



Hamilton Health Innovation Check-up: Meeting Minutes

January 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: February 28th 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 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 accessed 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](#)

February

- Feb 3: [Monthly Community Meeting](#) (London Life Sciences)
- Feb 4: [#TalkClinicalTrials: Experiences in Cancer Clinical Trials](#) (Clinical Trials Ontario)
- Feb 8: [LSO Career Talks - Beyond the lab coat](#) (LSO)
- Feb 8-9: [LSX World Congress](#) (LSX)
- Feb 10: Spotlight on JLABS Canada (JLABS)
- Feb 9-11: [2022 OBIO Investment Summit](#) (OBIO)
- Feb 17: [Establishing a US Office](#) (CENE)
- Feb 22-24: [A Future for Everyone](#) (Science Technology Awareness Network)
- Feb 28: [Hamilton Health Check-up](#) (Synapse Consortium)

March & Beyond

- Mar 2: [Connect to Careers Job Fair](#) (City of Hamilton)
- Mar 3: [StrikeUP](#) Digital Conference for Women Entrepreneurs (Northumberland CFDC)
- Mar 7: [UpOnDigital 2022: Update on Ontario Digital Health Conference](#) (Digital Health Canada)
- Mar 22-24: [Canada SynBio Conference](#) (Ontario Genomics)
- Mar 23: [Synapse Life Science Pitch Competition](#) (Innovation Factory)
- Mar 28: [Hamilton Health Check-up](#) (Synapse Consortium)
- May: LSO Celebration of Success Annual Awards Presentation (Life Sciences Ontario)
- Jun 13-16: [BIO International Convention](#) (BIO)
- Jun 1-2: [E-Health Conference and Tradeshow 2022](#) (Health Infoway, CIHI & Digital Health Canada)
- Jun 20-23: [Collision 2022 Conference](#) (Collision)
- Jun 22: Access IO with Lakeridge Health and Ontario Shores Healthcare (Access IO)
- Aug: [Startup Survivor Pitch Competition](#) (The Forge)

Looking to engage the Hamilton Health Ecosystem?



innovation. Learn more about SOPHIE [here](#)

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



clinical trial in one of Canada's leading research hospitals. Learn more about HEALTHI [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

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):

- [Catriona Franc](#)
Manager Business Operations, Bay Area Health Trust ([BAHT](#))
- [John Hands](#)
Director, Business Development, Bay Area Health Trust (BAHT)

[presentation slides used, and are available for download from the [Health Check-up website](#)]

Discussion

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

Introduction & Overview of McMaster Molecular Medium

Just wanted to start by sharing that this is [Bay Area Health's Trust](#) 20th anniversary this year. Bay Area Health Trust operates business units in the life science or healthcare adjacent space.

What is unique about the Trust is where the value is derived from business goes – which is to our beneficiaries, which include McMaster University and Hamilton Health Sciences. As our CEO often says, we don't have investors or shareholders, we have beneficiaries, and that is where our value goes. Both in terms of profit and non-monetary value as well.

One of the things we do is look for opportunities to stand up businesses in this sector or category. About a year ago, we were in discussions with [MILO](#) [tech transfer office McMaster University] about a [technology](#) that came out of the [Research Institute at St. Joe's](#) and McMaster University. The technology is called "McMaster Molecular Medium" or MMM. For those of you who have not had a PCR test the medium is the liquid solution at the bottom of the tube into which the collected specimen (usually collected using a nasal or throat swab) is deposited. This is an important piece in the entire process, because depending on the type of medium that is used, the advantage is that it can inactivate the virus and makes it safer for people at the lab. It also takes a time-consuming step out of the analysis process.

Over the last 12 months, we've been commercializing this technology – and we're in the process of securing regulatory approval. And hopefully, some of you have seen the recent [press release](#) which announced a large order from the Ontario Ministry of Health. MMM is manufactured in Ontario and has been used in over 3 million tests by Ontario Health at assessment centres across the province.

We feel this is a perfect example of the positive feedback loop that exists in the Hamilton ecosystem. Through innovative research at our hospital/university, we created an interesting novel technology. Companies like Bay Area Health Trust come in to make an investment of capital and talent to help commercialize the product. Then we look for other opportunities to help advance and scale that technology in the market. And while Good To Go Test was not the primary goal (as a business line) when we first engaged with MMM, it's turned into an exciting secondary benefit.

