

Hamilton Health Innovation Check-up: Meeting Minutes

October 29th, 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 accessed through a public Dropbox, using the following link:

<https://www.dropbox.com/sh/wszh8i2jq1sr03g/AACByBs-HmHVBI0ZIX5Hj7zEa?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: Alex.Muggah@SynapseConsortium.com. Updates will be reflected in a new section titled "Amendments from Previous Meeting".


Next Monthly Check-up: November 26th | 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: **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">• Sarrah Lal Senior Manager Michael G. DeGroot Initiative on Health Innovation (MGDII) McMaster University	
<p>Topic: Innovation & Entrepreneurship “Clinics” @ McMaster</p>	
<p><i>[the following is a synopsis of the discussion, and has been lightly edited for length and clarity]</i></p>	
 <p>MGDII - Clinics Overview.pdf</p>	<p>(presentation slides, available for download in Health Check-up drobox folder)</p>
<p>Introduction</p> <p>The Michael G. DeGroot Initiative for Innovation in Healthcare (MGDII) is an exciting initiative that Dr. John Kelton and I have been working on for several years. There’s been a bit happening around what MGDII has been doing – and I wanted to give an overview of the Innovation Clinics that MGDII is in the process of standing up.</p> <p>The motivation behind MGDII is to turn disclosures and patent applications activity at McMaster University into more companies. It is understood that there is a great deal of research activity at McMaster – lots of publications – but not as many companies being created, despite our student and research excellence.</p> <p>This is not to say that Hamilton is without success stories. Great companies are coming out of research initiated in McMaster (e.g., Adapsyn, Fusion, Advanced Theranostics, Mariner Endosurgery, Turnstone, Triumvira, 20/20 OptimEyes). However, too successes can depend on serendipity and fortuitous collisions (with investors, private sector partners, expertise, etc.). Our hypothesis is that we’re missing opportunities because of a lack of connections - so through MGDII we’re trying to spread knowledge, funding opportunities, and networks, so we can increase the chance of success.</p>	
<p>Discussion</p> <p>Our goal with the Innovation Clinics is to create venture teams of students who can be linked to researchers that can create social impact in Hamilton and the community. The Clinic concept is meant to be a place where all these things happen. It will be a physical location – to complement the virtual content we’re creating – to bring students together with researchers, clinicians, companies, etc.</p> <p>There will be a physical clinic at the Ron Joyce Centre (RJC, opening January 2019), at the McMaster University Medical Centre (MUMC) and the Charlton Campus at St. Joseph’s Healthcare. We’re trying to leverage the assets</p>	

Guest Speaker Discussion

that are already there, and apply it against existing activities. For example, at St. Josephs their strength is research, at MUMC, there is talent, at RJY there is end product support around marketing strategy and operational effectiveness. The hope is to trade off these different assets and bring them together. The clinic is a talent and skill set exchange.

The approach we're taking, is that we're looking to focus on 6 different health innovation categories (i.e., therapeutics, medical devices, diagnostics, data sciences, research tools, health system innovations), and are working through a three-stage pipeline to address the need for success.

First, increase awareness of innovators and innovation. We're creating the innovator series where we profile people like John Valliant, who are different stages of the innovation development journey. And through sharing their story, start to inspire others. We're also privileged to have students who can complement senior researchers

Second, develop skill sets so they can pursue innovation. For us, we're developing bootcamps, workshops to train individuals through the spectrum from idea/conception to market entry. We want people to think about what problem(s) will develop value for interested stakeholder groups.

Third, create opportunities to apply skill sets to drive innovation forward. This has been competition projects such as the [Innovation Sprint](#) and Venture Sprint. To enable people to activate skill sets and absorb new learnings, we're letting them participate in innovation projects, to create tangible projects for others – and then get feedback on their effort.

The Clinic is still developing mechanism(s) to identify projects that can be submitted to be worked on. These can include working on new proof of concept technologies, or technology with an intended use case (e.g., but no market strategy), a clinical challenge to identify pain points and resolve them, and patents with novel inventions (find clinical application and work with researchers to move them forward). Depending on the project, different outputs will likely be created. As before, the ultimate goal is to have more success stories.

Question & Answers

Question: You talked about patent – do we expect all patents to be issued?

Not necessarily. It is sometimes necessary to file applications for which there isn't a lot of hope – but over time, a decision may need to be taken around whether to invest \$100,000 to implement patent in every jurisdiction. We may need a private sector partner. At an early stage, researchers want to publish, which may lead us to abandon the patent application. Usually if we pursue the application, it will get issued. We've had a good year in McMaster – it can take 5 years from start to finish to get a patent issued – but we've had 18 this year.

Question: The skill sets for many of the things that you're doing – the consumer market research – may not necessarily be native to the academic community

We have a lot of resources that we can draw upon. For example, in both our business and health science library systems. Naturally, they are better at finding research papers – and will also access information from other partners in the community such as the Innovation Factory.

Question: Are there people with expertise who can bring real-world knowledge into the clinic from outside.

Guest Speaker Discussion

There is always an application project, after the bootcamp has been delivered. We'll get feedback from lawyers and MILO. We're collecting mentors who will be assigned to teams, but want to make sure that before we set them in front of the student.

Question: What are the types of people that can engage / participate with the Clinic?

