

Hamilton Health Innovation Check-up: Meeting Minutes

July 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: August 29th 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](#)

August

- Aug 10: [LSO Golf Classic](#) (Life Sciences Ontario)
- Aug 11: [Medtech Pub Night](#) (Ironstone PD)
- Aug 18: [2022 Corporate Roundtable Series: Cross Border Funding](#) (CENE)
-  Aug 29: [Hamilton Health Check-up](#) (Synapse Consortium)
- Aug: [Startup Survivor Pitch Competition](#) (The Forge)

September & Beyond

- Sep 8: [Life Sciences London Monthly Meeting](#) (Life Sciences London)
- Sep 15: MIP Golf Tournament (McMaster Innovation Park)
- Sep 19-22: [Creating Communities of Innovation](#) (AURP)
- Sep 22: [Annual President's Golf Classic](#) (Mohawk Foundation)
-  Sep 26: [Hamilton Health Check-up](#) (Synapse Consortium)
- Sep 28: [LiONS LAIR](#) (Innovation Factory)
- Se 28-29: [BioNation](#) (BIOTECanada)
- Sep 29: [Bloom Burton Award Gala](#) (Bloom Burton)
- Oct 12: [Canada's Medtech Conference](#) (Medtech Canada)
- Oct 24-26: [The Medtech Conference](#) (AdvaMed)
- Nov 10-11: [Clinical Trials Conference 2022](#) (Clinical Trials Ontario)
- Dec 10: [I'm Every Woman: A Concert of Greatest Hits](#) (Hamilton Health Sciences Foundation)

Looking to engage the Hamilton Health Ecosystem?



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



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

Time allotted | 30 Minutes

Topic: **Guest Speaker Discussion**

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

Guest Speaker Discussion
<p>Guest Speaker(s):</p> <ul style="list-style-type: none">• Andrew Guy Director, Advanced Technologies Branch (Innovation, Scale-Ups and Regional Economic Development), Ontario Ministry of Economic Development, Job Creation and Trade [presentation slides used]
<p>Discussion <i>[the following is a synopsis of the discussion, and has been lightly edited for length and clarity]</i></p> <p><u>Introduction</u></p> <p>Hello, my name is Andrew Guy, and I lead the Advanced Technologies Branch, a group here at the ministry tasked with engaging with companies in the life sciences and technology sector. Michael Mathiu leads the life Sciences team, working alongside Stephen, Keith and Karen from the team who have all joined me today.</p> <p>Our responsibility is not to run programs or focus on policy, but rather to engage with public stakeholders and bring back to the ministry information and expertise to program- and policy-people as well as decision makers to help them make good decisions. Our team also gets quite involved with investments opportunities (e.g., larger scale investments), helping the government make good decisions to attract those investments.</p> <p><u>Overview of Ministry of Economic Development</u></p> <p>We'll look first at who is within the Ministry of Economic Development. Sometimes this can be a mystery. Following the election, we have a new mandate, though the Ministry will keep its name and we have the same Minister we had just before the election: Minister Viktor Fideli.</p> <p>But what do we do though? The Ministry focuses on economic development, supporting companies and helping them to grow and succeed. There are a few ways we support, such as looking how to reduce regulatory and other barriers to business competitiveness. We're the arm of government that listens to business and ensures the government hears that input before making decisions.</p> <p>We want to accelerate innovation and commercialization. We do that through policy, as well as through programs. The Assistant Deputy Minister of the Innovation Scale-up and Regional Economic Development Division (Anne Vermont) provides leadership to the teams that support the regional innovation centres (RICs) across Ontario. We also support the Ontario Capital Growth Corporations, and other efforts the ministry is involved with to enable access to capital.</p> <p>The Ministry is interested in attracting/securing local expansions and foreign direct investment, which we support in two ways: program funding (e.g., Southwest Ontario Development Fund, Advanced Manufacturing and Innovation Competitiveness Fund); and providing service directly to companies (e.g., making connections, information sharing, site selections, etc.). We help companies understand the Ontario business environment so they make good decisions and grow here in Ontario.</p> <p>We are very involved in matters related to domestic and international trade. When NAFTA negotiations were going on, our whole Ministry was supporting the federal government and working with our key industries on it.</p>

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There are always things going on related to pan-provincial trade. Our decision makers want to make sure the benefits of Ontario's strong and diverse economy benefit the entire province. To help drive exports, the Ministry provides a number of direct delivery programs. We work with small and medium companies to attend trade shows and missions. In 2021 we launched the Invest Ontario agency, whose job is to accelerate foreign and domestic investment in the province. This complements the investment attraction fund (for both foreign and domestic direct investment), to encourage major investments here in the province.