Guest Speaker Discussion

Overview of Good to Go Test

Bay Area Health Trust has been working on [Good to Go Test](#) since September. Good To Go Test is a screening service offering fast asymptomatic PCR and rapid antigen test for COVID-19, backed by an accredited lab St. Joseph's Healthcare, Hamilton. We provide internationally accepted PCR test results for individuals who need a test for travel, business, work, or school.

We wanted to take MMM one step further and commercialize this technology and create a business model through venter partnerships in the Greater Hamilton area. Our hope is to launch asymptomatic rapid antigen testing service in collaboration with pharmacies. We launched today at 8am this morning, and our website is now live, which is very exciting!

If any of you have travelled during the pandemic, you may have needed an antigen or PCR test. However, increasingly some people are finding it difficult to get a PCR test in a timely manner. Our mission is to meet the demand for this service in the greater Hamilton area. We identified a large gap in the market in access to asymptomatic COVID-19 testing.

While there are many companies offering this service in Ontario, we saw a real gap in the Hamilton region. We provide a cost-effective solution and service, powered by our COVID-19 diagnostic lab at St. Joseph's – working with an accredited lab analysis. As mentioned previously, there are compelling ways in which we're engaging with the ecosystem: using a state-of-the-art MMM, developed locally and manufactured in Ontario. We've got a proven track record, having already provided over 3 million tests to Ontario Health for use at assessment centres.

We're excited about the prospect of Good to Go Testing expanding accessibility to local testing and building further brand recognition of MMM.

Customer Experience

The customer experience is very simple. Individuals can go to our easy-to-navigate website where they can pick a location close to where they are. Our initial plan is to launch with two pharmacies, though we are expecting to expand significantly in the future adding additional pharmacy sites.

Once a customer arrives at the pharmacy, they can quickly take a test, after completing a consent paper (which can be done through the website). The sample is collected by a pharmacist in a few minutes and then sent to our lab. Results and certificate are provided to the customer within 24 hours. Rapid antigen tests can be processed on-site at the pharmacy, with results and certificate generated onsite and delivered via text/email within 15 minutes.

You'll see that here the type of information that a customer will receive once they've completed the test. The certificate is branded (with Good to Go Test) and includes a QR code. This document can be saved onto a phone or printed, and then be presented at an airport or wherever you need this certification.

We're putting out marketing materials and other supporting documentations to prompt customers to book a test directly in the pharmacy, and then have a test right away. What is nice for the pharmacists, is that much of the administrative load is done for them – customers are signed up, pay and provide attestations prior to their arrival, so that they don't have to do anything other than administer the test and send the samples to our lab. The reaction of pharmacies has been fantastic, and we have several additional sites that are ready to onboard with us.

Next Steps

Guest Speaker Discussion

Going forward, my focus will be on building new partnerships, as we look to expand our geographic footprint beyond the Hamilton region.

Our business model is based on joint success through partnerships with vendors and pharmacists. Phase one involves getting off the ground, partnering with pharmacies in the Greater Hamilton Area, with phase two we are looking to expand along the Hamilton – Niagara corridor. Phase three would involve an expanded service, use of fee-for-service laboratory tests using MMM as the transport medium for sites across Ontario. Today we need a PCR test for travel, but tomorrow what sort of test will we need – we want to be nimble and able to respond to that market need (i.e., tests done in pharmacy vs. in lab, launching at-home testing services, working directly with companies/organizations that need bulk testing).

We are not the first business to launch this service, but we want to be the most sustainable. We're already looking ahead to see what we can do to respond to changing market/pandemic conditions. For example, should PCR testing go away, what can we do to leverage the technology, partnerships and relationships that we've built up. We see this as a longer term initiative, and we have the ability to pivot quickly to modify our offering to provide solutions that meets the needs of organizations, companies, and individuals.

Leveraging Ecosystem Assistance

It's great to speak with you today, and this audience represents a good cross section of the types of organizations that we need to engage with in order to be successful. In terms of assistance, there are a few ways in which you could help, including:

- Sharing contacts with independent pharmacists or pharmacies that might be interested in this solution
- Identifying where your organization might have a need for certified COVID-19 testing
- Sharing within your network the capabilities of Good To Go Testing

Question & Answers

Question: Can you share the cost for the service?

Answer: The same-day PCR test cost is \$150. If you come in early in the morning, you can get results by 8pm that evening. For PRC test results that are delivered within 24 hours, the cost is \$145. For rapid antigen testing, the cost is \$65.