An entrepreneurial journey is not linear, but we're trying to create a linear activity to deal with a cohort that is interested. We know they are students who are interested, and the characteristics they have. We're evaluating content and creating a stable of mentors that we want to protect so they aren't over-used. There is a natural opportunity to leverage the assets in Hamilton. We're going to need people-teams and groups, within 6-12 months, who will need support.

By and large, the more focused specialized knowledge is what we need, in-depth subject matter experts. For example, we've just met someone from St. Joseph's Healthcare who is into privacy and security – who will be able to help us answer these questions. If we make the Clinic attractive enough; additional VCs, investors, students, will come.


Question: The hardest thing to find is talent. Engaging researchers can often mean going down groundhog holes. Finding people who can manage PHDs. Executives in Residence (EIRs) don't get enough time with companies. Finding people who have the capacity can be hard.

There are some specialized mega-superstars researchers (e.g., [Gerry Wright](#)), who have self-selected to focus primarily on research. They have great idea, but are already working 20 hours a day – but there is an opportunity to get their students. We have lots of ideas, but meeting with clinical partners likely won't generate much as they aren't oriented towards commercialization. It is important we create a good match-making model from young people who want to move an idea. At this point our focus is students who are at the start of the process

Time allotted | 20 Minutes

Topic: **Communicate**

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

Discussion	Presenter
<p>Synapse Life Science Pitch Competition</p> <p>Applications for the 2019 competition are starting to come in, but we would greatly appreciate if you could share with your network, reminders or encouragement to apply before the November 11th deadline!</p>  <p>Please encourage innovators with a life science product, service or idea, and upper-year college/university and Masters/ PhD students to apply for the opportunity to become teams and</p> <ul style="list-style-type: none"> • Work hands-on to develop a business and commercialization plan, and potentially pitch for up to \$60K in cash and in-kind prizes • Participate in business training workshops to help bring their idea to market • Connect with the innovative life science community <p>Click here to check more details and apply for the Synapse Life Science Pitch Competition.</p> <p>Click here to SAVE THE DATE for the Synapse Pitch Showcase on March 27th, 2019</p>	<p>Alex Muggah (Synapse)</p>
<p>The Synapse Life Science Consortium and Sleep Angel are pleased to present two upcoming talks on November 15th and 16th by Dr. Michael Ackerman.</p> <p>A world-renowned expert in areas of health innovation, infection-control and sepsis, Dr. Ackerman is the Director of the Masters in Healthcare Innovation and Professor of Clinical Nursing at Ohio State University.</p> <p>November 15: Sepsis - Current Guidelines & Controversies 3-5pm, McMaster Innovation Park</p> <ul style="list-style-type: none"> • Open to nurse practitioners, clinicians and students, this session begins with a creative exploration of the pathobiology of this deadly syndrome. Included in this exploration is the role precision medicine will play in shaping future therapy. Most recent evidence will be presented. The session heavily emphasizes the most recent “Surviving Sepsis Campaign” guidelines, Sepsis 3 definitions and utilizes an evidence-based approach to adult learning. • Networking and light refreshments following the talk • For more information, or to register, click here 	<p>Alex Muggah (Synapse)</p>

Discussion	Presenter
<p>November 16: Innovation Based Practice in Healthcare Noon-1:30pm, McMaster Innovation Park</p> <ul style="list-style-type: none"> • Innovation-based practice (IBP) describes what happens when there is a gap between what's known and what is needed. This presentation will describe the "Innovation continuum", what it means to healthcare, and how to address innovation management in complex adaptive systems. The talk will also explore the impact of an innovation- vs. evidence-based approach to developing novel healthcare technology (see attached article by Dr. Ackerman) • Networking following the talk and light lunch will be served • For more information, or to register click here 	
<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.</p> <p>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, 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.</p> <p>Portal is online through the Synapse website: http://synapseconsortium.com/partner/</p>	<p>Andrea Lee (HHS)</p>
<p>Niall Wallace from Gabriel Scientific had a few updates, including:</p> <ol style="list-style-type: none"> 1. I have a demo unit of HandInScan over the next 2 weeks before it is shipped out west to Calgary. London Health Sciences is our first Canadian deployment and they purchased 2 units that went live yesterday. Their trial earlier this summer was a good success - and they are perhaps the best site so far in North America in terms of Hand Hygiene quality. <p>If there is interest - a good stat to share is that we had a 74%+ failure rate among measured hand hygiene quality among hand hygiene trainers and experts at APIC2018 (the largest Infection Control conference in the US) - which is slightly better than the 92% failure rate at a study conducted in 2017 among clinical and nursing staff at the University at Buffalo/Niagara University. The good news is that all improved to a 95%+ pass rate within 3 weeks.</p> <ol style="list-style-type: none"> 2. I have just secured the Canadian distributor rights for ReadyDock.net - a UV surface disinfection technology for mobile phones, iPads and other mobile healthcare devices. It is a desktop unit with a drawer that completely sterilizes surfaces in 30 seconds. The second most contaminated surface we typically found in US hospitals were physician phones. Available to support demos for anyone who is interested. 3. Gabriel Scientific launched our Children and Infants line for SleepAngel.ca at the national Child Wellness conference. Our latest results - also featured at APIC - we a 58% infection incidence reduction and 38% cost savings from a tertiary hospital/ICU in Saudi Arabia. <p>For more information, please reach out to Niall Wallace: niall@sleepangel.ca</p>	<p>Niall Wallace (Gabriel Scientific)</p>
<p>A recent report by the University of Toronto Impact Centre, called "The Land of Stranded Pilots"</p>	<p>Alex Muggah (Synapse)</p>

