![Synapse Life Science Consortium logo]

Hamilton Health Innovation Check-up: Meeting Minutes

July 2023

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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	Alex Muggah, Director, Synapse Consortium
Virtual Location	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: August 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 in Hamilton, Ontario.

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

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Hamilton Health Innovation: Calendar Highlights

Check out Synapse's online calendar

August

- Aug 17: Life Science Ontario Golf Classic (LSO)
- Aug 24: Client Summer Patio Social (Innovation Factory)
- Aug 28: Hamilton Health Check-up (Synapse Consortium)

September & Beyond

- Sept 7-8: Healthcare Cybersecurity Forum (HIMMS)
- Sept 25: Hamilton Health Check-up (Synapse Consortium)
- Sept 27: LiONS LAIR (Innovation Factory)
- Sept 28: Bloom Burton Awards Gala (Bloom Burton)
- Oct 2: Next Great Big Idea – Canada's life sciences innovation summit (NGBI)
- Oct 9-11: Medtech Conference (AdvaMed)
- Oct 12: Canada Healthcare Innovation Summit (Bamberg Health)
- Oct 12-13: 5th Annual Innovations in Science of Cannabis Conference (CMCR)
- Oct 26: Digital Health Conference (DocerApp)
- Nov 2: Annual Ideas to Action Forum (LSO & Shift Health)
- Nov 4: Health Research Conference (WeSpark)
- Nov 8-9: CTO 2023 Conference (Clinical Trials Ontario)
- Nov 13-16: MEDICA Healthtech Conference 2023 (MEDICAlliance)
- Jan 8-10: Biotech Showcase 2024 (EBD Group)
- Feb: Investment Summit 2024 (OBIO)
- Mar 11-15: HIMSS Global Health Conference & Exhibition (HIMSS)
- Apr 15: Early-Stage Life Sciences Companies and Investors Networking Event in Toronto (Mintz)

Looking to engage the Hamilton Health Ecosystem?

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):   [Michael Jones](#), Business Development and Commercialization Manager, [Ontario Center of Innovation](#)   - Sabrina Fiorellino, Chief Executive Officer, [Fero International](#)   [Jeremy Grushcow](#), Co-Founder & CEO, [Juniper Genomics](#)   [Slides used during the presentation can be accessed [here](#) (for OCI) and [here](#) (for Fero International)]

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

Introduction: Ontario Center of Innovation (OCI)

Good morning and thank you for the opportunity to discuss some of the programs that the Ontario Center of Innovation has to offer. I'm going to highlight some of the companies that we've been able to support which are on the call here today.

[OCI](#) is a not for profit exclusively funded through the Government of Ontario. We partner with various ministries within the provincial government to deploy funds to support economic development. Most of our funding comes through MEDJCT, but we do have programs with the Ministry of Transportation and Ministry of Health. The goal is to support SMEs and entrepreneurs with job creation with a focus on province wide economic development.

OCI Impact Through Programs

Over the last five years, we've supported projects across the province, spanning from London to Kitchener-Waterloo, the GTA-Hamilton area, Kingston to Ottawa. These projects are made possible through a variety of programs. OCI supported just under 1,000 companies in the last fiscal year, created 6,600 new or retained jobs, the supported companies generated about $350 million in revenue, and generated around $800 million of private sector follow-on investments, within the province of Ontario.

[Ready for Market](#) (R4M) and the [Life Science Innovation Fund](#) (LSIF), our two investment funds. Ready for Market is sector agnostic, investing in companies at the $125,000 or $250,000 level. These companies need to be associated with a campus linked accelerator. Examples include [The Forge](#) that's associated with McMaster or Velocity that's associated with University of Waterloo. I will discuss LSIF in more detail below.

The [Digital Competence Center](#) (DCC) helps people to work with a consultant to determine if there are digital tools or solutions that they can incorporate into their company to provide better efficiencies and increase revenues. [OneEleven](#) is an accelerator that we have in Toronto. [The International Entrepreneur Soft-Landing Program](#) (TBTC) helps with bringing in companies primarily from India to Toronto and developing their businesses. These are well established businesses in India that want to grow or expand. The Critical Technologies Initiative helped to incorporate digital technology into agriculture, mining, and advanced manufacturing. We also have [Collaborate to Commercialize](#) (C2C), which I will go into more depth on later.