These costs are comparable, and if anything, a little less. We don't have much competition in the Hamilton area, but we entered the market at an affordable price. We looked at the competition and wanted to be a little below that. There can also be discounts for organizations that are ordering large volumes of tests, or for families that are getting multiple tests at once.

Question: What is the scope of partners in the Hamilton region?

Answer: There are 170 pharmacies in Hamilton which don't have this service. Our intention is to plot out a map, and to give each partner some exclusive geographic territory. We have 5-6 pharmacies already lined up to sign on after the launch goes well. We have interest in Oakville and along the Niagara corridor.

Question: What is the minimum number of people that are required for organizations?

Guest Speaker Discussion

Answer: These tests are going to be administered by registered pharmacist/technician/RPN only. We are happy to be innovative and explore how to bring services to you. But currently, this is only for asymptomatic testing.

Question: Are you working on securing regulatory approval?

Answer: our lab partner has validated the MMM, and so its approved and ready to be used. However, there are some limitations to our ability to commercialize, so we are securing additional regulatory approvals which will give us flexibility going forward.

Question: What is your capacity to process tests, and how will you scale that capacity going forward?

Answer: We are geographically limited by the types of tests that we are doing (requires someone to visit a pharmacy). With regards to PCR tests, there is no real limit on our testing capacity.

The limit is more around the logistics of getting customers processed by the pharmacies (i.e., # of time slots, getting samples couriered to the lab). The throughput testing capacity of the lab is such that we do not envision hitting its limit anytime soon. Should we get to the point where we are hitting that testing limit, then we would find another lab. If we start to expand into cities across the province/country – then we would start looking for partner labs in those geography.

Question: Can you expand on how you've engaged with pharmacy chains to explore them becoming partners?

Answer: We've found is that the Hamilton region has an exceptionally high number of independent pharmacy owners (though many under franchise brand like Pharmasave). Hamilton seems to have this more than other areas. We're excited about speaking with chains, though some have already established similar services (i.e. Shoppers Drug Mart). The key to success is finding pharmacists who want to embrace this model, who are willing to empower their staff to take on this service.

Our original plan was to launch with retail pharmacies at the General (HHS) and Children's Hospital (McMaster). Omicron required us to pivot, and so we built relationships with private partners in the community. However, in the coming months we expect to open at the hospitals, which is aligned with Bay Area's desire to give back to our beneficiaries. We would give McMaster and HHS staff a discount to access this service.

Question: Do you intend to serve students/teachers, or others who need testing for reasons other than travelling? Will you offer discounts

Answer: The market is going to drive the demand and price. We've been thinking a lot of scenarios for customers who can't get a rapid test for themselves but need to see a specialist to administer it. What we're offering is really focused on today's launch, but we're going to be watching very closely where the demand goes to drive the business. We'll be in close discussion with our partners to explore how to drive additional traffic and build on the relationship they have with their patients.


Time allotted | 15 Minutes

Topic: **Communicate**

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

Discussion	Presenter
<p>Dr. Marc Jeschke named new VP of Research at HHS</p> <p>Hamilton Health Sciences Centre has announced the appointment of Dr. Marc Jeschke (pictured) as vice president of research at HHS, commencing on June 1, 2022.</p> <p>Dr. Jeschke brings world-renowned expertise to the organization in the field of translational research through which basic scientific and medical research are brought into day-to-day clinical applications that directly benefit patient care. He brings a superb track record as a research leader with a proven ability to attract funding and grants from various national programs and agencies to advance innovative medical care in burns. His academic activities include more than 450 peer-reviewed articles, books, and chapters on burn care. As a clinical investigator, he has secured over \$22 million in funding to support research and clinical trials throughout his career.</p> <p>Dr. Jeschke’s expertise in research is accompanied by a stellar record as a medical educator and as a mentor to residents, fellows, and students. He has also served as president of the Shock Society, a scientific society that focuses on improving the care of trauma, shock, and sepsis patients, and president of the Canadian Burn Association.</p> <p>Read the full article here</p>	<p>Alex Muggah (Synapse)</p>
<p>Elarex – McMaster Spinout Company Wins \$1.2M Bill & Melinda Gates Foundation Grant</p> <p>A new company spawned by McMaster University innovation in the arena of vaccine manufacturing has received a grant from the Bill & Melinda Gates Foundation.</p> <p>Elarex Inc., based in Burlington, ON, has been awarded a \$1.2M Cdn grant from the non-profit humanitarian foundation to develop a new technology for keeping liquid mRNA vaccines safe and viable without the deep-freeze that is necessary today for storing and transporting such vaccines.</p> <p>Maintaining the “cold chain” from the point of manufacture through the administration of single doses is necessary, but it presents a cumbersome, resource-intense, and expensive barrier to the equitable global distribution of vaccines, particularly in developing countries. A technology breakthrough in improving the thermostability of mRNA liquid nanoparticles in liquid form would enable better use and distribution of mRNA vaccines in low- and middle-income countries.</p> <p>Elarex was created in 2019 to commercialize technology developed by a team including McMaster’s Chair of Chemical Engineering Carlos Filipe, an Elarex co-founder and scientific advisor. The team had developed a storage method for suspending biological nanoparticles in a dissolvable, edible material made from sugar and starch. The platform is designed to keep vaccines and treatments viable for months without refrigeration, even in hot weather.</p> <p>Read the full article here</p>	<p>Jen Gauvreau (Innovation Factory)</p>