Discussion	Presenter
<p>The report sought to better understand the difficulty companies have commercializing health tech in Canada. They looked at this issue and decided to focus on three specific questions: Does Canada actually have a problem with health tech commercialization? If so, how extensive is that problem? And what is causing it?</p> <p>The report found the US has five times as much capital on a per population basis invested in both new and growing companies. In terms of public expenditure on research, an annual expenditure of \$7.3 B of health tech research in Canada winds its way through the system, gets augmented by privately funded research, of approximately \$500 M, to produce about \$3.5 billion of revenue annually. That's \$3.5 billion of revenue from \$7.3 billion of research.</p> <p>Our examination of the system found that:</p> <ol style="list-style-type: none"> 1. There is no alignment of research dollars and researchers with commercialization objectives. 2. From the perspective of the entrepreneur, the system for commercializing health technology is a byzantine and flawed system with multiple overlapping, competitive, and duplicated parts with funding and assistance gaps. 3. The healthcare system is not aligned to purchase the innovation that comes out of the health tech system, and in fact, can act as a brake on innovation. 	
<p>Biomedical Discovery and Commercialization (BDC) Student Placements</p> <p>The BDC program has 16 excellent students in the Master's program who are starting internships in January and are currently looking for suitable placements.</p> <p>The BDC program is a limited enrollment offering by the Department of Biochemistry and Biomedical Sciences with key contributions from the DeGroot School of Business. The training program encompasses level III and IV of undergraduate studies as well as a 12-month course-based Master's program. The latter includes a 4 to 8 month internship in the health sciences sector. This limited enrollment program will afford a unique educational experience for students seeking first-rate training in the biomedical sciences with an emphasis on drug discovery and development.</p> <p>To learn more please contact Jennifer Crane: cranej1@mcmaster.ca</p>	<p>Jennifer Crane (McMaster)</p>
<p>Innovation, Commercialization & Entrepreneurship Events hosted by the Michael G DeGroot Initiative for Innovation in Healthcare (MGDI)</p> <p>Several events coming up in the fall. These workshop events are divided across four different types of series. All are welcome to attend:</p> <ul style="list-style-type: none"> • Breakfast & Learning: pick up new knowledge about current issues and trends relevant to the healthcare industry • Innovator series: in-depth discussions with emerging and existing innovators. Relevant for anyone curious about health innovation, including those who are not innovators or entrepreneurs 	<p>Sarrah Lal (MGDI)</p>

Discussion	Presenter
<ul style="list-style-type: none"> • DevTank meeting: small, focused group discussions on particular business issues. Suited for researchers and innovators thinking about pursuing commercialization activities, or who have a project and is skill building • Innovation Sprint: the 2nd annual competition open to all students. Working with St. Joseph's Healthcare's Integrated Comprehensive Care (ICC) model to identify new ideas and solutions to improve the delivery of care through the ICC <p>If interested, sign up through the MGDII Eventbrite page or contact Sarrah Lal at: sarrah@mcmaster.ca</p>	
<p>PHRI Research Day 2018 a Resounding Success</p> <p>On September 10, PHRI hosted its annual Research Day, highlighting the work of faculty, students and staff working at Population Health Research Institute</p> <p>Guest speaker Dr. Alan Bernstein, president of the Canadian Institute for Advanced Research, presented "The Future of Health Research." While Dr. Antoine Hakim spoke on Changing the Scene on Strokes in Canada through a National Network, sharing lessons learned from establishing the Canadian Stroke Network Other presentations included Dr. Guillaume Paré on Population to Pathophysiology: the role of Omics research, and Dr. Michael McGillion discussed Integrating Research with Clinical Innovation, with some of his students displaying the SMArTVIEW remote patient monitoring technology.</p> <p>To learn more, and to see who was recognized, click here</p>	<p>Alex Muggah (Synapse)</p>
<p>Celebrate Research Day @ St. Joseph's</p> <p>On October 23rd, St. Joseph's hosted its annual celebration of research, recognizing the achievements of our researchers and the recipients of the 2018 Research Institute Award Program. These awards help new and established researchers to continue improving patients' quality of life through new diagnostics, treatments and understandings of the body and mind.</p> <p>In addition to the awards ceremony, researchers from each of the four major research programs will present the key successes of their work over the past year. We are also holding an academic poster competition which showcases student projects from across St. Joe's.</p> <p>To get a full recap, click here</p>	<p>Gail Martin (St. Joseph's)</p>
<p>Hamilton Health Sciences Pitches at OCE Health Technology Fund (HTF)</p> <p>Katie Porter (Executive Director, HHS Research Administration) shared that on October 24th, representatives from HHS with private sector partners, pitched at the OCE health technology fund. Their idea is a digital health application that supports the patient journey, helping to keep them out of the hospital. The pitch was the final hurdle, and we will now wait to hear if the project gets funded.</p> <p>Nicole De Long (OCE) was able to share that there were three projects from the region that were pitched for the HTF program, out of the 18 that were submitted from across the province.</p>	<p>Katie Porter (HHS)</p>
<p>Hire McMaster Happy Hour (Nov 1)</p> <p>Do you work in Biotechnology? Please register for an exciting networking opportunity and meet experienced professionals, current students and recent graduates interested in Biotechnology. Connect with driven McMaster students and alumni to hire exceptional new employees Mentor young alumni and share your journey</p>	<p>Alex Muggah (Synapse)</p>

