

Hamilton Health Innovation Check-up: Meeting Minutes

August 27th, 2018

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, Synapse Consortium
Location	McMaster Innovation Park,
	175 Longwood Dr,
	9:00-10:00am

Please note that minutes for our monthly check-up meetings are not published and are for reference purposes only. We do our best to ensure all information is accurately portrayed, and that no privileged/private information is inappropriately disclosed.

Past meeting minutes can be access through a public Dropbox, using the following link: https://www.dropbox.com/sh/wszh8i2jq1sr03g/AACByBs-HmHVBl0ZIX5Hj7zEa?dl=0

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: <u>Alex.Muggah@SynapseConsortium.com</u>. Updates will be reflected in a new section titled "Amendments from Previous Meeting".

Next Monthly Check-up: September 24th | 9:00 – 10:00am | McMaster Innovation Park

Please contact Alex Muggah at Synapse to be added to the meeting invite list / minutes distribution lists

Time allotted | 20 Minutes

Topic: Communicate

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

Discussion	Presenter
New CEO at McMaster Innovation Park (MIP) Business leader and technology expert Ty Shattuck has been appointed CEO of the McMaster Innovation Park (MIP). Shattuck has significant experience guiding start-ups and early stage technology companies to commercialization, and is considered "a visionary, whose experience – both on the business and technology sides – combined with his proven leadership, strong interpersonal skills, and his capacity to embrace new ideas, will ensure we build on the momentum and reputation the Park has developed over the last decade." Ty began his new role on September 4, 2018, it's an exciting opportunity to realize the vision of MIP and its role in developing the regional economy.	Alex Muggah (Synapse)
CPDC Receives \$10.4M over 4 Years The Honourable Kirsty Duncan, Minister of Science and Sport, announced five grants totaling \$79.8 million, to be delivered through the Centres of Excellence for Commercialization and Research (CECR) program. The five hubs are located in Hamilton and Toronto, Ontario; Montréal, Quebec; and St. John's, Newfoundland. The announcement was made on July 30 at <u>McMaster University</u> , where the <u>Centre for</u> <u>Probe Development and Commercialization (CPDC)</u> is located. The CPDC works with industry and academic partners to provide the expertise and infrastructure needed to develop and manufacture radiopharmaceuticals, a special type of drug that gives off energy and helps doctors diagnose diseases at an earlier stage. Based on their diagnosis, they can then choose the best therapy for individual patients with diseases such as heart disorders and cancer. With this funding, the CPDC will be able to launch new manufacturing and training initiatives that will expand its work in the rapidly growing radiopharmaceutical industry. Not only will this support high-tech jobs, it will ensure Canadians have access to these innovative solutions that detect and treat their diseases sooner.	
Applications for the latest <u>Forge</u> cohort have closed, with 30 applicants applying for 5 slots – showcasing the competitive nature of companies looking to take advantage of Hamilton's campus-linked accelerator. The Forge operates on a 3-cohort cycle each year, and are bringing in our earliest stage of companies. Once they arrive, these companies will undergo a bootcamp, and then will we help push them towards	Jonathan Boulanger (Forge)



Discussion	Presenter
developing a product that meets a market demand. Expecting to move programming to	
focus more on an entrepreneurship course that is being developed. The Forge Startup	
Competition is set for March where McMaster students and alumni (last 5 years) can	
participate and receive seed funding of \$100,000.	
Input Health, one of the Forge's most exciting clients, was successful in raising \$200,000 for hiring from NRC-IRAP. Check out their current openings <u>here</u>	Jonathan Boulanger (The Forge)
Synapse has created the <u>Hamilton Innovation Partnership Portal</u> (HIPP) to make the process simpler and more streamlined to find new partners within Canada's leading health research and educational ecosystem.	Andrea Lee (HHS)
It'll be 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, and have asked companies to direct them to the portal. Synapse is working with HHS to test it out with companies right now, including getting the approach/questions right. This will be a sense of who wants to interact with the community, and then triage companies to relevant stakeholders within Hamilton. Portal is online through the Synapse website: <u>http://synapseconsortium.com/partner/</u>	
St. Joseph's Establishing AI Centre of Excellence in Niagara Region	Fraser
St. Joseph's is working with the provincial government to address concerns around how prepared healthcare organizations are to address changes that will stem from the application and deployment of AI. Niagara region is planning on building a new hospital by 2024, with a lot of focus around integrating AI into the delivery of care. This centre should inform the process before we start building the hospital – how to integrate AI rather than bolt it on. By way of contrast, Humber has built a digital hospital, with Niagara looking to build an AI hospital.	Edwards (St. Joseph's)
What is an AI hospital – it is one that doesn't have anyone coming in it. There are many other centres looking at specific applications of AI to diagnostics (e.g., radiology and imaging) – this will not be the focus of our centre. Inspired by Women's Health Hospital in Toronto, that wants 25% of its services to be provided virtually. We need to avoid the situation that the day we open the hospital is already over capacity. We want to see the flow of patients from community into the hospital, and then back out into the community.	
St. Joseph's is looking to leverage \$10 million to help entrepreneurs and innovators who are developing new AI solutions in healthcare. Then how to scale those changes across the province. Currently looking for an executive director to run that centre. They're in the midst of the recruitment process with 4 or 5 candidates – so hopefully we'll know who will lead the centre soon and then on to considering the specific problems we're wanting to solve. By early 2019, hope to have he first open procurement looking for solutions. St. Joseph's is committed to engaging with Brock University, and many private sector partners.	