Discussion	Presenter
<p>McMaster ranked #1 for faculty and graduate student research intensity</p> <p>McMaster University continues to rank among the country’s most research-intensive universities – for both graduate students and faculty members – in the annual ranking of the country’s Top 50 Research Universities. “The pandemic has made for a bit of a different funding landscape, yet our researchers continue to garner significant funding from all sources,” says, Karen Mossman, vice-president, research.</p> <p>According to the 2021 Research Infosource rankings released today, McMaster placed first in graduate student research intensity – averaging \$68,900 per graduate student, and second in faculty research intensity – averaging \$369,400 per faculty member; significantly above the national average for both.</p> <p>With a total sponsored research income of \$353.5 million, McMaster placed third among medical/doctoral schools in the Research University of the Year ranking, which measures research income and intensity, along with publications in leading journals, and publication impact and intensity. McMaster earned the second spot in the corporate research income category – attracting more than \$112M from its industry partners.</p> <p>Read the full article here</p>	<p>Gay Yuyitung (MILO, McMaster)</p>
<p>Heersink \$32M gift boosts McMaster’s biomedical and global health innovation</p> <p>A donation of more than \$32 million Cdn from Marnix Heersink, an Alabama physician and entrepreneur, will boost McMaster University’s role as a hub for biomedical innovation, entrepreneurship and global health. The gift will create the Marnix E. Heersink School of Biomedical Innovation and Entrepreneurship to educate the next generation of entrepreneurial health innovators.</p> <p>The Marnix E. Heersink School of Biomedical Innovation and Entrepreneurship will be based at the Michael G. DeGroot Centre for Learning and Discovery on McMaster’s main campus, and in the future, it will be housed in a new purpose-built building, as McMaster develops Canada’s Global Nexus for Pandemics and Biological Threats.</p> <p>The gift totals \$25 million US, or more than \$32 million Cdn. These funds will support the creation of the school; the establishment of two endowed professorial chairs in biomedical innovation and in biomedical entrepreneurship; a development fund for innovation and commercialization as well as \$5 million Cdn funding for the new Global Nexus building, a contribution being matched by the university. It also includes the funding for the Mary Heersink Centre for Global Health.</p> <p>Read the full article here</p>	<p>Alex Muggah (Synapse)</p>
<p>Bay Area Health Trust supplies Ontario with McMaster Molecular Medium for COVID-19 PCR test kits</p> <p>Bay Area Health Trust will be supplying Ontario's provincial labs with its McMaster Molecular Medium (MMM), a molecular transport medium that is a critical component of COVID-19 PCR testing. This is a repeat order of the made-in-Ontario product by the procurement authority representing the Province of Ontario. MMM is on Public Health Ontario's approved list of COVID-19 PCR collection kits.</p>	<p>John Hands (BAHT)</p>