Discussion	Presenter
<p>Please register via eventbrite or direct any questions about the event or campaign to Daniel Hess at hire@mcmaster.ca</p>	
<p>The Nexus – Creating Healthcare Spaces to Meet the Needs & Strategic Procurement Workshop (Nov 5-6) This year, CCHF’s Toronto Fall session has a twist! A one-day ‘un-conference’ on new projects and new happenings shaping the healthcare facilities followed the next day by an interactive workshop on Strategic Success for Procurement. This very special 2-day event will be an opportunity to be inspired and informed about new happenings in healthcare facilities such as standards and guidelines, learn about new projects from the leaders, and new framework approaches for planning healthcare facilities. Innovative approaches that can be applied to your projects will be discussed among our expert panelists and audience For further details and registration visit: www.cchf.net</p>	<p>Alex Muggah (Synapse)</p>
<p>Sustainable Innovation Conference, Ontario Chamber of Commerce (Nov 6) The future resilience and economic competitiveness depend on the capacity of its businesses to innovate and the government’s engagement in supporting sustainable business practices. Faced with both internal and external pressures to reduce their environmental impact, businesses across Ontario have embraced sustainability-oriented innovation to strengthen competitiveness, increase efficiency, and build a resilient economic future. Don’t miss this unique opportunity to influence the OCC’s advocacy and strategize with government and industry stakeholders on sustainable innovation initiatives in Ontario. To register, click here</p>	<p>Alex Muggah (Synapse)</p>
<p>The Forge presents: “99 Problems Competition” (Nov 6) The Forge is excited to host our first competition of the academic year! This competition focuses on a long-held principle of innovation; that one must understand the problem thoroughly in order to create effective solutions. This competition is open to all current McMaster students from all faculties! You can choose problems proposed by our industry partners such as St. Josephs Hospital, CNA Insurance, Magnes Insurance, Spearin Interactive or come forward with your own problems! Participants will be judged on their ability to understand a problem’s root issue and come up with a solution that effectively resolves it in unique and innovative ways! Students will be competing for a prize of \$1500 for 1st place, \$1000 for 2nd place and \$500 for 3rd place and a fast track in our end of the year Student Startup Competition!</p>	<p>Monika Yazdanian (The Forge)</p>
<p>LSO Networking Night (November 6th) Join the LSO members and other industry individuals for November’s Networking Night. It will be a casual opportunity to meet and network with people from all across the Life Sciences industry. LSO is the voice of Ontario’s vibrant and diverse life sciences sector through advocacy, education and promotion of commercial success. Please drop by anytime after work and join us for drinks (cash bar) and build your own network. We hope to see you all there. Please click here to register.</p>	<p>Ramy Ayad (LSO)</p>

Discussion	Presenter
<p>McMaster Innovation Showcase, November 7, 2018</p> <p>MILO is hosting an Innovation Showcase on November 7th 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</p> <p>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.</p> <p>For further agenda details, or to register: https://milo.mcmaster.ca/showcase</p>	<p>Leigh Wilson (MILO)</p>
<p>Blockchain Event coming to Hamilton (November 20th)</p> <p>The City of Hamilton will be attending and sponsoring the first ever full day Blockchain/Cryptocosm event in Hamilton. Blockchain technology is rapidly expanding to encompass all aspects of the digital age. Starting with Bitcoin as the core payment messaging and distributed ledger system to Ethereum smart contracts with Distributed Autonomous Organizations (DAO), Cryptokitties, remittance, and thousands of use-cases. Blockchain technology is revolutionizing the way business is done today. At this, the first ever full-day conference in Hamilton Ontario, attendees will gain a wealth of knowledge from industry experts, entrepreneurs, enthusiasts, and business leaders in the Blockchain ecosystem.</p> <p>Use the promocode HAMILTON50 for 50% off general admission and for all information follow this link. https://blocktechconnect.com/#home</p>	<p>Alex Muggah (Synapse)</p>
<p>LSO's Annual Policy Forum, November 27th</p> <p>Now entering its 9th year, brings together key stakeholders to strategize how we can accelerate our life sciences sector. The 2018 Policy Forum, "Achieving Policy Impact in a Transformed Political Landscape," features speakers from a broad spectrum of industry and government as well as robust opportunities for audience engagement.</p> <p>Click here to view the program</p> <p>Panel Session Topics Include:</p> <p>Life Sciences Policy Under the New Ontario Government Life sciences remains Ontario's greatest untapped opportunity for economic growth and social prosperity. How we approach life sciences policy in the coming months and years will have a profound, long-term impact on our province and Canada as a whole. With a new government in place, what is emerging in terms of policy directions and priorities for our life sciences sector? How can we work together and build bridges to accelerate our success?</p> <p>Fireside Chat Our Fireside Chat will delve into the results from our audience polling session. What are the primary issues we should focus on going forward? How can government and the private sector play an active role in this transformation?</p>	<p>Ramy Ayad (LSO)</p>