Building up a Life Science Sector Strategy

Ontario is the center of life sciences in Canada, with more than 50% of the country's economic activity in this sector. There are a lot of companies in Ontario, which have significant revenue and exports – though on a whole we import more than we export.

The focus of the Ministry is on the human health side of life sciences. We're interested in what emerges from institutional research (i.e., once a company has been formed). We recognize that the life sciences industry is centered on the GTA-H (Greater Toronto Area – Hamilton), but the H is really important. We see an increasing amount of activity in Hamilton, which is a really nice thing to be able to say. There are also other centers like Ottawa, Waterloo, London even Kingston.

An important part of my team's role is to ensure that internally, the Ministry understand the importance and value of the industry to the province. The sector is growing, and will continue to grow – and it's always going to be important. That's the key: life sciences is always going to be important, and having a public strategy is part of how we acknowledge that.

To that end, we developed a life science sector strategy: "[Taking Life Sciences to the Next Level – Ontario's Strategy](#)" that was released in March 2022, just before the election. We want to use this strategy to position Ontario for growth, it's about competing on a global scale. If there's any business that's continental and global, it's the life sciences industry. Capital flows are international. Talent is incredibly international, and the products go all over the world. You're not going to survive as a company selling only in Ontario.

The government strategy is a big thing. Ontario hasn't had a public life science strategy of any kind in over a decade – so this was a signal that the government sees life sciences as a priority. This shows the government sees the sector as important and one that can grow. As an aside, this is our 2nd sector strategy, the first being for the automotive industry (which as you all know, is one of Ontario's most important industries).

The strategy has four main pillars: (1) growing the biomanufacturing footprint; (2) building resiliency in PPE and critical medical supplies; (3) boost commercialization capacity of Ontario companies and startups; (4) adopt Ontario innovation to improve healthcare.

There's a lot of assets to build on here in Ontario. We have an excellent innovation ecosystem with research institutes, incubators, startups, scientists, multinationals. Working together we can build on some of our strengths, such as:

- **Talent:** We produced 65,000 STEM grads annually here in Ontario. The importance and attention paid to this pipeline is something that endures as governments have changed. It's critical that we keep producing this talent.
- **Manufacturing:** Ontario is a great place to build things. We know how to make things and can do it at prices that are competitive with our peers, especially the United States. It can be a car, or a medical device, or cell and gene therapies or a generic pharmaceutical.

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- Advanced Tech: We have many good technologies, from gene therapy to AI and machine learning applications in digital health. Ontario belongs at the top level of global conversations in many technology areas.

Balancing these strengths are some issues that we'll need to address. We're looking to build things up through commercialization, supply chains and supporting our SMEs, in particular:

- Commercialization: Our biggest weakness is that we don't get the benefits of all the great research and early commercialization that comes in Ontario. We need and to do that. We need to build firms up into to larger scale. Ontario is really good at research but we could be launching and growing more companies that create high-paying jobs. It is important that we grow companies to a scale that makes them sticky ensures most of the benefits come here to Ontario. I believe that our biggest issue is supporting commercialization.
- Supply Chains: The pandemic showcased the importance of rigorous supply chains. Our supply chains are deep, but we must understand where our products come. This raises questions like whether we have the right mix of drug production in Ontario? Can we make some of the devices that we need because the next health emergency? We don't know what it is. We must be able to secure them in times of need, and there is an opportunity to get more and more of the benefits of some of our leading firms that are integrating across borders.
- Homegrown Adoption of Innovation: We need to adopt innovations to improve health care in Ontario, so that they're benefiting our healthcare system. How we adopt innovation generally is a question, wherever it comes from in the world. But how do we best support home-grown innovative companies so their innovative products are being used in our domestic healthcare systems. In the end, healthcare is over 50% of the provincial budget, and is one of the top priorities of the government – it's a huge part of what we do.