Discussion	Presenter
<p>McMaster Molecular Medium is a ready-to-use, temperature-stable sample collection and storage medium that inactivates and stabilizes coronavirus specimens from the collection site to the laboratory.</p> <p>MMM was developed by researchers from McMaster University and The Research Institute of St. Joe's Hamilton's Disease Diagnostics and Development Group. MMM enable labs to safely increase their COVID-19 testing capacity, thereby returning faster results. Unlike viral transport media, MMM inactivates the virus so it cannot potentially infect a lab technician while keeping genetic material stabilized and ready for testing.</p> <p>These features are especially important during times of high testing levels, during which efficiency becomes critical. Another key benefit of using MMM is the ability to pool specimens, which can enable labs to significantly increase their testing capacity. Since most tests produce negative results, only pools that come back with positive results will need to be further tested.</p> <p>Read the full article here</p>	
<p>Synapse Competition Announces 2022 Finalists</p> <p>Meet the 2022 innovator teams participating in the Synapse Life Science Competition. A winner will be announced at the Showcase on March 23!</p> <p>The Synapse Competition is Ontario's premier life science pitch competition and is dedicated to fostering the commercialization of innovation in the life science sector. Delivered by Innovation Factory, in collaboration with the Synapse Consortium, this competition assists innovators, scientists and researchers to bring their ideas to market, increase revenues, leverage intellectual property attract, investment and create jobs. Innovator finalists receive training, mentorship, a \$5,000 grant and a chance to pitch and compete for up to \$80,000 in prizes</p> <ul style="list-style-type: none"> • Women's Global Health Innovations is a for-profit social enterprise researching, developing and manufacturing innovative reusable menstrual, sexual and reproductive health products and education programs. • Celerite Labs is a biotechnology spin-out from McMaster University and is developing an innovative magnetic printing technology that allows 3D printing of cells within a few hours, without the need of any scaffolds. • HDAX Therapeutics is developing targeted therapeutics for the treatment of brain cancers and neurodegenerative disorders, by selectively targeting the disease driver protein HDAC6 in the brain. • VIBRAINT Inc has been developing products that improve people's lives using state-of-the-art neurotechnologies such as brain-computer interfaces (BCI). • Artificial Intelligence Imaging Sensors (AimSense) develops portable head scanners to improve the outcome of patients with stroke and traumatic brain injury through quick triage and real-time monitoring. • Flora Bioworks is developing the first-ever gut microbiome capable of delivering clinically actionable results. 	<p>Kaitlyn Spivak</p> 

Discussion	Presenter
<ul style="list-style-type: none"> • Goji Technology Systems Inc. is a health technology company that makes it easier for clinicians to deal with their computers in healthcare. • Dahlia is currently developing a menstrual cup that has been re-designed alongside anatomy experts to be optimized for comfort and fit, along with a simple and discreet applicator and removal tool. • Expentory Health provides digital innovative healthcare and pharmaceutical solutions which intelligently assist pharmacies, hospitals and healthcare systems, and medicines supply chains with Artificial Intelligence solutions. • Kultura Diagnostics provides an integrated easy-to-use medical device and digital therapeutic solution for clinicians and patients to diagnose and manage gluten sensitivities. • Toothpad is an innovative startup working with the University of Toronto Dental Faculty towards improving oral hygiene by making oral health upkeep convenient. • Limbrace is an agile team built for innovation. Our solutions integrate smart technology to change how amputees interact with their prosthetics—enhancing comfort by avoiding common problems related to socket fit. • Acrescend's Nuvanitic is a flexible, powerful, self-service data analytics environment enabling clinical trial workflow management. • Tenomix is developing novel technologies that target inefficiencies in the pathology workflow, optimize cancer care and reduce healthcare costs. 	
<p>McArthur Medical Sales and AGS Zephyr secure Ontario Investment to Help Control the Spread of COVID-19</p> <p>The Ontario government is supporting an investment of more than \$2.9 million by five local companies to strengthen manufacturing of domestic medical supplies and support the development of homegrown innovations to help control the spread of COVID-19. The province is investing more than \$1.54 million through the Ontario Together Fund (OTF).</p> <p>McArthur Medical Sales Inc. is a Rockton, Ontario-based company that has developed and commercialized three products to assist hospitals in reducing the transmission of COVID 19 — Flusso By Pass, Flusso TFI and EXHALO Shield. These devices are used in collaboration with oxygen therapy systems and mechanical ventilators to improve patient care and reduce the spread of COVID-19, among other airborne contaminants. McArthur Medical Sales is investing \$798,000 to purchase manufacturing equipment and machinery to increase production by five times current capabilities. Ontario is supporting the investment with a contribution of \$379,000 through the Ontario Together Fund.</p> <p>AGS Zephyr Inc., a privately-owned Ontario-based company, founded by Sam Alesio, George Goto and Robert Sowka, specializing in air purification, is investing over \$350,000 into a novel air filtration project which will involve building prototypes, conducting trials and manufacturing the company's Personal Zone Air Purifier (PZAP) product for restaurants, classrooms and commercial, industrial and retail applications.</p> <p>Read the full article here</p>	<p>Alex Muggah (Synapse)</p>
<p>Hyivy Health secures \$1.1 million in pre-seed funding to ease women's pelvic health problems</p> <p>Born from its founder's own experience with cervical cancer, FemTech startup Hyivy Health has secured \$1.1 million in pre-seed funding to improve womens' pelvic health.</p>	<p>Alex Muggah (Synapse)</p>