Discussion	Presenter
The focus of the centre will likely be around aging (with 3x the number of people retiring in Niagara) and mental health – with major stakeholders (including LHINS) interested in supporting aging at home and helping mental health in the community.	
 Read more about it here, here, or here "Developing Clinical Point-of-Care (POC) Diagnostics" Workshop, September 26-27 Fraunhofer BEAM is hosting a clinical diagnostic workshop at the McMaster Innovation Park, bringing together clinicians from HHS and St. Joseph's to explore what is needed in point of care diagnostics tools. Expect to see companies, entrepreneurs and researchers in attendance. The second day of the workshop will look at how the Fraunhafer Project Centre for Biomedical Engineering and Advanced Manufacturing (BEAM) will help you get there. The workshop represents an excellent opportunity to: Understand the path to developing POC Dx from ideation to commercialization Be introduced to the FPC-BEAM centre and capabilities for Dx development Understand product development and regulatory pathway requirements Be informed of the industry's needs, pain points, and industry barriers Seek opportunities for networking with companies for potential partnerships or collaborations Speak with professionals and entrepreneurs about commercialization and intellectual property protection Identify funding opportunities such as grants, industry collaborations and investment Educate and/or identify opportunities for students/trainees in commercialization and industry collaborations 	Leigh Wilson (MILO)
For further agenda details, or to register: <u>https://fpc-beam-workshop.eventbrite.ca</u> BEAM is a joint collaboration between McMaster and the Fraunhofer Institute, designed to develop novel technologies in cell therapy, biomaterials, biomarkers, and point-of-care diagnostics by bridging the gap between academia and industry.	
McMaster Innovation Showcase, November 7, 2018 MILO is hosting an Innovation Showcase on November 7 th that will be held at McMaster Innovation Park. The theme is the future of healthcare, and will bring together a panel of experts on research ethics. Heather Chalmers, President and CEO of GE Canada, will be delivering the keynote address	Leigh Wilson (MILO)
The 9th annual Innovation Showcase will focus on biomedical technologies, highlighting the role and impact of McMaster research in shaping the future of healthcare. This event is hosted by the McMaster Industry Liaison Office (MILO) – supporting innovation, commercialization and community engagement. For further agenda details, or to register: <u>https://milo.mcmaster.ca/showcase</u>	