This is our vision; we want to establish Ontario as a global biomanufacturing life sciences hub. We need to move up the global rankings (e.g., taking on Boston, California) so that we're seen as one of the leading places in the world – not just in niche areas – but more generally. The government came in with a goal centered around employment, with a target of 85,000 high value jobs in the sector by 2030. That date is coming rapidly, so we better get going!

Delivering Impactful Initiatives

Often strategies in the government have pillars and initiatives. Having talked about the four pillars, I'd like to speak to a few of the initiatives that we're working on which will support these strategic pillars.

Under our first pillar (building bio manufacturing footprint), we will secure new vaccine and medicine manufacturing mandates and commercial-scale investments by leveraging Invest Ontario to help to grow and diversify Ontario's biomanufacturing sector:

- Securing high value investments: the best example is the wonderful announcement that accompanied the launch of the Ontario life sciences strategy in Hamilton. OmniaBio plan to [establish a \\$580 million bio manufacturing campus](#) at McMaster Innovation Park. We want to do more. We want to see more big investments like this. It's super exciting to see a Canadian owned company that wants to go out and compete in this area. I'm really pleased to see this large facility in Hamilton, which can anchor the cluster and this part of the province.
- Promote Ontario in key markets: We're a trading country and we will continue to promote Ontario in key markets around the world.
- Reduce red tape: identifying ways to reduce red tape is tough in the life sciences industry, since much of it is federally regulated for good reason. However, we must smartly reduce red tape so that our

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businesses can move efficiently and quickly. At the same time, we remain focused on protecting patient health and maintaining our reputation of building products to the highest quality globally.

Under the second pillar (building domestic resiliency) we will ensure future pandemic preparedness by supporting the growth and stability of Ontario's domestic personal protective equipment and critical medical supply sectors, including building a long-term stockpile for provincial use:

- Invest in domestic production: over the last few years, I've never seen so many life sciences investments come through the Ontario Together Fund program. It was everything from mask makers to companies producing fine chemicals that go into research, to medical technologies. It's been fun, and we've been busy. It's a greater program to do things quickly.
- Improve pandemic preparedness: we are continuing to make sure we are prepared to meet the challenges of this (and future) pandemics. The government released a PPE supply and Production Act recently. Earlier in the pandemic they secured a supply of Canadian-made N95 masks in Brockville.

The third pillar (boost commercialization capacity of Ontario companies) is meant to prime Ontario's small and medium-sized businesses for homegrown success by strengthening their ability to turn innovative research and ideas into Ontario-made products and services that the world wants to buy:

- Improve Access to Capital: the initial action is to launch a new program, the Life Sciences Innovation Program, which will be delivered by Ontario Centers of Innovation. This will be very early-stage funding to help bridge the support required to catalyze commercialization. It will be a co-funding program. Ontario will continue to invest in venture capital through the Life Sciences Venture Capital Fund and the Graphite Fund. The Ministry won't make direct decisions, they'll place capital into funds that then go out to the market and provide capital to Ontario's companies. We also have a smaller Investment Forums initiative, this will connect Ontario innovators and entrepreneurs with investors (e.g., conferences, other forums). We're working on the details right now
- Improving business acumen: innovators should be provided with the resources they need. There are a variety of elements to this initiative, including the Regional Innovation Centers (i.e., like Innovation Factory) which are really important, as well as support for other intermediaries working in the sector. The development of IPON, the intellectual property organization that Ontario launched, will help us get the benefits of our IP and make sure our innovators have the information they need to make good decisions to exploit that IP to maximum benefit for their companies and for Ontario.

The fourth pillar is the adoption of Ontario innovation to improve health care in Ontario, and will focus on:

- Supply chain modernization: this is about how do we take Ontario innovations and make sure they're being adopted by our public sector where it makes sense. The province will look to scale up Supply Ontario that was launched in the last mandate. We must ensure that life sciences and healthcare is a key point of supply chain modernization. The province also has the Building Ontario Business Initiative (BOBI) Act that will be implemented over the next couple of years.
- Innovation management (digital health pathways): how do we support digital health investments? The pandemic forced many things to happen, and we see a continued acceleration of our great digital health sector. Ontario Health Teams (OHTs) are at the core of our government's plan to build a modern, sustainable health care system that connects health care providers and services. To be effective, OHTs require early adoption of modern, Ontario-made technologies, tools and information that support digital health

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Life Science Innovation Program (Overview)

I'd like to quickly share a little more about the LSIP, or the Life Sciences Innovation Program. This is an early-stage co-investment fund, initially set at \$15 million to be deployed over three years. It will depend on the profiles and the budget cycle, but we're looking to invest up to ~\$500K in early-stage life sciences companies. This program is for companies at the early stage of their journey, when it can be hard to find capital. The province, through OCI, can help push them along.