Discussion	Presenter
<p>Hyivy Health is developing the first smart, holistic pelvic health rehabilitation product for the one in three women who will develop pelvic health complications in their lifetime. The startup has ambitious plans for its new capital. Hyivy Health plans to use the funds to help with manufacturing of its device, safety testing, certification, and to move through regulatory approvals with the FDA and Health Canada.</p> <p>It plans to complete an upcoming clinical trial in May 2022 with McMaster University to further explore the device's use for pelvic pain with endometriosis patients and tracking chronic pelvic pain.</p> <p>Read the full Betakit article here</p>	
<p>McMaster Industry Liaison Office Issues 2020-21 Annual Report</p> <p>I wanted to share the 2020-2021 Annual Report from the McMaster Industry Liaison Office (MILO). Despite challenges, it was a year to remember – read about the impressive highlights and accomplishments of the McMaster research community. 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.</p> <p>Read the full report here</p>	<p>Gay Yuyitung (MILO)</p>
<p>Hamilton Health Sciences Adopts Cloud DX for Post-Surgical Monitoring of 2,400 Patients</p> <p>Cloud DX has been selected as the Remote Patient Monitoring (RPM) platform for Hamilton Health Sciences (HHS) Surgical Transitions program. Launching this month, the program will monitor selected surgical patient populations using Cloud DX's Connected Health platform supported by HHS's Virtual Nursing Station.</p> <p>HHS is deploying Connected Health kits acquired in 2020-2021 in a new way, focusing on improving post-surgical outcomes after a successful national study proved the benefits of virtual care for that patient population. Additional kits will be purchased as needed to grow the program. Patient outcome data will be included in research conducted by scientists at the Population Health Research Institute (PHRI) at McMaster University to further prove the benefits and ROI of remote automated monitoring. This contract comes after the company's recent announcement of an exclusive virtual care partnership with Medtronic Canada.</p> <p>Lead Scientist at PHRI and Cardiologist at HHS, Dr. PJ Devereaux states: "Virtual Care and Remote Automated Monitoring offer many benefits; I believe this will become standard care after surgery going forward. ... Leaders like HHS are setting the stage for the future, and it's great to see the Surgical Transition program grow. Due to the convenience and ease of receiving care 24 hours a day after surgery within one's own home, many patients have indicated to me that we need to make this technology available to all patients moving forward."</p>	<p>Alex Muggah (Synapse)</p>
<p>Hamilton Hits Historic \$2 Billion in Building Permits</p> <p>The City of Hamilton has surpassed \$2 billion worth of construction, making 2021 the first time the city has ever reached the \$2 billion-dollar mark in construction value in one year. This milestone represents building projects in the residential, institutional, commercial, and industrial sectors. The city has reached the \$1 billion milestone eleven out of the past twelve years.</p>	<p>Jennifer Patterson (City of Hamilton)</p>