Discussion	Presenter
<p><u>Access to Health Innovation Panel</u> Health innovation is an integral component of our success and sustainability as a province and a nation. However, we are failing to capitalize on our investments within this sector and deliver these innovations to patients. With so many stakeholders involved – including innovators, regulators, purchasers, and insurers – how do we work together to balance cost and access to innovations? As key policies are being developed regarding drug pricing and national Pharmacare, how will access to innovations potentially be impacted?</p> <p><u>Investment Panel</u> Ontario’s life sciences sector is rapidly becoming known for its incredible innovations. But too often, we are losing our most promising companies to acquisition outside our borders. How can we amplify our competitiveness as a destination for global capital, while growing and scaling our companies here at home? What steps must both government and the private sector take to anchor our foothold within the global innovation marketplace?</p>	
<p>Ontario Trade Mission to Biotech Showcase, January 7-9, 2019</p> <p>The Export Services Branch of the Ontario Ministry of Economic Development Job Creation and Trade, is organizing a trade mission to San Francisco which will be able to accommodate a maximum of eight Ontario companies. The Biotech Showcase is an investor-focussed partnering conference with the objective of offering private and public biotech companies a unique opportunity to meet with investors and biopharmaceutical executives. The 2019 event is expected to attract over 3,600 participants, and 900 investors from 50 countries.</p> <p>Members of the Ontario delegation can meet one-on-one with investors and potential partners, take the pulse on the latest biotech investment trends, hear from investment and company executives, present their company’s value proposition to investors, and network with peers and potential partners. In addition, San Francisco is hosting the JP Morgan Conference during this period, which will provide participants with additional networking opportunities around town.</p> <p>For more information, please reach out to Patricia Cosgrove (Area Director, Health Industries/USA) before the application deadline of October 5th if you’re interested in learning more: Patricia.Cosgrove@ontario.ca</p>	<p>Carolynn Reid (City EcDev)</p>
<p>Clinical Trials Ontario Conference 2019 (March 26-27, 2019)</p> <p>The dates for the 2019 CTO conference have been set. Clinical Trials Ontario is an independent not-for-profit organization established with support from the Government of Ontario. Our mandate is to provide a streamlined approach to conducting multi-centre clinical trials in Ontario, while maintaining the highest ethical standards for participant protection.</p>	<p>Alex Muggah (Synapse)</p>
<p>Call for Abstracts: e-Health Conference and Tradeshow (May 26-29, 2019)</p> <p>Digital Health Canada has put out a call for those interested in submitting an abstract for presentation at e-Health Conference and Tradeshow. Contact Health Program Chair Scott McMillan or Conference Coordinator Yurim Park to get more information at: events@digitalhealthcanada.com or 647.775.8555</p>	<p>Alex Muggah (Synapse)</p>

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
<p>Synapse engages companies and organizations from outside the region that may be interested in engaging with the Hamilton ecosystem – including those that are seeking to establish a presence in Hamilton or that wish to partner with Hamilton resources and capabilities.</p> <p>For more information about upcoming engagement, or for assistance in hosting inbound visits that may be of interest to the broader community, please contact Alex Muggah: Alex.Muggah@SynapseConsortium.com</p> <p>Recent visits to/from Hamilton</p> <p><u>Synapse & HHS to Buffalo's (Oct 22nd)</u>: recent trip to Buffalo's medical campus allowed for meetings to conduct introductory meetings and establish new relationships with the Jacobs Institute (Bill Maggio, CEO and Dr. Nick Hopkins, Chief Scientist) and the Jacobs School of Medicine and Biomedical Science at NYSU-Buffalo (Dr. Sanjay Sethi, AVP for Health Sciences). The Jacobs Institute is focused on neurovascular surgery, and is interested in being a receptor for Ontario innovators and entrepreneurs interested in accessing the US market through Buffalo. Dr. Sethi is part of a +50-university network across the United States seeking to establish the infrastructure and expertise to support clinical trials in upstate NY, including those that involve multiple sites</p> <p><u>Visit from Swiss Canton of (Oct 25th)</u>: two representatives of the government of the Swiss Canton of Neuchâtel visited Hamilton, and met with representatives of the McMaster Industry Liaison Office, Fraunhofer BEAM facility, and the Synapse team. The meetings focused on the potential for greater collaboration between our respective communities and to identify ways in which we could support local innovators and entrepreneurs seeking to get their products into the Canada or European market.</p> <p>Upcoming site visits to/from Hamilton</p> <p><u>Upcoming: Presentation @ Consider Canada Cities Alliance (Nov 2nd)</u>: Synapse will be supporting the City Economic Development Agency in showcasing the Hamilton community to another 10 new "Investment Officers" that have been hired by our federal partners. The feds are organizing a "Cross Canada City Tour - Getting to Know the Regional Ecosystem". The focus will be on Hamilton's Advanced Manufacturing & Life Sciences sectors, where we will showcase the strengths and opportunities of your respective organizations.</p> <p><u>Upcoming: Bioscience Company Site Visit (Nov 5-6th)</u>: Massachusetts-based company visiting Hamilton to explore interest in establishing a commercial presence in the region. Company</p>	<p>Alex Muggah (Synapse)</p>