This was a big deal to get this new program approved and done. It can be hard for the government to start a new program, but if we can show success it can endure. That it is sector specific (it has life sciences in the name!) means that it won't have to compete with other sectors, like ICT. As we design the program, we'll need to consider whether there are different streams, or a general intake. We are also looking to develop a challenge intake stream, where we look to companies that are addressing acute issues and concerns here in the province. In terms of eligibility, this program will be for incorporated for-profit companies, headquartered in Ontario. The focus is on companies, not researchers. We want companies that are addressing a human health need, that can serve a decent sized market.

Looking Forward

This strategy will establish an advisory life sciences council as part of Phase 2 going forward. So what does this mean? It means that while we've done our best, we know we won't get it all right. One thing I've learned in government is that your policies and programs are almost never perfect the first time they are launched. It is important to listen and adapt them as you go.

Going forward, we're going to have conversations with the Life Sciences Council about areas that we probably haven't gone as deeply into as we should. We are looking forward to implementing these programs with many folks here on today's call, including companies and public-sector organizations. Collaboration through this Council will be important. Nothing gets done in this sector without a lot of people being involved.

So, hopefully I've given you a sense of where the province is going with respect to the life science sector. The team is small, but mighty, with only six of them covering this big sector. That's why working with all the different stakeholder organizations around the province, and staying networked, is really important. It's a great team to work with and they're passionate about the sector and incredibly helpful too.

Finally, I want to say every time we do something with Hamilton, it seems to go well. It might not be easy, but it goes well. Over the years, I've been really impressed by the passion and connectivity this community seems to have. So, congratulations on that and keep doing that, because whenever we've asked something, it's generally been so helpful and so reactive and a great network of people there. Keep it up and let's try and continue to grow this life sciences sector here in Ontario. I think it is and can continue to be something important that we're known for globally. Let's think big!

Questions & Answers

Question: We're a company that has been working with Health Canada for two years. Can you share what you're doing to help smooth regulatory approval pathways to get things tested more quickly?

Answer: Health Canada is incredibly important as the federal regulator. At a provincial level, how do we deal with that? We're providing support through our regional senior business advisors, through our RICs, to understand how things are going. There are a couple of different channels that we push on from a provincial level. One is my team, where we talk to our counterparts on a weekly basis. Sometimes we can give advice to companies about

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how to navigate the system, because sometimes it's a matter of pushing on the system. Finally, the top item in our strategy is around regulatory barriers, pushing the federal government to better support our companies. This may be through better service, or developing protocols more quickly. While we do not have a regulatory function at the provincial level, we will continue to raise this as a key barrier and recommend solutions to the federal government about what needs to be done to move things along.

Question: How we can best stay up to date on the different programs that are coming up? Obviously, we're very interested in the life sciences innovation program at my company, we'd love to know when these types of programs are being launched and different changes are being made.

A: That's an excellent point. We'll keep you posted through our public communications. For the LSIP, Michael Jones from OCI will be an important part of that program and will be sharing news about it. In terms of visibility of the roll-outs of new initiatives, I'll take this question back to the broader team; how do we ensure initiatives are broadly seen. Whenever we do something new, there is a press release, so keeping an eye out for that is important. We also rely on the broader community network to amplify the messages put out by our digital team via social media. My team here values connecting and working with companies one-on-one and will share information that way. So, it's going to be a variety of ways.

Q: As you think about innovations, how do you suggest we bring to the government's attention the potential opportunity of novel innovation, to help secure pilot projects and procurement?