Discussion	Presenter
<p>St. Joseph’s Healthcare physician received \$300k to improve clinical care</p> <p>A St. Joseph’s Healthcare (and McMaster University) emergency care doctor is receiving \$300,000 in funding to research improvements to clinical practice and enhance the healthcare experience for patients and clinicians alike.</p> <p>Dr. Shawn Mondoux is receiving the PSI Graham Farquharson Knowledge Translation (KT) Fellowship to support his mission of improving peer exchange experiences, educational intervention and coaching for trainee physicians. Mondoux’s project will extract data on physician practice from electronic medical records, using it to help doctors improve their performance through data sharing, coaching and education.</p> <p>Read the full Canadian Healthcare Technology piece here</p>	<p>Alex Muggah (Synapse)</p>
<p>Cortex Analytical Simulation Workshops</p> <p>SAS is running 3 half day workshop with the University of Montreal’s Masters of Public Health program that includes an predictive modeling ML game called Cortex. Anyone interested in seeing the game and playing it with their own company or students please reach out to Mark Morreale: mark.morreale@sas.com</p>	<p>Mark Morreale (SAS)</p>
<p>Dr. Mehran Anvari (St. Joseph’s Healthcare doctor and McMaster University Professor) appointed to the Order of Canada for revolutionary telerobotic surgery research</p> <p>For the past 30 years, Dr. Mehran Anvari, a professor of surgery at McMaster University, has been working to improve quality and access to health care for patients in remote regions of Canada.</p> <p>On Wednesday, that work was recognized by the Governor General, landing him an appointment to the Order of Canada, which recognizes outstanding achievement, dedication to the community and service to the nation. “It’s a great honour,” he said, “not only for myself, but for the team at St. Joseph’s and McMaster.”</p> <p>In the late 1990s, Anvari travelled to Nunavut to visit some friends when he came across a young mother who let him know her son had died due to a lack of health-care access. At that time, his team at St. Joseph’s Hospital and McMaster University had just begun experimenting with robotic surgery when they realized they could use those robots to offer surgery to patients from a distance.</p> <p>Read the full Hamilton Spectator Article here</p>	<p>Alex Muggah (Synapse)</p>
<p>OBIO Ontario Investment Summit – Feb 9-11</p> <p>As leaders in health science commercialization, OBIO supports venture-backed companies with talent, market and investment programs, guiding entrepreneurs through early-stage success! The Summit is Canada’s premier health science investment event, connecting global investors with presenting companies vetted by global VCs and strategic partners, and Canada’s most promising technology innovators.</p>	<p>Mary Argent– Katwala (OBIO)</p>

Discussion	Presenter
<p>With more than \$1B raised, companies use the OBIO Investment Summit as a springboard to their next round of financing from global investors. Here's the 50 must see companies presenting this year. This year's virtual format gives investors access to:</p> <ul style="list-style-type: none"> • Interactive live presentations including access to private chat and virtual meeting rooms. • An investment abstract for each company. • Recorded presentations and business decks accessible following each day and for two weeks following the Summit. 	
<p>Applications Open for The Forge's Startup Survivor Program</p> <p>Startup Survivor is a 4-month innovation program culminating with a pitch competition in October, open to McMaster students and recent alumni. Throughout the summer, The Forge will be giving out up to \$75,000 cash.</p> <p>Beginning in May, 10 finalists will set off on a journey to launch their business ideas to great lengths. Teams will complete 6 challenges with help from mentors and workshops along the way. With each completed challenge, finalists are granted a portion of their funding and are awarded points from The Tribal Council (our valued mentors).</p>	<p>Riley Moynes (The Forge)</p>
<p>Industry Talent Accelerators</p> <p>We are offering fantastic internship candidates for businesses. We facilitate wage subsidies for the hires (including Mitacs, Technation, ICTC, Magnet, etc), and offer a streamlined AI powered talent acquisition service for each of the industry programs.</p> <ul style="list-style-type: none"> • MedTech Talent Accelerator trains candidates in specialized MedTech industry-based modules endorsed by Medtech Canada, producing high-efficiency engineering and science talent tailor-made for the Medical Technology industry. Click this link to access 60+ industry-ready candidates available now for Jan, May and Sept. • TechTalent Accelerator develops industry-ready diverse talent for the Canadian Technology sector and is a collaboration between Ryerson, CompTIA (Computing Technology Industry Association) and its member companies. Click this link to access 40+ industry-ready candidates available now for Jan and May. 	<p>Adnan Syed (Ryerson Talent Accelerator)</p>
<p>MGD-HICE Educational Webinars & DevTank Meetings</p> <p>Operating out of the Michael G. DeGroote School of Medicine at McMaster University, the Michael G. DeGroote 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>
<p>Ontario Launches \$40M Program to Support Advanced Manufacturers Across Province</p> <p>Today, the Ontario government launched the Advanced Manufacturing and Innovation Competitiveness (AMIC) program to help companies get the tools, technology and talent they need to grow, compete and innovate in an increasingly competitive global market. As part of the 2021 Fall Economic Statement, AMIC is a new stream of the Regional Development Program (RDP).</p>	<p>Darren Lawless (McMaster)</p>