Finally, we recently closed out the [Innovating Digital Health Solutions](#) (IDHS) program where digital health companies work with Ontario health teams to pilot, evaluate, or implement their digital health solution within a hospital.

Guest Speaker Discussion

In Depth: Collaborate to Commercialize (C2C) Program

C2C is very similar to the Innovation Factory SOPHIE program in terms of it being an industry academic partnership program. C2C is focused on accelerating commercialization opportunities by leveraging the expertise that we already have in Ontario's academic institutions. The goal is to support SMEs within Ontario to grow and expand and economic benefits for Ontario.

To be eligible for C2C the industry partner must be a for profit SME company (up to 499 employees), be incorporated for at least two years and have a minimum of five FTEs. The five FTEs are five employees that you're paying which could be a combination of fulltime employees, part time employees, and contract employees. Regarding the commercialization horizon, we're evaluating four criteria in the three years after the project has been completed. The four metrics that determine if a project should be funded are projected revenue, IP or patents could be generated, private sector follow-on investment, and number of jobs created.

I work directly with companies interested in applying to C2C to ensure there is alignment with the program. Once an application is submitted, companies require endorsement by the academic or research hospital office which I can help with. The review process usually takes about four weeks to get a decision. This diligence and collaboration means that our success rate for the program is greater than 85%.

Funding can range from $40,000 to $300,000 total project budget and take between 6 to 24 months with OCI covering 50% of the total project budget. If you're asking for a $300,000, total project budget, OCI would cover $150,000 of that. The industry partner $150,000 is split one to one cash and in-kind. Typically, in-kind contributions focus on staff salaries, but you can also include other expenses such as lab work, materials, reagents, or cells that need to be purchased or maintained. There's no overhead shown in the budget, but the academic institution receives 10% overhead on the OCI contribution.

OCI has partnership program with NSERC to assist leveraging smaller budgets – with contributions of either $60,000 or $90,000. In these cases, NSERC, OCI and the industry partner are each providing a third of the budget. Companies can also leverage MITACS funding, covering the cost of an internship for a four-to-six-month period.

In Depth: Life Science Innovation Fund (LSIF)

The Life Sciences Innovation Fund is an investment program where we will provide direct investment into early stage, Ontario based companies that have IP. We need to see a strong IP portfolio for us to move forward on this program. The goal is to de-risk private sector capital investment into companies.

LSIF is focused on human health-related life sciences companies, which can be divided into digital health, therapeutics, diagnostic tools, and medical devices. The funding is $500,000 and the companies need to be headquartered in Ontario. Typically, we're looking at three- or four-to-one ratios of investment. For example, a $500,000 investment from OCI is best for companies raising between two and two and a half million.

To be eligible, companies must have incorporated for no more than five years ago (though there is some leeway on this front). Companies must have raised less than 3 million from third party capital to be eligible. The primary location of the company should be in Ontario, though having offices outside of Ontario is okay. We're looking at investing in early-stage companies, with competitive IP, that could be anywhere from conceptual stage to commercialization including companies post revenue.

In terms of the round size, we usually get involved in pre-seed to seed investments (from one to five million), where OCI would be contributing $500,000. At least one investor in the round must be based in Ontario.

Guest Speaker Discussion

OCI LSIF Success Story: Fero International

Hi everyone, my name is Sabrina, it's nice to see a lot of familiar faces. Today I'll share a little about Fero and our experience working with OCI.

Fero International Introduction

Our mission is to bring cutting edge sustainable and cost-effective health care facilities to the most vulnerable populations around the world. We're a female led business, which is significant in the manufacturing space. We design and manufacture what we call rapidly deployable volumetric steel modular infrastructure. These are essentially turnkey structures that we build and then deliver them on site for installation.

We're based in Southwestern Ontario with access to 300,000 square feet of manufacturing space. We're able to build 100,000 to 200,000 square feet of infrastructure every year in-house. We build facilities for hospitals, long term care facilities, remote communities, laboratories, mining, military, and disaster relief, where there is war or natural disasters. We have had our product tested by the University Health Network, including Toronto General, a top-4 globally ranked hospital.

