forces together to showcase the best in local talent and innovation at Hamilton’s leading pitch competition. Companies in various sectors, including life sciences, are welcome to apply.</p> <p>Celebrating its 12th anniversary, LiONS LAIR is an annual competition presented by Innovation Factory in collaboration with the City of Hamilton’s Economic Development Office and brings the entrepreneurship and innovation community together. Companies receive training and mentorship to grow your business, increase revenues, and attract investment.</p> <p>The 2022 LiONS LAIR pitch competition accepts 16 finalists who will receive training and coaching, all in preparation to pitch and compete for big prizes!</p>	<p>Jennifer Gauvreau (Innovation Factory)</p>
<p>Hamilton Health Science to go live with EPIC Electronic Medical Records System</p> <p>On June 4, Hamilton Health Sciences (HHS) is going fully digital with a new hospital information system called Epic. Healthcare providers will do away with paper charts, and all health information will be recorded and accessed digitally, from test results to medication lists to after-visit summaries. For HHS heart patients, this means an improvement in communication and access to test results.</p> <p>The Epic system includes a secure patient portal called MyChart. Once you set up a MyChart account by signing into the app on your phone or the MyChart website, you’ll have access to your health records with a history of each visit from June 2022 onward. This includes notes and an after-visit summary document which identifies medication changes, orders placed during your hospital visit and any instructions or education provided during your visit.</p> <p>Everything will be on hand to review whenever you’d like. So, no more frantic note taking during appointments and no more repeating your list of medications to every new healthcare provider.</p> <p>Read the full Canadian Healthcare Technology story here</p>	<p>Alex Muggah (Synapse)</p>
<p>ventureLAB Announces \$2.5M from the Government of Ontario to Expand Hardware Catalyst Initiative; Introduces MedTech Stream</p> <p>ventureLAB, has announced a \$2.5 million investment from the Government of Ontario to establish a MedTech-specific stream within its Hardware Catalyst Initiative (HCI), Canada’s only lab and incubator for hardware and semiconductor companies. The timely investment will enable ventureLAB to support made-in-Ontario medical solutions and will strengthen Ontario’s MedTech sector and technical capacity to fight COVID-19 and respond to future pandemics.</p> <p>The funding will expand the Hardware Catalyst Initiative’s state-of-the-art testing and prototyping capabilities. It will also be used to establish a MedTech-specific stream, with a new lab in Vaughan, Ontario, focused on the unique hardware and semiconductor needs of healthcare companies. By accessing HCI’s network of 35+ global industry leaders – who have committed over \$50 million in resources and mentorship – as well as ventureLAB’s in-house experts with decades of designing, manufacturing, and go-to-market expertise, MedTech founders will experience accelerated commercialization time, reduced cost, access to deep sector expertise, and intensive growth capital. The two-year project will result in high-quality</p>	<p>Alex Muggah (Synapse)</p>


Discussion	Presenter
<p>employment opportunities as well as a range of made-in-Ontario technologies, innovations, and intellectual property.</p>	
<p>Notice of upcoming funding opportunities - Clinical Trials Fund - CIHR (cihr-irsc.gc.ca)</p> <p>CIHR is pleased to provide this pre-announcement of the Clinical Trials Fund (CTF) in order to allow the research community time to prepare and respond to what will be an expedited process. This \$250 million funding opportunity over 3 years stems from 2021 Federal Budget announcements and in the first phase, is an integral component of Canada's Biomanufacturing and Life Sciences Strategy. In support of this, the CTF will provide funding through 3 specific vehicles: platforms with the development of a pan-Canadian Clinical Trials Consortium; people with the funding of training platforms; and, projects through the funding of a broad spectrum of clinical trial initiatives</p>	<p>Joon Kim (NRC-IRAP)_</p>
<p>MGD-HICE Educational Webinars & DevTank Meetings</p> <p>Operating out of the Michael G. DeGroot School of Medicine at McMaster University, the Michael G. DeGroot Health Innovation, Commercialization & Entrepreneurship (MGD-HICE) aims to accelerate the exploration of health innovation opportunities and creation of socioeconomic impact.</p> <p>Check out the full suite of programming here</p>	<p>Sarrah Lal (MGD-HICE)</p>

Time allotted | 15 Minutes

Topic: **Collaborate & Accelerate**

Partnership opportunities, programming and resources available to the community, market gaps and challenges, learn about potential funding opportunities, discuss new RFPs issued, etc.