Discussion	Presenter
<p>focuses on developing a new modality of medicines – monoclonal microbials. These products are orally delivered and intended to modulate systemic immunology and biology through direct interactions with human cells in the gut. They believe they have the potential to be broadly applicable across many diseases – including autoimmune, immunoinflammatory, metabolic, neurological, neuroinflammatory diseases and cancer.</p> <p><u>Upcoming: Dr. Michael Ackerman Ohio State University (Nov 15-16th):</u> The Director of the Master in Healthcare Innovation Program and Professor of Clinical Nursing at Ohio State University, as well as being a critical care nurse with various health systems in the US is coming to Hamilton to build new relationships between Ohio State University and the hospital / university here in Hamilton, including research collaboration as well as opportunities for student engagement/participation. While here, he will be giving two short talks, Sepsis - Current Guidelines & Controversies (Nov 15) and Innovation Based Practice in Healthcare (Nov 16) that are both open to the public</p>	
<p>Mark Stewart (McMaster Innovation Park) raised the question about whether there is a shortage of biochemical lab space in Hamilton (and the broader region). The general consensus seems to be that there is significant unmet demand for wet lab space, across southern Ontario – where many companies and researchers are looking for space but find it difficult to find. Communitech noted that for Kitchener this is a big problem, with several companies that have been asking Communitech whether they know where to find wet lab space.</p> <p>By way of example, Gail Martin (St. Joseph’s Healthcare) noted that a wet lab space recently made available at the West 5th building was immediately filled given the latent demand in the hospital.</p> <p>Nicole De Long (OCE) noted that companies interested in finding space should reach out to OCE to tap contacts and networks who might be able to find some.</p> <p>Laura Harrington (MIRA) noted that there may be new space opening up on McMaster University campus, while John Kelton (MGDII) underlined that the challenge is often the availability of high-tech/high-fidelity equipment, rather than the room itself.</p>	<p>Mark Stewart (MIP)</p>
<p>Engaging with Communitech and Kitchener-Waterloo Community</p> <p>Two members of the Communitech MedTech client service team were in town to express their interest in building new relationships within the Hamilton health cluster and catalyze regional success stories.</p> <p>In particular, they’re interested in identifying partnership opportunities across our respective cities, with particular interest in clinical research expertise and capabilities that are lacking in KW. As well, Communitech is also interested in leveraging relationships to support companies that are looking to sell into the United States.</p> <p>To learn more, reach out to Jacob George (jacob.george@communitech.ca) or Naudia Banton (naudia.banton@communitech.ca) at Communitech</p>	<p>Naudia Banton Communitech</p>
<p>Health Canada: Consultation on Health Technology Regulations</p>	<p>Anu Shukla-Jones (Health Canada)</p>

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<p>Anu Shukla-Jones, from the Strategic Policy Division of Health Canada, is part of a team designing a national consultation focused on advanced technology health products (gene editing, 3D printing, advanced cellular therapies, digital health products – wearables, implants, multiomics, software, etc.) and would be interested in engaging the right people in Hamilton.</p> <p>She is interested in speaking with stakeholders who are developing, testing or deploying ‘advanced technology health products’ and their issues with product classification, clinical trials, compliance and enforcement issues, and how these products are used for clinical decision support and the practice of medicine. Trying to figure out what the appropriate regulatory touch is – and this is very much the beginning of the conversation.</p> <p>Any thoughts from the community are welcome, though this isn’t a quick process, so please take your time. Recommendations and input can be sent to hc.hpfb.engagement-mobilisation.dgpsa.sc@canada.ca . Health Canada is working on a summary that will reflect all conversations that will have taken place.</p> <p>Attached is a deck that has been used for the engagements. A summary of the consultation is intended to be published in early 2019.</p> <p>Separately, members of the Hamilton life science cluster are encouraged to sign up to the Canadian Health Consultation Stakeholder Registry, part of the Canadian government Consultation and Stakeholder Information Management System (CSIMS) to share information on health topics. It is also used to invite stakeholders to take part in future consultations. You may choose to:</p> <ul style="list-style-type: none"> • receive information about your chosen topics • participate in consultations • take part in research activities such as surveys <p>To learn more, or to register, click here</p>	
<p>JLABS QuickFire Challenge</p> <p>JLABS are calling on innovators to turn their attention to those crucial first years for mom and baby. In the First 1000 Days QuickFire Challenge, we’re seeking game-changing ideas, with an emphasis on health technologies, which will lead to the prevention and interception of childhood disease and disorders at the earliest stages.</p> <p>Submit solutions to impact the First 1000 Days to help every mother and child get their healthiest start possible. Awards are available for up to \$250,000 in Grants</p> <p>For more information, click here</p>	<p>Breanne Halyk (JLABs)</p>
<p>AGE-WELL has announced AGE-WELL’s Core Research Program 2020-2025</p> <p>A major new funding opportunity Researchers based at Canadian institutions and working in the field of technology and aging are invited to apply for funding. Successful applications will be included as part of AGE-WELL’s renewal application for funding through 2020-2025. AGE-WELL will provide significant funding for 3 to 5 years to projects that:</p> <ul style="list-style-type: none"> • Are driven by real-world problems and challenge areas • Address specific areas of interest to AGE-WELL and its partners and stakeholders • Focus on innovative technology-based solutions to support older adults and caregivers 	<p>Karen Mossman (McMaster)</p>