A: This is the hardest question I'll get, because you've essentially asked: "how do I sell my product?" This is the big challenge in this sector. Does someone want to buy my product? Who are the people/organization that is going to pay for it? We see this regularly. You have a great idea, a product in commercialization, and go meet with the long-term care minister or with their staff, but they don't buy it. So, who's buying it? This is the secret sauce, how do companies develop their plans to sell their things? But to be honest, it's not the government that has the advice here, this is why we have the regional innovation centres (RICS), to connect you with people that've done it before.

In terms of advice that resonates, it is having the right people in the room when asking the government to do something, including starting a pilot. While you may arrange a meeting with the Minister or policy/program officials at the government, they aren't the people who are going to buy your product. So, it's about finding the right people and coming with a message that resonates and hits home at the right level. So when speaking with ministers knowing that they work at a policy level, come with a message that hits at a policy level. When you're speaking to the government about an innovation that's going to solve a problem, it's all about the group that you've convened, which adds legitimacy. You can share information that needs to be considered, and then it can be passed on to those officials who are responsible for making the relevant decisions.

Q: Is there a mechanism by which that you're going to seek people to participate in that Life Science Council that you mentioned?

A: We'd be happy to talk with stakeholders, or others from Hamilton, about who you believe would be individuals who would be excellent to sit on the Council. We're at the gathering phase, putting a list together for decision makers, so we'd be happy to have that conversation. It's a little bit like making a cabinet, you want people who are truly engaged. Some of these things aren't easy to do, and sometimes it's hard to sit on a Council. The time commitment and engagement is not just the individual, but something that your company/institution must be ready commit towards as well.

Q: For challenges being developed for LSIP Stream 2, is there a mechanism by which you'll be collecting them from hospitals, healthcare facilities and GPs?


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A: The challenge stream is one of the hardest things to do, setting up something that is effective and works for industry. I will be tell health system folks that industry is an important stakeholder. They provide all the innovation that goes in and will be used (e.g., drugs, devices, ehealth solutions, and everything in between). The challenge stream is a challenge, and there is a lot of TBD around it right now. In some cases, an early stage companies product may not be used in a healthcare setting outside of a trial, not used on patients for years – but they'll need to be involved. There are a lot of conversations to be had about how to do it right. It'll look great in retrospect after 10 years, but standing it up and making the first step will be really hard. So, it is a challenge.

Time allotted | 15 Minutes

Topic: **Communicate**

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

Discussion	Presenter
<p>Synapse is proud to present the 2021 Hamilton Life Science Cluster Report</p> <p>The 2021 Cluster Report identifies 200+ organizations, with more than 36,000 employees and \$5.7B in economic activity, that developed innovative technologies transforming the future of how healthcare will be delivered across Canada.</p> <p>In addition, you can also see the most recent brochure published by Synapse that provides an overview of Canada’s leading health research and education cluster. Learn more about Hamilton’s world-class capabilities in research and discovery, clinical trials, healthcare education and life science commercialization.</p> <p>Read the full Hamilton Life Science Cluster Report here</p> <p>Read the full Hamilton Ecosystem Brochure here</p>	<p>Alex Muggah (Synapse)</p> 
<p>McMaster Researcher Parminder Raina Receives Order of Canada (Hamilton Spectator)</p> <p>McMaster professor Dr. Parminder Raina has been honoured as a member of the Order of Canada — one of the highest honours of merit in Canada — for his extraordinary contribution to research on aging and its impact on policy-making.</p> <p>Raina, also a lead investigator of the Canadian Longitudinal Study on Aging (CLSA), is among 85 appointees to receive the recognition for his “impact on national policy-making in geriatric care services,” the Gov.-General of Canada Mary Simon’s list said.</p> <p>His recent works include a nationwide study on the impact of COVID-19 on aging Canadians, as well as a six-year-long study to better understand links between lifestyle, microbiology, and brain health.</p> <p>In an interview with The Spectator, Raina said he was “surprised” to be named a member of the Order of Canada, and “delighted” that his work “had some merit and made a difference.”</p> <p>Read the full interview at the Hamilton Spectator here</p>	<p>Alex Muggah (Synapse)</p>
<p>Renowned burn surgeon leaves Toronto for Hamilton to reboot General’s burn trauma unit, develop ‘skin printing’ stem cell tech, and become new VP Research at Hamilton Health Sciences</p> <p>Dr. Marc Jeschke joined McMaster University as a professor of surgery, and was also recently named vice-president of research at Hamilton Health Sciences and medical director of its burns unit. The burn trauma surgeon and scientist is moving to Hamilton from Toronto to become medical director of the burn unit at the General Hospital on Barton Street East, and continue his research into technology that will “print” new skin from stem cells to heal a patient’s wounds.</p> <p>McMaster University recently landed Jeschke, who left posts at Sunnybrook Hospital and the University of Toronto, to become a professor of surgery. He was also named vice-president of</p>	<p>Alex Muggah (Synapse)</p>