Focus on Modular Space

We fundamentally understood that COVID was affecting the healthcare system both on the long-term care side and hospital side. We wanted to create space, and not just beds in a box, but space that could save lives for people who are otherwise at risk. So, at Fero we developed a mobile medical module, a flexible way of creating space that could be an entire hospital, or an intensive care unit, isolation unit, a long term care facility, or even operating space. This creates the ability to rapidly expand both urban and remote setting capacity for intensive care units.

In addition, we took our design to the next level, making it possible to deploy negative pressure capabilities in our units. For example, if deployed as operating rooms because of a mass casualty event, the Fero module can be quickly transformed in an intensive care unit (with negative pressure) to care for those patients who have survived those operations. A tremendous amount of engineering went into the air handling system that we have and a lot of it was proprietary to the way we had to design it to fit the need for the smallest amount of space. There is no other solution that has that kind of flexibility on the ground to adjust to changing needs that you'd find in a hospital facility.

Solution: Modular Healthcare Buildings

We started with the Emergency Management Solution during COVID and since then, we've expanded significantly. We're well underway building wet laboratory space for a Canadian university research park exploiting the 3.5 million sqft shortage of lab space in Southwestern Ontario alone. We're also working on remote clinics, including diagnostic clinics attached to long term care homes, and diagnostic clinics for remote communities integrating robotic diagnostics in some of these clinics. Fero is excited about building a 5200sqft outpatient clinic for a western Canadian city hospital that will be operational by September.

Fero Team & Partners

I believe a company is nothing without its team and part of our success is the diversity and experience within our team. Fero has people for whom this is their first time being part a business or a startup. We those with a vast amount of experience and are well known in the Hamilton ecosystem, across the province, and across Canada.

Guest Speaker Discussion

An additional aspect of our success is the partnership we have with global companies. For example, Fero partnered with some global giants in medtech companies including Draeger, a $3.3 billion euro company, which currently sells to hospitals and mining sites all over the globe. We've created a joint offering of medical clinics for mines, which we have been pitching and selling to mining sites.

Fero's Experience with OCI

Historically Fero has taken advantage of government funding, and LSIF was the best experience we've had, in part because of Michael Jones. He made the process very easy, with it taking just three months. Once we submitted our application, he reviewed it and provided some suggested changes (which we did). The application went for an internal then external review very quickly after which we received our funding. The OCI team was very supportive; they always reach out to us about speaking engagements and getting more involved in the community, which is really helpful.

Lastly, I would like to note that female-led and female founded startups received just over 2% of funding in 2021. In 2022, it was under 2%,. So funding for us, as a female-led company, is instrumental and we are extremely grateful to be collaborating with OCI.

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An OCI LSIF Success Story: Juniper Genomics

Hi everyone, I'm Jeremy the founder and CEO of Juniper Genomics, a genetic diagnostics company. Our mission is to help in vitro fertilization (IVF) patients have babies faster. I will talk about our story and then jump into our experience with OCI.

Juniper Genomics: Our Story

There's lots of innovation going on in IVF, and one of the challenges is differentiating your innovation from other companies operating in this space. At this point in their family journey patients are willing to do almost anything, so this creates an obligation to make sure that what we're offering is meaningful and differentiated.

Juniper has created a patented workflow that solves key technical challenges and unlocks new findings to help improve the IVF process. The product we're initially offering can be classified as deep tech, gathering a large amount of our own (and surrounding) data and then integrating it into a single platform. There's huge clinical demand for this, and the clinical excitement about what we're doing has driven our purpose and helped shape our product.

I would completely agree with Sabrina (Fero) that the team is key. Our co-founders include myself, Carolyn Quinlan, our bioethicist, and Lee Shulman, who's at Northwestern and provides medical expertise side. We also have our lab scientist at Velocity. Overall, we have an incredible advisory board which provide input across the pillars of science, medicine, and ethics. Without a doubt, the team is the cause of our success, and will continue to be going forward.