Discussion	Presenter
A third Health Ecosphere showcase will be happening in either October or November, though the date has not yet been announced. It will focus on procurement (rather than exposure), with 24 projects are being show	Goran Marjanovic (HHS)
To learn more, contact Goran at: marjanovgo@hhsc.ca	
Bay Area Research Logistics (BARL) is heading to Alberta, to present at the University of Calgary and attending their BioAlberta general meeting – a life science consortium for the entire province. Afterwards, heading to Vancouver in October and Boston in November for clinical trial conferences.	Kaitlin Guarascik (BARL)
Separately, BARL visited Buffalo recently and had a few exploratory meetings about securing warehousing facilities to support transhipments of clinical trial materials. They need refrigerated storage, and are looking for flexible space (maybe 5,000 square feet), which would meet the necessary FDA CGMP regulatory requirements.	
Ron indicated that he would be happy to help connect BARL with Panasonic, while CBRE noted that they have a decent presence in the US market and could also assist.	
Health QR is excited about the progress being made with partners to apply for a CAHBI grant. They see potential synergy with Dash MD, around discharge processes and streamlining process between hospital and community pharmacy. They see significant opportunity for a project that will be based out of PEI.	Patti Ryan (HealthQR)
St, Joseph's is part of two Health Technology Fund (HTF) applications.	Fraser Edward (St.
The first relates to St. Joseph's innovative <u>integrated comprehensive care</u> (ICC) funding and process model. They hope to work with Medtronic to deploy a virtual platform that will accelerate the impact of the ICC.	Joseph's)
The second proposed project is with a Toronto-based company called <u>Identos</u> , and would involve working with several hospitals, including a team based in the Niagara region, on an identity management platform. In addition to a patient portal, patients may also need to access and interact with a community management app, or a pharmacy app, etc. The Identos platform can act as a wrapper that This is a wrapper that puts greater control in the hands of the patient.	
Check out two great videos about the McMaster's research and collaborative capabilities: <u>Introduction to McMaster University's Faculty of Health Sciences</u> and <u>McMaster University: Health innovation using 3D printing</u>	Alex Muggah (Synapse)
CBRE wanted to share that it has recently released a life science study: " <u>The Boom</u> <u>Amid Disruption</u> " looking at the trends facing life science companies, primarily in the United States – but recognizing that some of the trends are affecting Canadian companies as well.	Jim Wilson (CBRE)
Trade Mission to Biotech Showcase 2019 Export Services Branch of the Ministry of Economic Development, Job Creation and Trade, will be organizing a Trade Mission to the Biotech Showcase 2019. This event is	Carolynn Reid (EcDev)



Discussion	Presenter
produced by Demy-Colton and the EBD Group. It will take place from January 7-9, 2019. The Biotech showcase is an investor partnering conference devoted to offering private and public life sciences companies and service providers an opportunity to present and meet with investors, and pharma executives.	
Registration and program information will be sent to you in the next couple of weeks. For more information about the Biotech Showcase, please visit: <u>www.ebdgroup.com</u>	
Or contact Patricia Cosgrove (Ontario Ministry of Economic Development, Job Creation and Trade) at: patricia.cosgrove@ontario.ca	
New Medical Device to Assist Antibiotic Discovery	Alex Muggah (Synapse)
A group of McMaster University researchers have created <u>specialized hardware that</u> <u>will be "game-changing" in their quest to discover new antibiotics</u> . The new lab instrument — a small, black box called the printed fluorescence imaging box (PFIbox) — was created in-house using a 3D printer at a cost of about \$200. The <u>research</u> was led by Dr. Eric Brown, who is director of the Biomedical Discovery and Commercialization program, along with Shawn French and Brittney Coutts of the department of biochemistry and biomedical sciences at McMaster.	
An interview with the researchers in the Hamilton Spectator can be found <u>here</u>	
Mohawk opens Joyce Centre for Partnership & Innovation	Alex Muggah (Synapse)
On September 10 th , students and guests saw the official opening of the largest renewal of labs and classrooms in Mohawk's 51-year history, construction on The Joyce Centre began in late 2016 following a \$20 million investment by the Government of Canada. Mohawk welcomed The Honourable Filomena Tassi, Minister of Seniors and other federal government representatives to recognize and celebrate the support of the Government of Canada in Abuilding this remarkable and game-changing building at a special ceremony.	
For more information on The Joyce Centre for Partnership & Innovation, visit www.netzeromohawk.ca.	
On September 26 th , Life Sciences Ontario (LSO) will be presenting a collection of company success stories to be distributed at our Queen's Park Day. LSO's annual Queen's Park Day gathers companies and policymakers to communicate the	Alex Muggah (Synapse)



Discussion	Presenter
tremendous potential of Ontario's life sciences sector, and collaborate on solutions to accelerate its growth	
This is a fantastic opportunity to spotlight your organization in front of an audience of key policymakers, while helping raise the profile of our sector. To submit your success story, please fill out our short online form. To access the	
form, <u>click here</u>	