Discussion	Presenter
<p>research at Hamilton Health Sciences (HHS), and brings nearly his entire lab team of 20 with him.</p> <p>His lab developed a hand-held 3D stem cell-based skin printer that he said has effectively treated burn wounds on mice, and after improving the machine, also on pigs, but it has not been used on humans. Jeschke is convinced it will ultimately be tested in clinical trials after coming close to crossing that threshold before he left Toronto.</p> <p>Read the full story at The Hamilton Spectator</p>	
<p>Invest Ontario features Hamilton’s OmniaBio – Shaping the Future of Regenerative Medicine</p> <p>Since the 1963 discovery of stem cells by two University of Toronto researchers, Drs. Ernest McCulloch and James Till, Ontario has been at the forefront of regenerative medicine discovery and development.</p> <p>Dr. Peter Zandstra C.M., Chief Scientific Officer, and Dr. Michael May, President and Chief Executive Officer of CCRM, recognized a need to translate this pipeline of discovery into products, leading to the founding of the organization in 2011.</p> <p>“Working with our partners, we established a capital-efficient and collaborative commercialization model to make that happen,” says May. “Today, CCRM has a global client base, and our team supports the commercialization of regenerative medicine-based technologies and cell and gene therapies with strategic funding, dedicated infrastructure and specialized business and scientific expertise.”</p> <p>Those commercialization capabilities took a giant leap forward in March 2022 with the announcement of the launch of OmniaBio Inc., a biomanufacturing operation that extended from CCRM. OmniaBio will be the anchor tenant in a new biomanufacturing campus being built in Hamilton’s McMaster Innovation Park.</p> <p>As a contract development and manufacturing organization—known in the industry as a CDMO—OmniaBio will support a broad range of cell and gene therapy companies by providing process development and clinical/commercial production services in compliance with global health standards. OmniaBio’s technical and manufacturing focus will be gene-modified and cell-based therapeutics and viral vectors for pivotal Phase III in-human clinical trials and commercial-stage manufacturing.</p> <p>The facility is set to be Canada’s largest CDMO specializing in cell and gene therapies. “OmniaBio Inc. will be a game-changer for Ontario and Canada,” says May. “It will provide missing infrastructure and expertise to allow Canadian cell and gene companies to remain here while also attracting foreign companies. Cell and gene therapy is Canada’s opportunity to be a global leader in the life sciences.”</p> <p>Read the full Invest Ontario piece here</p>	<p>Alex Muggah (Synapse)</p>