Better Genetics Leads to Better IVF

Suffice to say, IVF is terrible and there are significant challenges associated with it. It doesn't work very well, it costs a lot, and the experience is bad. From Juniper's perspective, the missing piece that will have an impact is

Guest Speaker Discussion

genetics. With more genetic testing being done during pregnancy, patients are asking more about the genetics of their embryos during the IVF process, which is driving interest and demand.

If you remember one thing from today, I hope it's that the idea that we are "bad at pregnancy" is wrong. The narrative is wrong, we use the word miscarriage when there's nothing wrong with how the baby is carried. Mammals have been having babies for millions of years. Each time an embryo is created, it has at least 100 genetic changes that have never been tried before. This is how evolution works but it's also what goes wrong in pregnancy. At least 85% of the time there's a pregnancy loss, the cause of the loss is the genetics of the embryo itself.

If you can identify embryos that don't have lethal genetic changes, you can vastly improve the success rate of IVF. IVF provides us with an opportunity to choose an embryo, which is powerful, and can change the experience of becoming a parent.

How Juniper Genomics is Improving IVF

Juniper's vision is twofold. First, is to change the immediate experience of patients going through IVF. Currently, without testing you need between six and seven transfers to have a baby. We aim to bring that down to two to three transfers. In aggregate this will have a large impact on the economics of IVF. Once we can prove those outcomes, it will reduce the cost of coverage, allowing more people to access IVF for less money without the need for more IVF clinics. Improving access and reducing cost of IVF by improving the process is the critical piece we're focused on in the medium term.

Secondly, by collecting data involved in steps upstream of having embryos and IVF, we're trying to build a platform that decides and can tell patients and physicians what actually works and doesn't in IVF. Knowing that the data we've gathered is useful, and being able to generate it and deliver it in an actionable way to IVF patients is a series of challenges that we've built technical solutions to solve. We're replacing existing embryo genetic tests with our tests and coating a layer of data on top of this process. We're able to achieve this without changing the clinical workflow.

Juniper's Experience with OCI

Today, clinical interest is really high. We have partner clinics in the US, Canada and Israel, which we are continuing to grow. Our lead investors are New York based venture capitalists and we just closed a $2.5 million dollar seed round by doing some technical validation. The next step is raising our Series A, doing a clear rollout and starting to build the data platform around us. We are very excited to be on this journey. The data is shaping up well and we are grateful for the support of OCI and Velocity.

We had a positive experience with OCI in general, and with Michael in particular. Compared to other government funding and VC processes, it's a short process and absolutely worth it. Michael worked hard to support our application, he did what he said he was going to do, and was available to support us through the process.

Two important points, OCI doesn't fund until the rest of your raise is in the bank. So as companies are preparing their closing process, they should make other investors aware of that. Second, the program is really specific and has very clear criteria. If you meet those criteria, they will be happy to help you, if you don't meet those criteria there's not a lot they can do. While they will be encouraging if you're not at that stage, they can't put you through the process until you're at the right stage.

Guest Speaker Discussion

Questions & Answers

OCI

Question (To OCI): Regarding the C2C application timeline, is it a rolling take, or do you have cohorts? Are there constraints on who the academic or clinical partners are?

Answers: It is a rolling process, you can submit an application at any time. We do have a budget for the year but have flexibility to move funding across fiscal years, if required. As long as your partner is a professor or clinician who can hold a grant at their institution, they would be eligible. As long as they are able to hold a grant while associated or affiliated with their academic institution, then that's fine.

Question (To OCI): Can C2C be combined with other funding (i.e. SOPHIE)?

Answer: This is a question that is coming up more and more often and I need to get clarification because even last week, I was speaking with another company who wants to do a project with MMRI, where they want to access SONAMI funding. I am still looking into it. From the SOPHIE side stacking is generally allowed between federal and provincial sources, but not from the same level of government. However, you need agreement from both programs. One program can not speak to both.

Question (To OCI): Regarding IP, does the C2C agreement between the parties need to be in writing at the time of application or can it be resolved afterwards?

Answer: Typically, the industry partner and tech transfer office must be in agreement. While each institution is reasonable, they are all different. For example, the University of Waterloo has an inventor led IP approach (stays with the inventor), while McMaster is different. But it's usually negotiable. As long as you have an agreement in place, that's what we're looking for. We don't want to have the project approved and then have the parties need to negotiate and finalize IP ownership. This can hold up contracting, which has happened in the past.