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<ul style="list-style-type: none"> • Are user-centred, involving end-users and stakeholders in all stages of the research • Deliver not only the technology but the practice, policy, and service delivery models that are needed for the solution to be effective • Use a transdisciplinary approach • Have the potential to lead to economic and social impact • Help AGE-WELL to achieve its mission 	
<p>3i Ontario, lists grants, funding and partnership opportunities for life science companies. 3i Ontario is maintained by Azimuth Health Group, an Ontario Innovation Broker</p>	<p>Alex Muggah (Synapse)</p>
<p>Emerging Health Leaders Program!</p> <p>The Emerging Health Leaders (EHL) Program is a two-week, life-altering experience that will challenge your thinking and push you to become a better leader! If you are a student or young professional seeking to make a difference in the health landscape, enhance your leadership capabilities, and give yourself an edge when entering the world of work— EHL is the program for you!</p> <p>Apply to take advantage of the Early Bird rate for Spring & Summer 2019 offerings of the program. EHL is an interdisciplinary program, welcoming students from all programs and faculties. Enrolment is limited. For more information, click here</p>	<p>Alex Muggah (Synapse)</p>
<p>Yordas Group Workshops</p> <p>Yordas – recently located in Hamilton – is a leading provider of scientific, environmental, human health, global regulatory and sustainability consulting services. We have international capability with supporting offices and representation in North America, Asia and Europe, and commercial activities across 40 countries. They offer a wide range of training courses, including on Biocides, hazardous chemicals, OSPAR and REACH regulations.</p> <p>For more information, please contact Giselle Vincent: g.vincett@yordasgroup.com, Yordas Group Lead, North America</p>	<p>Giselle Vincent (Yordas)</p>
<p>2019 Innovation Nation Conference & Student Innovation Showcase</p> <p>Debra Vivian reached out to share that the 2019 Innovation Nation Conference & Student Innovation Showcase is scheduled for Sunday January 20th at LIUNA Station in Hamilton. The Innovation Nation is entertaining, educational and inspirational! It's a wonderful place to hear nationally and internationally acclaimed innovators discuss their journey of discovery as they work to solve many of the challenges we face today.</p> <p>Register online at: http://www.innovation-nation.ca</p>	<p>Debra Vivian (CSii)</p>
<p>Opportunities from Canadian Foreign Affairs Trade Commission</p> <p>The Trade Commission asked to share three opportunities with the Synapse community, including companies/researchers in your network, and to reach out if the are interested:</p> <ul style="list-style-type: none"> • Astellas' seeking pre-clinical researchers and start-ups: San Francisco-based corporate VC arm looking for those creating therapeutic programs and platform technologies relating to oncology, autoimmune/allergy, muscle disease, sensory disorder and CNS. Astellas' Tokyo-based tech scouting group is seeking technologies for R&D 	<p>Petia Tchoukaleyska (Trade Commission, Canadian Foreign Affairs)</p>

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<p>partnerships in domains including drug delivery capsules, nanosensors, non-invasive sensors, brain-machine interface, virtual therapy and novel insurance programs, among others. Click here for areas of interest. Relevant for researchers and companies in Hamilton. Trade Commission will facilitate follow-up for those researchers/start-ups Astellas is interested in.</p> <ul style="list-style-type: none"> • <u>Application deadline November 15</u>: The Canada-Chicago Mentoring Program (C2MP) is recruiting companies for its 5th edition. This program is run as a partnership between the TCS and Chicago Innovation Mentors (CIM). It helps pharma, healthIT and medical device companies refine their business strategy for growth in the US market. The 5 companies selected for C2MP will receive TCS support, guidance from a team of CIM mentors, and access to MATTER, Chicago's top tier healthcare incubator. • <u>Early heads up on a Toronto-based event</u>: The TCS, in partnership with MaRS Health Venture Services, is bringing its LEAP Canada program to Toronto in November 2018. <ul style="list-style-type: none"> ○ LEAP focuses on early-stage therapeutics companies that are developing novel treatments. Companies in all therapeutic areas are welcome to apply including: oncology, neurology, infectious disease, auto-immune disorders, metabolic disorders, orphan diseases and more. ○ The program starts with a panel presentation on commercialising biotech discoveries, then 16 companies will be selected for 1 hour private meetings with experienced mentors from San Diego's biotech cluster. <p>If any researchers/companies are interested in hearing about these opportunities, please ask them to reach out to Petia Tchoukaleyska, Trade Commissioner at Petia.Tchoukaleyska@international.gc.ca</p>	
<p>Women Entrepreneurship Fund (Application deadline Nov 15)</p> <p>As part of the Women Entrepreneurship Strategy, the Government is making funding available directly to women entrepreneurs through the Women Entrepreneurship Fund. The objective is to provide support to women to grow their businesses and facilitate their pursuit of opportunities in markets abroad. The Fund is a \$20 million investment providing up to \$100,000 in non-repayable contribution funding for 12 months. The Women Entrepreneurship Fund will fund women-owned and women-led businesses to invest in activities that focus on:</p> <ul style="list-style-type: none"> • Supporting pursuit of market opportunities abroad (e.g. international marketing strategy, supply chain integration, promotions, business advisory services, online presence/website development) • Supporting Scale-up, Expansion and Growth (e.g. product/service development and improvement, inventory management, value stream mapping, upgrades to plant and equipment, process and technology improvements) • Additional activities that support the objectives of the Women Entrepreneurship Fund <p>Eligibility Criteria:</p> <ul style="list-style-type: none"> • A for profit organization; • Women-owned and/or women-led business; • A small to medium enterprise (SME) (under 499 employees); and • A business in operation for a minimum of two years. <p>Email for more information: ic.wes-sfe.ic@canada.ca</p>	<p>Alex Muggah (Synapse)</p>