Discussion	Presenter
<p>The two-year, \$40 million program will support advanced manufacturing businesses to invest in the equipment, advanced technologies and skilled workforce needed to improve competitiveness and growth. As Ontario continues to recover from the impacts of COVID-19, AMIC will help to create and retain good jobs and address the need to restore the essential supply chains that will support economic recovery across the province.</p> <p>Beginning today, eligible businesses can apply for the new program. Eligibility requirements include:</p> <ul style="list-style-type: none"> • minimum of 10 employees • three or more years of financial statements, and • minimum of \$500,000 in eligible project costs. <p>Read the full release here</p>	
<p>Hamilton & McMaster Innovation Park Featured in JLL Greater Golden Horseshoe Life Science outlook - Q4 2021</p> <p>The Toronto-Golden Horseshoe Area is poised to become one of North America’s up-and-coming life science hubs. The report explores what is required to happen for the region to realize its potential. It also includes key market indicators, tenant and landlord perspectives, and identifies opportunities and challenges facing the sector.</p> <p>“While Toronto is unquestionably the regional driver for talent and innovation, nearby secondary markets provide critical inputs such as universities, incubator spaces, and affordable real estate. In this report we posit that industry players must adopt a more regional mindset, leveraging the respective advantages of satellite cities like Hamilton, London, and Waterloo Region to fortify the region’s life science ecosystem. The universities, hospitals, and companies in these cities must not be considered competitors to their Toronto counterparts, but instead part of a Greater Golden Horseshoe Area (GGHA) Life Science Ecosystem.”</p> <p>Read the full report here</p>	<p>Alex Muggah (Synapse)</p>
<p>MaRS launches new \$100 million Graphite IAF fund</p> <p>MaRS IAF and the Province of Ontario, in partnership with private sector investors, have launched a new \$100 million fund that will focus on seed-stage investments and extensions, through to the rights for Series A rounds. The fund has already reached \$77 million in a first close. Together with the new Graphite fund, the IAF will continue to operate and support pre-seed and seed-stage companies. Graphite will be predominately Ontario-focused, but with a broader mandate, searching for promising companies across Canada.</p> <p>Investments will be diversified, and include funding life sciences, software companies, and cleantech companies. “At the seed stage we’re really betting on great founders with strong addressable markets and some kind of unique capability from an IP perspective or from a customer traction perspective,” Wu said.</p> <p>Read the full article here</p>	<p>Alex Muggah (Synapse)</p>
<p>Hiring in the Community</p>	<p>Alex Muggah (Synapse)</p>


Discussion	Presenter
<p>MILO Business Development Officer - Software and Mobile Applications (McMaster Industry Liaison Office)</p> <ul style="list-style-type: none"> Responsible for enhancing the development of collaborative relationships between the University, public, and private sector. Assists in the assessment of intellectual property protection and market potential of University research, in supports of the University's research and technology transfer activities. Requires a thorough knowledge of business fundamentals and a scientific field (computer science/software engineering). <p>Software Development and Sales Roles (Prolucid)</p> <ul style="list-style-type: none"> We are hiring for. We work on unique and interesting projects across industries. If you, or someone you know is interested, please have them reach out directly to me: chris.kennedy@prolucid.ca <p>Civil Engineer & Project Manager (McMaster Innovation Park)</p> <ul style="list-style-type: none"> Reporting to the PMO Director, the Civil Engineer Project Manager will be responsible for the review and approval of all aspects of park infrastructure engineering, design, and construction for roads and services. This will include stormwater management facilities, sanitary and utility projects, District Energy system as well as the support and coordination of all site plan applications and construction from the initial stages to project completion. This role will assist and/or lead the development of project scope, budgets, and design approach, including assistance in writing technical portions of proposals, contract negotiation, for all infrastructure projects supporting MIP's Master Plan Development. <p>Business Development Director (Biomedtech) – Hamilton, Telework (INO)</p> <ul style="list-style-type: none"> Based in Hamilton and the technological park of Québec City, INO is the most important centre of expertise in optics-photonics in Canada and is one of the best technological research centres in the world. For 30 years, it has been creating and developing innovative and relevant solutions to meet the needs of Québec and Canadian businesses. By means of multiple applications of light, from laser to fibre optic, including images, INO masters light to capture, identify, predict, determine or transform the real world. The job is a technical-commercial position for biomedtech and biophotonics. <p>Velocity is hiring a Business Advisor specializing in health and regulated industries</p> <ul style="list-style-type: none"> At Velocity, you will become an integral part of Canada's most productive startup incubator, where an awesome community of entrepreneurs is solving global problems by building scalable startups. We are seeking an advisor with experience launching health technology companies or has entered other highly regulated industries. Demystifying and navigating regulatory steps and quality systems are critical for founders who are commercializing medical technologies. A strong candidate has such first-hand experience launching products or businesses in a regulated industry. 	

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 \(COVID-19\)](#)