Questions (To OCI): Can you share a sense of what the total funding envelope is for LSIF and the number of companies that you're going to support?

Answers: This program was launched in November 2022, we just finished our first fiscal year and announced the six companies that we supported within that first fiscal year (which include Sabrina at Fero and Jeremy at Juniper Genomics). This fiscal year we've put through another three that haven't been announced yet. Our goal this fiscal year is between 10 and 15 companies, and next year is 10 to 12. So with the program ending March 2025, over the next three years our goal is to invest in 30 companies.

Question (To OCI): Can you speak to your (Michael Jones) experience supporting companies accessing OCI programming?

Answer: I've successfully supported two companies to secure funding (out of three applications I was involved in). My success rate is fair, but in terms of the LSIF program I've learned quickly about what makes an applicant successful. It is a rewarding process because it does take a while. Once you find a company you have to go through an application process, which takes at least six weeks. Then once the company submits their application, it goes out for external review for another four weeks. Finally, the company gives a final pitch. In total, it's probably closer to three months.

Question (To OCI): At a high level, what does OCI expect in terms of its engagement with the company going forward now that it has an equity stake through LSIF?

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Answer: OCI doesn't take any board seats in the company. We're a very silent observer. We do expect that companies report out on the four metrics we are interested in. This essentially involves submitting a mid-year ande end-year report. If anyone has gone through the government granting processes, the reporting is always focused on the same four metrics: patent or IP that has been generated during the reporting period, job creation, revenue creation, and follow-on investment. Those four metrics are always being evaluated on. As long as the company reports on those metrics, then we're pretty happy.

Fero

Question (To Fero): Are there any particular resources or expertise that a member of this group could support you with?

Answer: Two things are paramount for us. Number one is employees with skilled labor such as engineering, health and safety, QA people, and some of the trades. We are scaling rapidly, and by September we expect to be close to 80 people. Finding people at that pace is challenging. We're trying to hire as senior as possible to then start an internship program so they can train people who are entry level. Without the senior leaders it is very hard to train the entry level employees so we're starting at the top first.

Second is sales. We have robust sales and sales leads in almost every province except Ontario, so anything on the sales side in our provinces would be ideal.

Juniper Genomics

Question (To Juniper Genomics): As you're transitioning through the commercialization process, what are the major pain points / opportunities in the future you're confronting?

Answer: The next stage is building a CLIA lab with Series A funding, which takes a lot of advanced planning. I would love to find a way to do that in Canada. But it's challenging because there is no CLIA in Canada, there's only CAP and that is a longer process. It is also more challenging because the ecosystem isn't there to build what we need and the talent and regulatory authorities are harder to access. If people have experience with CLIA or CAP/CLIA labs in Canada, or if they have facilities that can be subleased or built out to create lab space that would be great. I don't know that much about it yet, especially in the Canadian landscape.

Due to the specialized nature of the workflow, we can't really subcontract the work. We can lease the facility, but it has to be our space. We need to CLIA validate the assay; it's not just sending DNA samples out which is why other people aren't doing it.