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<p>MesoMat Wins LiON'S LAIR 2018</p> <p>MesoMat was named the grand-prize winner of the 8th Annual LiON's Lair event, taking home a prize of \$76,000 in cash and in-kind resources, for their wearable, stretchable conductible technology. MesoMat began in the Department of Physics and Astronomy at McMaster University and through fundamental research on soft materials and the physics of self-assembly a technique to cheaply fabricate microscopic coils was discovered along with a process to fabricate stretchable, flexible conductive fibres.</p> <p>The second-place prize of more than \$56,000 in cash and in-kind prizes was awarded to Benjamin Lee, founder of Altius Analytics, a hardware and software company that allows you to seamlessly record and analyze 3D human motion. Third place was awarded to Chad Ingles and Ryan O'Grady of FotaFlo, a profit-generating referral marketing solution that easily captures and shares photos and videos for the adventure tourism and camp industries, who took home \$45,000 in cash and in-kind prizes.</p> <p>For more information, click here</p>	<p>Karen Linseman- Brown (Innovation Factory)</p>
<p>2019 Manning Innovation Awards (Deadline December 17)</p> <p>Successful Canadian innovators who are improving the lives of Canadians and others around the world through your commercialized innovation are invited to consider nominating themselves for a Manning Innovation Award!</p> <p>Since 1982, The Ernest C. Manning Awards Foundation has been creating a culture of innovation in Canada by discovering, celebrating and rewarding Canadian innovators of all ages. There are several prizes, with 4 awards of \$100,000, \$25,000, \$10,000 and \$10,000.</p> <p>The rules of eligibility are as follows:</p> <ul style="list-style-type: none"> • Nominees must be Canadian citizens residing in Canada • Innovations must be successful, either commercially or among the intended end users <p>Innovations must be current and demonstrate elements in the following areas:</p> <ul style="list-style-type: none"> • Intellectual Achievement - The degree of intellectual achievement or quality of ingenious thinking and experiment to discover, create or conceive the innovation. • Uniqueness and Originality - Refers to the state of being original; the freshness of aspect, design or style utilized to produce the invention. • Development - Refers to the extent to which the idea or concept has been thought through to completion. • Commercialization - Refers to the degree of successful commercialization or quantifiable impact of the innovation (not forecasted or projected). • Benefits - Refers to the economic and/or social benefit to Canada resulting from the innovation. <p>For more information, including nomination forms, please go to: www.manningawards.ca or contact Southwestern Ontario Manning Innovation Awards Chapter Chair Gary Svoboda at gs@adventusresearch.com</p>	<p>Alex Muggah (Synapse)</p>

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<p>Founded by the former executive lead of the Health Ecosphere Innovation project, Altissima works with progressive for-profit corporations and not-for-profit organizations to design, develop and implement successful collaborations that create transformational change. Altissima seeks to support private and public sectors leaders looking for support in advisory and support services include Business and Innovation Strategy; Government Relations; and Project Management. Thinking about public-private collaboration? Visit us at www.altissima.ca</p>	<p>Toni Wells (Altissima)</p>

Hamilton Health Innovation: Calendar Highlights

November

- Nov 1: [Market Research: Strategic Analysis Frameworks and Methodologies Part II](#) (MGDII)
- Nov 1: Hire McMaster Happy Hour
- Nov 5-6: [The Nexus – Creating Healthcare Spaces to Meet the Needs & Strategic Procurement Workshop](#)
- Nov 6: [Sustainable Innovation Conference](#) (OCC)
- Nov 7: [McMaster Innovation Showcase](#) (MILO)
- Nov 10: Final Pitches and Networking with St. Joseph's Healthcare, Hamilton & Industry (MGDII)
- Nov 15: [Sepsis - Current Guidelines & Controversies](#) (Synapse)
- Nov 15: [Team Building: Strengths Mixing and Performance Management](#) (MGDII)
- Nov 16: [Innovation Based Practice in Healthcare](#) (Synapse)
- Nov 16: [Health Innovation Devtank: Innovation Valuation](#) (MGDII)
- Nov 22: [Sunnybrook Next Generation Hawk's Nest](#) at Mars
- Nov 27: [LSO's Annual Policy Forum, November 27th](#) (LSO)
- Nov 27: Emerging Trends in Biomedical Engineering (MGDII)
- Nov 29: [Breakfast & Learn - Commercialization Plan 101](#) (MGDII)

December

- Dec 12: Emerging Therapeutics: Cancer Treatments (MGDII)
- Dec 13: Ecosystems: Facilitating vs. Hindering Health Innovation (MGDII)
- Dec 21: Health Innovation Devtank: Budgeting for Health Start-ups (MGDI)

January (and beyond)

- Jan 7-9: [Trade Mission to Biotech Showcase](#) (Ontario)
- Jan 20: [2019 Innovation Nation Conference & Student Innovation Showcase](#)
- March 26-27 (2019): [Clinical Trials Conference 2019](#) (CTO)
- April 1-5 (2019): [Toronto Health Innovation](#) (TOHealth!)
- April 3-4 (2019): [Canada's MedTech Conference](#) (MEDEC)
- April 29 – May 3: Hamilton Health Innovation Week (Synapse)
- May 26-27 (2019): [e-Health Conference and Tradeshow](#)