Time allotted | 20 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
4th Annual Celebrate Research @ St. Joseph's Healthcare	Gail Martin (St. Joseph's)
On Thursday October 23rd, 2018, the Research Institute in partnership the with St. Joseph's Healthcare Foundation are hosting the 4th Annual Celebrate Research event. During this time we will recognize and celebrate the many research achievements at St. Joe's and present recipients of the 2018 Research Institute Awards Program with their certificates.	(St. 303eph 3)
In addition to the awards ceremony and interactive display marketplace we have included a "mini" Academic poster competition for learners from the five pillars of research at St. Joe's (Mental Health and Addictions, Nephrology, Genitourinary, Lungs & Chest, and FSORC).	
The event as a whole is slated to take place from 11 am until 4 pm with the poster session from 12-1:30 pm. To register click <u>here</u>	
Recent Site visits to Hamilton:	Alex Muggah
Sept 13: German Delegation visiting BEAM	(Synapse)
 Minister Dulig (Deputy Prime Minister, and Minister for Eoconomic Affairs) spent the day in Hamilton meeting with life science stakeholders to strengthen the relationships between Hamilton and the Saxony region in Germany, building on the relationship between McMaster University and AZI Fraunhofer that led to the creation of the <u>Biomedical Engineering and</u> <u>Advanced Manufacturing (BEAM)</u> facility at the McMaster Innovation Park. 	
Sept 14: Norwegian Parliamentary Committee on Health visiting Health Ecosystem	
 Members of the Norwegian Parliamentary Committee on Health met with innovators and clinicians operating out of Hamilton Health Sciences and St. Joseph's to learn more about how the Hamilton region is developing and deploying innovative health technology. The Norwegian delegation was particularly interested in hearing about the collaborative partnership between Ably Medical (Norwegian hospital bed manufacturer) and the GERAS Centre 	



Discussion	Presenter
for Research on Aging who are working to develop the <u>next generation of</u> <u>hospital beds</u> .	
Sept 28: UK Department of International Trade & British Consulate visiting Hamilton	
• The UK Department of International Trade Lead Specialist for MedTech and Business Development Manager for the National Health Research Institute (NHRI) will be in Hamilton with members of the British Consulate to meet with Hamilton companies and researchers to explore potential opportunities to develop new commercial pathways and collaborative partnerships.	
The Yordas Group would like to invite interested parties to the upcoming NanoMonitor workshop in Lancaster on the 25th September in Lancaster.	Giselle Vincent
Nanomonitor is an EU funded LIFE project that has developed a real-time information and monitoring system to support the risk assessment of nanomaterials. The system is an on- line information system consisting of two integrating elements; a software application to capture, store, exchange and manage the data on the concentration of engineered nanomaterials, and a new low cost monitoring station prototype to support the the outdoor and indoor monitoring of airborne nano-pollutants.	(Yordas)
The workshop will allow participants to use the station and investigate its capabilities. In addition the workshop will introduce how the system can be used to prove compliance with REACH and other regulations, identify emerging risks for authorities and regulators and be used in conjunction with other air quality monitoring systems. Professor David Alsop, one of Lancaster University's leading medical researchers, presenting some of his recent work on links between magnetic nanoparticles and Alzheimer's to show why the monitoring of nanomaterials may be a crucial tool in reducing emerging health risks.	
To register, click <u>here</u>	
Upcoming Michael G. DeGroote Initiative for Innovation in Healthcare Workshops Intellectual Property, Legal Agreements & Business Incorporation, Sept 20 (9:30- 11:30am)	Sarrah Lal (MGDII)
Are you interested in learning more about how (and when) you can protect your research and innovations? Join us for our 'Breakfast and Learn' sessions to learn more about intellectual property, how to navigate the regulatory environment and strategically validate your up-and-coming technologies. Note that the Breakfast & Learn series occurs bi-weekly, and additional events will be added to our online event listing.	
Health Innovation Roundtable: Business Model Development, Sept 21 (9-11am)	
Ever wondered how (and why) organizational structures change based on the underlying business strategy? Join us as we discuss the Harvard Business Review	



Discussion	Presenter
(HBR) Podcast "Choosing a Strategy for Your Start-up" by Joshua Gans, a professor at the UofT Rotman School of Management. In this podcast he advises against trying to commercialize a new technology or product before considering all the strategic options. At the end of the discussion and follow-up workshop on business models, you will understand key components of business models and how to generate a strategy that aligns with the industry (context) and goals of your innovation.	
These discussions are open to students, researchers, health care professionals and entrepreneurs. Refreshments will be provided! Please register early as spots are limited.	
Women Leaders in Digital Health Award	Alex Muggah (Synapse)
Nominations now open for 2019. Digital Health Canada introduced the Women Leaders in Digital Health Award in order to recognize the top ten female visionaries harnessing the power of IT to transform Canadian health and healthcare. Each year, ten new Women Leaders are recognized for the work they have accomplished in the last year.	(Synapse)
It's time to select the 2019 Women Leaders in Digital Health! Honour a health IT colleague, mentor, or employee - the Women Leaders in Digital Health Award is open to all women working in the Canadian digital health community. Simply download and complete the <u>nomination form</u> before September 28, 2018	
Applications Open: Sunnybrook Next Generation Hawk's Nest at Mars	Alex Muggah (Synapse)
On November 22, @MaRS Discovery District, 4 medical technology startups will come out and pitch an all-star panel of judges + an audience of 300+.	(0)100007
The pitches will be followed by a tough Q&A from the panel and will be scored across a set of categories. At the end of the night the winner will be crowned by audience vote. The champ will earn non-dilutive funding to the tune of 50% of the net proceeds from the event, up to a maximum of \$50,000! The rest of the money raised will be donated to the highest priority needs of the Sunnybrook Research Institute. Also be hosting upwards of 25 booths from other Canadian Medical Technology Startups.	
If you are interested in applying, please visit <u>snghawksnest.ca</u> or reach out to event organizers; Ben Axler (<u>benjaminaxler@gmail.com</u>), Jesse Buckstein (<u>jesse@cpointcapital.ca</u>) and Dave Tile (<u>david@nimblemedia.ca</u>).	
Innomar Live 2018 Conference: Healthcare Innovation	Alex Muggah (Synapse)
On October 4 th , the InnomarLive conference will examine how patients, clinicians and payers are moving towards innovative digital technology solutions to drive improvements in the healthcare community while empowering and improving overall care. Today's rise in Digital Health solutions are creating communication hubs, enabling integrated data sharing, and	