Time allotted | *15 Minutes*

Topic: **Communicate**

Discussion	Presenter
[Hamilton's VoxNeuro raises $4.5M to scale brain performance software across US clinics](#) VoxNeuro, which develops software that measures brain performance, has raised $4.5 million CAD ($3.4 million USD) in all-equity funding as it looks to expand across the United States (US). According to VoxNeuro, the financing was led by the undisclosed family office that contributed to its previous $4-million round in October. That office is now its largest shareholder, the company noted. The funding round also saw participation from its strategic investor g.tec, which develops high-performance brain-computer interfaces and neurotechnologies, as well as Klick Health, Centre for Aging + Brain Health Innovation by Baycrest, McMaster University, Bay Area Health Trust, and a number of angel investors. With this funding, VoxNeuro plans to accelerate its product development and operational model as it scales clinical installations across the US. The startup's chief business officer James Connolly told BetaKit the capital will go towards its sales and marketing efforts, partnerships, and continued development with institutions. Launched out of McMaster University in 2017, VoxNeuro's cognitive-health assessment management platform, called CHAMP, uses brain biomarkers to provide clinicians with a quantitative assessment of patients' key cognitive functions. These could include factors like attention and concentration, information processing, and working memory. They are scored against a normative database to generate a report. Read articles about this story [here](#) (Betakit) and [here](#) (Helio)	James Connolly (VocNeuro)
[Ontario Government invests $10 million in OBIO to create Life Sciences Critical Technologies & Commercialization Centre of Excellence](#) The Ontario government is investing up to $9.7 million to support a project by the Ontario Bioscience Innovation Organization (OBIO) that will help Ontario companies in the life sciences sector adopt and develop critical technologies, such as 5G, ethical artificial intelligence (AI), blockchain, cybersecurity, quantum and robotics. These critical technologies will improve the sector's competitiveness worldwide and ensure that Ontario remains a leader in life sciences innovation. OBIO, a not-for-profit organization representing the life sciences sector, will receive up to $9.7 million through the province's Critical Technology Initiatives program to launch a new Life Sciences Critical Technologies & Commercialization Centre of Excellence. The centre of excellence will work with eight partner organizations to provide small and medium-sized businesses in the life sciences sector with the tools and resources they need to adopt, develop and bring to market critical technologies. Funds will also be used to support 5G living labs – specialty testing environments with 5G infrastructure.	Maura Campbell (OBIO)

Discussion	Presenter
Ontario government provides $500,000 to Stoney Creek-based Fero International Inc. As a female chief executive officer for Fero International Inc., Sabrina Fiorellino knows how difficult it is to raise critical funding to expand a business. Founded in 2020, the company — which builds sustainable and cost-effective modular structures, principally for the health care industry, but can be used in remote areas, war zones and disaster sites — has experienced rapid expansion and is in need of capital to meet the rising demand, said Fiorellino. The business executive was grateful for the $500,000 from the Ontario government's $3-million announcement made by Economic Development Minister Vic Fedeli on July 27 at Fero International's Stoney Creek location on South Service Road. "This investment is especially significant to us," said Fiorellino, inside one of the company's structures that would soon be shipped to Winnipeg. "We are extremely grateful." The investment, said Fiorellino, will be used to hire four more people to the business' 10-person staff and purchase capital equipment to meet expansion plans. Fero focuses on medical services able to create a 5,200-square-foot modular structure within seven months for a hospital emergency facility, she said. The strategy is to reach up to 200,000 square feet of modular structures every year.	Alex Muggah (Synapse)
Researchers develop rapid test that detects asthma marker Based on decades of work to uncover the underlying mechanisms of asthma and other respiratory conditions, researchers at McMaster University and St. Joseph's Healthcare Hamilton have produced a simple rapid test that can detect a key driver of severe asthma. John Brennan, director of McMaster's Biointerfaces Institute, and Parameswaran Nair, a respirologist at the St. Joseph's-based Firestone Institute for Respiratory Health, led the creation of a new rapid test that can quickly and accurately identify white blood cells known as eosinophils, even when they are present in complex biological samples such as sputum, by tracking their protein signatures. Having access to quick and reliable information about the presence of eosinophils can guide physicians in making important decisions about patient care. The test looks similar to the familiar COVID-19 home test, which makes it readily adaptable to mass manufacturing once it is approved for clinical use. To create the new test, the researchers developed and deployed a protein-targeting element known as a DNAzyme and modified it for use in the rapid test.	Alex Muggah (Synapse)
McMaster receives $6.8M as part federal government initiative to establish national medical isotope ecosystem McMaster University has received $6.8M from the federal government as part of a national initiative to create a Canadian Medical Isotope Ecosystem (CMIE) – a pan-Canadian network for medical isotope research and innovation. The investment was announced at Bruce Power in Tiverton, Ontario by Pam Damoff, Parliamentary Secretary to the Minister of Public Safety and the Member of Parliament for Oakville North-Burlington, on behalf of the Honourable François-Philippe Champagne, Minister	Alex Muggah (Synapse)