Discussion	Presenter
<p>Dignio acquires Canadian AceAge Inc. and strengthens its position in a growing market</p> <p>Dignio has completed the acquisition of AceAge, a leading manufacturer of medication dispensers, hence becoming fully integrated within electronic medication support and remote care. Through the acquisition, Dignio will strengthen its position as an innovator within health technology and deliver new and better solutions to its customers.</p> <p>Last year, Dignio launched a new multi-dose dispenser produced by AceAge - now it's acquiring the company to combine resources and know-how, with the aim of creating a leading manufacturer and distributor of software and medication dispensers globally. AceAge will continue to be based in Ontario, Canada, with its existing and new customers - but following the acquisition, Dignio will work closely with the management of AceAge to continue further product development.</p>	<p>Shannon Graszat (Innovation Factory)</p>
<p>Co-Founder of Allarta and McMaster prof working on cure for Type 1 diabetes</p> <p>There's no cure for Type 1 diabetes. But soon, courtesy of a Hamilton-based company, there could be one.</p> <p>Dr. Harald Stover, a chemistry professor at McMaster University and co-founder of Allarta Life Sciences, is behind breakthrough research that aims to cure diabetes with a cell-based therapy, in which new curative cells transplanted into the body do the work to produce insulin — alleviating the need for injections and immune-suppressive drugs.</p> <p>The technology, born in a McMaster laboratory, is in the early stages of implementation in Canada — 100 years after Canadian researchers developed therapeutic insulin, changing the lives of diabetics around the world. Stover, who presented his latest developments at the World Polymer Congress in Winnipeg July 20, told The Spectator his team is working “to push the technology closer to the clinic and patients in Canada and globally.”</p> <p>Read the full Hamilton Spectator Q and A with Dr. Harald Stover and Allarta co-founder Maria Antonakos talking about new cell-based therapy, which alleviates need for insulin injections and immune-suppressive drugs.</p>	<p>Maria Antonakos (Allarta)</p>
<p>Radiological Society of North America (RSNA), Opportunity to Exhibit in the Ontario Pavilion at RSNA 2022, November 27-December 1, 2022</p> <p>The Export Growth Branch (EGB), Ontario Ministry of Economic Development, Job Creation and Trade, is organizing a 600 square foot island pavilion, at RSNA 2022. If your company offers products and services in the imaging/radiology sector, this event will be of interest to you. The pavilion will be located in the North Hall, # 6146. For more information about RSNA 2022, please visit the website: www.rsna.org. RSNA is a world class event dedicated to the radiology/imaging sector. Participating at this trade show will give you access to potential customers, partners and investors, and in particular world class radiologists, all individuals you would not normally have the opportunity to meet. In addition, participants will be able to attend the educational sessions.</p> <p>The EGB will be working closely with the Office of the Ontario Agent General in Chicago, and the Canadian Consulate in Chicago, in order to ensure you are well prepared for RSNA. In terms of financial assistance available to exporters, you may be interested in the CanExport program provided by the federal government. Please register no later than September 15, 2022.</p>	<p>Patricia Cosgrove (MEDJCT)</p>


Discussion	Presenter
<p>White Paper: Toronto Global Identifies Acute Need for Wet Lab Space in Southern Ontario</p> <p>Despite soaring demand from life science companies and the critical importance of the biotechnology industry, there is an acute shortage of wet lab space across the Toronto Region.</p> <p>There are over 200 life sciences start-ups in our region? We want to keep the momentum going by building more wet lab space. Addressing the underlying factors constraining wet lab construction requires a coordinated, multi-stakeholder approach from various levels of government, academic and health institutions, and industry.</p> <p>To learn more, check out our NEW White Paper. https://bit.ly/3yosPfl</p>	<p>Bethany Moir (Toronto Global)</p>
<p>BioTalent Canada launches new programme for leaders in DE&I</p> <p>BioTalent Canada, a company that supports the people behind life-changing science, has launched the I.D.E.A.L. Biosciences Employer Recognition Program.</p> <p>This new recognition program is for employees who demonstrate Inclusivity, Diversity, Equity, and Accessibility Leadership. And the main objective is to recognize organizations in the Canadian bio-economy that are leading the way in embodying the diverse and inclusive business principles necessary to promote the growth and success of the sector.</p>	<p>Andy Donovan (LSO)</p>
<p>Call for Innovation: Public Health Agency of Canada and National Research Council</p> <p>The Public Health Agency of Canada (PHAC) is seeking a technology, procedure or technique that provides the means to detect concussions based on the objective measure of clinical indicators.</p> <ol style="list-style-type: none"> 1. Detecting concussions using objective indicators: In this way, the solution will support the Government of Canada's efforts on concussion by preventing severe health outcomes and helping to improve the detection and management of concussions. 2. Respiratory disease therapeutics: NRC is seeking therapeutics that could be positioned to address respiratory disease either through preventing viral infection/replication or can treat the associated complications such as inflammation, edema, blood clots, pneumonia or fibrosis. Potential therapeutics could have utility in other disease indications which could be extended for use in respiratory disease 	<p>Andrea Guest (Innovation Factory)</p>

Time allotted | 15 Minutes

Topic: **Collaborate & Accelerate**

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

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

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

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

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

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

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

Learn More About COVID-19: Online Resources

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

Hospitals and Research Centres

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

Hamilton Community Partners

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

Government and Agencies

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

For Companies Making COVID-19 Related Medical Products

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