Discussion	Presenter
<p>Want to Connect with your Ecosystem: Check out the Synapse Health Ecosystem Directory</p> <p>Synapse has created a Director of +200 private- and public-sector organizations in the Hamilton (and regional) health innovation ecosystem which work alongside the Synapse Consortium to support of the commercialization of health innovation. Learn more about what others are up to, and identify potential collaborative partners at: www.synapseconsortium.com/directory</p>	<p>Alex Muggah (Synapse)</p> 
<p><u>Engaging Mohawk College's IDEAWORKS</u></p> <p>IDEAWORKS projects in general (of which, MEDIC is one area) which was provided and may help with identifying if Mohawk College can support our companies with projects. This might be a refresher for some or all of us, but highlighting nonetheless:</p> <p>Tips for Innovation Factory Referrals to IDEAWORKS</p> <ul style="list-style-type: none"> • Our four innovation centres (MEDIC for Digital Health, AMIC for 3D printing, EPIC for energy efficiency related projects and MTIC for Medical Technologies related challenges) are active during this time- but note that due to existing commitments, are often looking at projects one month to three months in the future. • Other areas of expertise are on a case by case basis, especially this year, with a number of our faculty committed to teaching and revamping courses • The ideal applied research partner is one that is in the scaling stage; they have some revenue and can meet a lot of the funding agencies criteria for funding or want to self-fund a research project. Typically what we look for is 2+2; two years in business with two employees • We recommend working with us on projects that aren't mission critical but can help the company explore an innovative idea. <p>What about start-ups?</p> <ul style="list-style-type: none"> • If they require a few tips or advice, we can normally chat with them (or if there is a critical mass -like five or six companies in a space-, we can do a webinar type discussion). • They can see about the availability of capstone projects, where students generally work on projects for a four month period, for free, in order to get course credit. It may help with MVPs. <p>Contact Andrea Johnson for more information: andrea.johnson4@mohawkcollege.ca</p>	<p>Andrea Johnson (Mohawk College)</p>
<p>The CONNECTION - McMaster University Online Partnerships Portal!</p> <p>The Connection is a new program offered by McMaster's Office of Community Engagement (OCE) designed to facilitate online, mutually beneficial partnerships between campus and local Hamilton community organizations. As communities look for ways to adapt and rebuild in response to COVID-19 The Connection will make the process of addressing Hamilton community and University identified needs easier by providing online tools and resources. It's a way for everyone who sees themselves as part of a collective community-campus effort to connect and respond to COVID-19 locally</p>	<p>Gay Yuyitung (MILO)</p>

Discussion	Presenter
<p>Collaborating with McMaster Institute for Infectious Disease Research (New Intake Form)</p> <p>In addition to our ongoing COVID-19 research initiatives at McMaster, the Michael G. DeGroot Institute for Infectious Disease Research is mobilizing its strong research community to assist Canadian researchers and businesses in their attempts to find solutions to the international crisis. The IIDR teams have the capacity to assist with the testing of anti-viral compounds and products, as well as the testing of products or devices aimed at sterilization. This includes new methods for sterilizing personal protective equipment. They are able to offer services in the following areas:</p> <ul style="list-style-type: none"> • BSL2 cell culture infection with representative human coronaviruses; • Testing of methods or products that are designed to inactivate the virus; • Biochemical/enzyme studies with anti-viral agents. <p>Cell culture and small animal models of SARS-CoV-2 infection can be performed in McMaster’s secure biosafety level 3 facility. Availability for BSL3 testing is very limited, and projects requiring this type of work will be screened and prioritized by an internal committee.</p> <p>If you have a product or innovation that you are interested in pursuing further and feel that we could be of assistance to you, please reach out to us through the online form. Each project will be evaluated to determine if McMaster has the capabilities and capacity to perform the required testing.</p>	<p>Gay Yuyitung (MILO)</p>
<p>Hamilton-based technologies available for licensing</p> <p>Each year researchers at McMaster, Hamilton Health Sciences, and St. Joseph’s Healthcare Hamilton make new discoveries that lead to new products, services, or process improvements to help companies expand their pipeline or increase their productivity. The business development team at MILO is here to help you tap into and access these discoveries as efficiently as possible. MILO’s objective is to support effective transfer of these technologies to companies for social and economic benefit and enable the continued growth of research excellence at the institutions.</p> <p>Please contact Glen Crossley, Associate Director, Business Development and IP or search the list to see some of the technologies currently available for licensing or further R&D</p>	<p>Glen Crossley (MILO)</p>
<p>Hamilton Innovation Partnership Portal</p> <p>Synapse has created the Hamilton Innovation Partnership Portal (HIPP) to make the process simpler and more streamlined to find new partners within Canada’s leading health research and educational ecosystem. It is a way for companies to interact with the Hamilton community. A streamlined approach, to have Synapse represent everyone. We’ve set up an intake form for companies to direct request to the portal. Portal is online through the Synapse website: http://synapseconsortium.com/partner/</p>	<p>Michael Jones (Synapse)</p> 
<p>Submit Community Events on the Innovation Factory Calendar</p> <p>Our calendar is home to Innovation Factory workshops and networking events as well as events from the community which help support our local entrepreneurs and businesses. If you have an event which may a fit, please submit it and we will review it within five business days.</p>	<p>Annie Horton (Innovation Factory)</p>