Discussion	Presenter
of Innovation, Science and Industry. "With this investment in the creation of the Canadian Medical Isotope Ecosystem, the Government of Canada is taking another major step towards building resiliency in our domestic medical production capabilities, which will help to ensure the health and safety of Canadians in the event of any potential future global supply chain disruptions," said Damoff. "This investment will not only grow the economy, as the Ecosystem is expected to attract over $75 million in investment and create or maintain over 600 highly skilled, well-paying jobs, but also contribute to economic reconciliation with the Saugeen Ojibway Nation."	
FireNorth Conference: Connect with Mohawk to Speak or Join the Conference As you all know, each year we host our annual FHIR North conference which will take place on October 17 and 18, 2023. We are currently in the process of recruiting speakers for the conference and I would appreciate it greatly if you can spread the word within your networks within the digital health world. Here is the link to the call for speaker proposal	Sherif Abdou (Mohawk College)
Call For Applications: The Forge Business Incubator The Forge Business Incubator is a limited-enrollment program for early-stage startups, creating customized plans for a small cohort of startups to help encourage growth. These entrepreneurs are past the business idea stage and have started gaining traction by launching their startup to the market or have developed a working prototype. The Forge accepts three Business Incubator cohorts per year. The Business Incubator program is sector agnostic – program alumni include software, hardware, IoT, medical devices, healthcare IT, life sciences, advanced manufacturing, and consumer products companies. Full-time founders based in Hamilton are preferred but all applicants are welcome. For more information, click here Should you have any questions about the program, please contact Riley Moynes, Incubator Manager: riley@theforge.mcmaster.ca	Marissa Principato (The Forge)
FluidAI formally launches Streat Platform FluidAI has formally launched Stream Platform, its new AI-powered post-surgical patient monitoring system, in Canada and Saudi Arabia and have made announcements via press release and social media channels. They're really excited about this launch, which has been 9 years in the making. FluidAI has completely redone its website for the occasion, and you can learn more through the press release, LinkedIn post, or this great video	Mustafa Obeidat (FluidAI)
In Canadian first, UWaterloo endowment launches venture capital play After 15 years of incubating some of Canada's most promising startups, the University of Waterloo is spearheading a new fund to invest in them directly. The school is using up to $5 million from its $800-million endowment to create a venture capital fund that will invest in early-stage companies, many of them built at UWaterloo. The fund, which will be spun out of the university's in-house startup accelerator, Velocity, is	Adrien Cote (Velocity)

Discussion	Presenter
working to raise a total of US$25 million to invest in new companies, general partner Ross Robinson told The Logic. It will operate independently of the university and the accelerator. It is currently looking for other investors, and aims to announce a first close in the first quarter of 2024. It is the first time the University of Waterloo's endowment will invest in venture capital. Michael Ashmore, chair of the endowment's finance and investment committee, said it's also the first time a university endowment in Canada has established a VC fund to support startups incubated at the school.	
Driving efficiency at St. Joseph's Healthcare Hamilton with system integrations St. Joseph's Healthcare Hamilton in Ontario, Canada, and Quest Diagnostics have collaborated since 2015 to deliver effective document management solutions across their 900+-bed multi-campus academic and research healthcare organization. With the implementation of EPIC in 2017, St. Joseph's looked to Quanum Enterprise Content Solutions (ECS) for integration solutions to unify their patient records to deliver seamless access to users in near real-time. Read the case study for the full story of how Quanum ECS has helped St. Joseph's on their digital journey to achieve seamless integration with Epic and ultimately, HIMSS Stage 7.	Mackensey Bacon (RSJH)
Canadian Transfusion Trials Group receives $2.3M for innovative research network A national initiative designed to promote collaboration and excellence in transfusion medicine research has received $2.3 million from Canadian Blood Services. The Canadian Transfusion Trials Group (CTTG) is led by co-directors Donald Arnold of McMaster University and Jeannie Callum of Queen's University and University of Toronto. The funding, disbursed over five years, will be used to support the development of a cohesive and diverse transfusion medicine research community across Canada. The pan-Canadian group of physician-investigators, transfusion scientists, students, medical trainees and research staff will address high-impact research questions in transfusion medicine. Blood transfusion is a medical treatment that replaces blood lost through injury, surgery, or disease. Half of all Canadians will either need blood or know someone who will need blood at some point in their lives, yet less than two percent of those who are eligible actively donate blood.	Alex Muggah (Synapse)
Lianna Genovese was awarded first place and the $25,000 prize for her Guided Hands invention in the Power Play Innovative Startup Pitch Competition at the inaugural International Conference on Aging, Innovation, and Rehabilitation in Toronto. Genovese is a facilitator and ambassador for The Clinic, and was part of the 2020-2021 Residency @ The Clinic.	Riley Moynes (The Forge)
McMaster Job Postin: Senior Advisor, Research Innovations & Parnterships The Faculty of Engineering is currently hiring for a Senior Advisor, Research, Innovation & Partnerships. Someone with an interest in entrepreneurship and background in life sciences / bio-innovation would be ideal. If you know of anyone in your network that might be interested, please feel free to share the posting with them.	Gregor Lawson (McMaster)