Discussion	Presenter
empowering patients for more focused and accurate care. EMR connectivity, wearable technology and telemedicine is revolutionizing how patients are experiencing and accessing care. Digital technology is connecting a myriad of stakeholders with the goal of improved health outcomes and efficiencies for the healthcare ecosystem in Canada.	
Intelligent Surgical is working with 10 other companies to stand up a startup accelerator to serve life science companies in the Kitchener-Waterloo region. This dovetails with efforts to create a MedTech cluster in KW by Armand and Intelligent Surgical, and provide a venue that would help companies grow and stage in the region. It may be useful for Hamilton-based companies, hospitals and others to align with this effort to support MedTech start-ups gaining traction across the region. Fraser Edwards (SVP Partnerships, St. Joseph's Healthcare) noted that St. Mary's General Hospital – part of St. Joseph's network of hospitals – could potentially be an partner, given their capabilities and location in Kitchener.	Jim Wilson (CBRE)
Earlier in the summer, Ron connected with contacts in China who were looking to diversify their interests, with Canadian life science companies being one area of potential interest. His Chinese partners are looking for Canadian companies who are interested in developing new products and/or selling into the Chinese market. They're very open to business, and if companies are looking to engage with China, they can get more information directly from Ron (<u>ronkaczorowski@sympatico.ca</u>)	Ron Kaczorowski
<u>3i Ontario</u> , lists grants, funding and partnership opportunities for life science companies. 3i Ontario is maintained by Azimuth Health Group, an Ontario Innovation Broker	Alex Muggah (Synapse)



Hamilton Health Innovation: Calendar Highlights

<u>September</u>

- Sept 20: McMaster University Student Career Fair
- Sept 20: Intellectual Property, Legal Agreements & Business Incorporation (MDGII)
- Sept 21: Business Model Development (MDGII)
- Sept 21: Industry Preview Career Fair (BDC Program)
- Sept 24-26: Philadelphia MedTech Conference
- Sept 26: Queen's Park Day (LSO)
- Sept 26-28: World Angel Investor Summit 2018 (NACO)
- Sept 26-27: <u>Workshop: Developing Clinical Point-of-Care Diagnostics</u> (FPC-BEAM)
- Sept 27: <u>LiON's Lair</u> (Innovation Factory)

October (and Beyond)

- Oct 4 <u>Health Economics and the Future of Cancer Health</u> (Health Leadership Academy)
- Oct 4 <u>InnomarLive</u> 2018 Conference Series: Health and Innovation (Innomar)
- Oct 4: <u>Breakfast & Learn In-Focus: Data Registries, Machine Learning and Digital Apps</u> (MGDII)
- Oct 18: <u>Breakfast & Learn Market Research: Research Ethics & Methodologies Part I</u> (MGDII)
- Oct 16-18: 21st TCI Network Global Conference (Institute for Competitiveness & Prosperity)
- Oct 23: <u>4th Annual Celebrate Research</u> (St. Joseph's Healthcare)
- Oct 24: <u>Waterloo MedTech 2018</u> conference (Waterloo MedTech)

November (and Beyond)

- Nov 7: McMaster Innovation Showcase (MILO)
- Nov 22: <u>Sunnybrook Next Generation Hawk's Nest</u> at Mars
- April 3-4 (2019): <u>Canada's MedTech Conference</u> (MEDEC)