Discussion	Presenter
<p><u>Government Call for Innovative Solutions</u></p> <ul style="list-style-type: none"> • Call for Suppliers (Federal): In support of the Government of Canada’s whole-of-government response to Coronavirus disease (COVID-19), they are asking suppliers about their ability to provide a variety of products and services. • Call for Suppliers (Ontario): request for information from companies able to supply emergency products to help fight Coronavirus • Federal Government Call to Action for Canadian Manufacturers to support businesses to rapidly scale up production or re-tool their manufacturing lines to develop products made in Canada that will help in the fight against COVID-19. Please refer to the product specifications and requirements for Canada’s medical supply needs. • Health Canada will facilitate earlier access to a vaccine, or therapeutic product for COVID-19 to expedite the review of COVID-19 related health product submissions and applications. • Government of Canada is speeding up the importation and sale of medical devices used to diagnose, treat or prevent COVID-19. Here is information about expediting access and authorization for diagnostic devices for use against coronavirus (COVID-19). • Government of Canada will launch specific challenges through the Innovative Solutions Canada (ISC) program and will rapidly select the best projects to accelerate development and testing of promising innovations that can have a direct impact on our health care response. Also use the ISC Testing Stream to become the first customer of these innovative products. • The National Research Council of Canada (NRC) will organize an NRC COVID-19 Challenge Program, composed of teams of government, academic and private sector partners to address a range of medium term PHAC and HC needs, including personal protective equipment, sanitization, diagnostic and testing, therapeutics, and disease tracking technology. The most promising solutions will be selected for procurement, working with Innovative Solutions Canada. • DISRUPT COVID-19, a Government of Canada virtual forum that will include representatives from the National Research Council (NRC), the Industrial Research Assistance Program (NRC IRAP), Health Canada, the Public Health Agency of Canada (PHAC) and Innovation and Science, Economic Development (ISED), is being organised as a pilot initiative with the goal of getting technologies on the ground helping patients and health care professionals as fast as possible. • Next Generation Manufacturing (NGen) will invest \$50 million in Supercluster funding to support companies as they rapidly respond to the COVID-19 pandemic by building a Canadian supply of essential equipment, products, and therapeutics. For more information on NGen’s COVID-19 Response Program, see the full bulletin, review the project guide, and share your capabilities in the form below. • Ontario Website for PPE Suppliers to Post Products for Sale: Review a list of companies that sell personal protective equipment (PPE) and other supplies to keep your employees and customers safe from COVID-19. Apply to be added to the workplace PPE supplier directory <p>The Digital Technology Supercluster has launched the COVID-19 Program is focused on unlocking solutions to protect the health and safety of all Canadians and our economy through the development, deployment, and scaling of digital technologies.</p>	<p>Innovation Factory & Synapse Consortium</p>

Our Synapse Consortium partners are at the forefront of addressing COVID-19 in the City of Hamilton, and across Ontario: doctors and nurses caring for patients, public health officials coordinating city-wide responses, conducting epidemiological research at Canada's leading research hospitals, and innovative companies developing products to provide needed supplies and services.

Throughout all of this, Synapse remains committed to our core goal of facilitating connections across the Hamilton health ecosystem, bringing public- and private-sector actors together to enable innovation and resolve pressing health challenges. While Synapse staff are not in the office, we're still providing support virtually – so please continue to reach out and find out how we can help!

If you want to get in touch, please contact [Alex Muggah](#), Director of the Synapse Consortium. Separately, we've assembled links to information that has been compiled by organizations across Ontario (and Canada) to assist you with navigating the COVID-19 pandemic.

Learn More About COVID-19: Online Resources

Synapse Consortium partners have put together a significant amount of information and updates on the status and activities related to containing and addressing COVID-19 for both businesses and citizens in the region:

Hospitals and Research Centres

- Hamilton Health Sciences: [COVID-19 Updates](#)
- St. Joseph's Healthcare: [Research Institute](#) and [Hospital](#) Update
- McMaster Institute for Infectious Disease Research: [News and Updates](#)
- McMaster University: [COVID-19 Update](#)
- Mohawk College: [COVID-19 Update](#)

Hamilton Community Partners

- Mohawk College [Collaboration Landing Page](#)
- McMaster University [Collaboration Landing Page](#)
- City of Hamilton: [City Response and Resources](#)
- Hamilton Public Health: [Learn more about COVID-19](#)
- Innovation Factory: [COVID-19 Info Centre](#)
- Hamilton Chamber of Commerce: [Resources for businesses](#)
- Hamilton Spectator: [What you Need to Know in Hamilton](#)
- Buy-Local (Hamilton): [Hometown Hub](#)

Government and Agencies

- Health Canada: [COVID-19 Information and Resources](#)
- OCE: [Collaboration Platform](#)
- Government of Ontario: [COVID-19 Information for Ontarians](#)
- Government of Canada: [Business Support](#)

For Companies Making COVID-19 Related Medical Products

- [Call for Suppliers](#) (Ontario)
- [Call for Suppliers](#) (Canada)
- Health Canada: [Expedited Review of Health Product Submissions and Applications for COVID-19](#)
- Health Canada: [Applications for medical devices under the Interim Order for COVID-19 use](#)
- Health Canada: [Expedited Access and Authorization to make COVID-19 personal protective equipment](#)
- Health Canada: [Diagnostic devices for use against coronavirus \(COVID-19\)](#)