Discussion	Presenter
HHS Job Posting: Administrative Coordinator, Research The Executive Director of Research Administration is hiring for an administrative support. Here's the link to learn more	Katie Porter (HHS)
Call for Applications: 2023/2024 OBIO CAAP program The call for applications for the 2023/24 OBIO® Capital Access Advisory Program (CAAP®) is now open. OBIO's CAAP® is a competitive, 9-month structured program for health science companies seeking to start their Series A financing in the late 2023 to early 2024 timeframe. CAAP® will culminate with company presentations to global investors and strategics at the 2024 OBIO® Investment Summit. Companies selected to present at the Summit have raised over $1.3B since 2018.	Jack Lee (OBIO)
Landmark Report Published on the Status of Inclusion, Diversity, Equity and Accessibility (IDEA) in Canada's Life Sciences Sector Life Sciences Ontario and Shift Health, with support from Pfizer and adMare BioInnovations, will soon release a comprehensive report titled 'Status of Inclusion, Diversity, Equity, and Accessibility (IDEA) in Canada's Life Sciences Sector'. This report represents a collaborative effort involving extensive research and input from organizations within the sector and focus groups. The report aims to shed light on the challenges and opportunities faced by underrepresented groups in the life sciences sector, emphasizing the crucial link between diversity, innovation, and overall success. By addressing the lack of representation and barriers to access, we seek to inspire actionable change and foster a more inclusive, equitable and accessible future for all. The report uncovers where life sciences organizations have made progress in IDEA, how IDEA initiatives have impacted individuals working in the sector, and, importantly, immediate opportunities and recommendations to guide organizations to make progress IDEA across in four key areas: Talent development; community and culture; knowledge, and leadership. You can read/download the report here	Lotanna Ifeobu (LSO)
Canada's first cohort of the Global Hypergrowth Project announced the Government of Canada has launched the Global Hypergrowth Project (GHP), a new scale-up service that will help companies rooted in Canada go further, faster. This project brings together the combined strength of its government partners to help tailor support to each participating company's specific needs, offering solutions that are as unique as the companies themselves.	Joel Adams (Innovation Canada)

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
Want to Connect with your Ecosystem: Check out the Synapse Health Ecosystem Directory	Alex Muggah (Synapse)

Discussion	Presenter
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	
Engaging Mohawk College's IDEAWORKS 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: Tips for Innovation Factory Referrals to IDEAWORKS • 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. What about start-ups? • 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. Contact Andrea Johnson for more information: andrea.johnson4@mohawkcollege.ca	Andrea Johnson (Mohawk College)
The CONNECTION - McMaster University Online Partnerships Portal! 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	Gay Yuyitung (MILO)
Collaborating with McMaster Institute for Infectious Disease Research (New Intake Form) In addition to our ongoing COVID-19 research initiatives at McMaster, the Michael G. DeGroote 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	Gay Yuyitung (MILO)

Discussion	Presenter
are able to offer services in the following areas: • 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. 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. 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.	
Hamilton-based technologies available for licensing 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. 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	Glen Crossley (MILO)
Hamilton Innovation Partnership Portal 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/	Alex Muggah (Synapse)
Submit Community Events on the Innovation Factory Calendar 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.	Annie Horton (Innovation Factory)