

Hamilton Health Innovation Check-up: Meeting Minutes

April 30th, 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, 8:45-10:00am

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

Next Monthly Check-up: May 28th | 8:45 – 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

Guest Speaker(s):

Fraser Edward SVP Partnership & Development, St. Joseph's Healthcare, Hamilton

Topic: Innovation in Healthcare, Integrated Connected Care

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



Synapse Hamilton

 ${}^{\text{Health Innovation Chr}} \quad \text{(presentation slides, available for download in Health Check-up } \underline{\text{drobox folder}})$

Introduction

Have been in/around healthcare for +15 years, after growing up in UK, and then coming back to Canada. After university, worked in technology, and then get into information technology. Started in Pitney Bowes, and then into a sales/marketing track at a telephone company installing telecoms infrastructure across the EU.

Now working for a hospital system (St. Joseph's). It was the uniqueness of the opportunity to drive change, as well as the frustration of being a health tech entrepreneur. Started a little health startup and worked there for 3 years later, then moved to BlackBerry for 7 years where we engaged 500,000 healthcare workers. There were a lot of effort to put technology in the hands of healthcare professionals, at Bayshore, St Elizabeth and others. Saw firsthand how healthcare workers today are connected (i.e., phones, internet, etc.), but they are not connected into the healthcare system.

Have had the opportunity to work with broad network of care providers, from Hamilton to Niagara and support partnerships and business case behind health technology. I wanted to work with entrepreneurs and external stakeholders to build something better. After working 15 years of selling into the healthcare system, the interaction between hospitals and companies is like two worlds colliding. It was possible to have good conversations, strong partnerships, but we couldn't get to a business case to make the compelling argument to scale up procurement.

St. Joseph's Healthcare has been around 150 years, a Catholic health system which shares a CEO with hospitals in Niagara. This allows for ideas to be generated in one part of our system and then migrate to other parts of the system. This results in an opportunity to work with a \$1.3 billion



organization, 2,800 beds, 13,000 staff, across 14 sites. We have an acute teaching hospital in Hamilton, 3 long term care facilities, a home care group, etc. – a continuum of care under one roof. Gives us opportunity to do things differently.

When I arrived in Hamilton the first question I asked was: "which suppliers do we like, and who brings real value", the answer was few, if any. The challenge is often that vendors arrive saying: "we can do anything, what do you want?" rather than showing what research/intel has been done, how they understand the needs of the institution, and the specific use-case and impact that they're providing.

Canada is a tough market.

St. Joseph's is trying to think about how to change the whole model of care: both in terms of bundling care and the financial model. Driven by a fundamental challenge: if we keep delivering care the way we're doing it now, we'll never be in a position to apply technology to meet the demand of increased care requirements of baby-boomers and others.

A filter is important to help identify where and how to focus your energies. We've invested in EPIC, a state of the art digital health management system. Once we flipped the switch from paper to electronic, we've created a system which now becomes our anchor – around our patient records. We need to do more (i.e., home care, linkages into research, ambulatory care, etc.), but we've made good progress to date.

Spoke to an executive at a healthcare system in the US that moved to Cerner (digital EHR), and asked him "what happened". He described how his organization moved from a place where everyone said that they were the best, to one where they had the evidence to see who was the best – had moved into an evidence based system. They were now able to compare performance metrics against a common baseline. EPIC will be the foundation for St. Joseph's, and will be its anchor. This does meant that we don't want to invest in side-systems unless they can pull data out (or put it in).

Integrated Comprehensive Care

ICC is the program that I'm focused on - improve and scale it up. In my mind, there are 4 themes that can help drive success:

- 1) Champion the patient experience: need to drive care and advocate for the patient. How can we improve patient experience i.e., open up EPIC, public visibility of data through a portal
- 2) Support our staff: healthcare work is hard, emotional, and requires a high degree of support. They need to be supported and assisted within the constraints of the system
- 3) Evolving scope of practice: many groups are fragmented, and technology can be used creatively to connect diffuse teams. For example, bringing clinical and surgical teams together, supported by personal support worker to bridge gaps
- 4) Remote monitoring: can do more on our watch/phone then much of the equipment available in a hospital. For example, can get a halter monitoring system from the hospital, or you can use a FitBit to track the same information



Integrated Comprehensive Care is the healthcare system that we think we already have. A system that will look after us across all points of care. However, the reality is that if you're sick it's a full-time job to navigate through the system. There are pockets of healthcare that result in people getting lost in the system – discharged from hospital before they're picked up with community care. Best case is that they come back to the hospital and get re-admitted (which is costly).

St. Joseph's is unique, because we have a hospital and community care facilities, creating a connected family that is willing to work across silos. The ICC program is the result of hospital, community and home care elements coming together to re-examine the patient experience and health economics of care delivery in a holistic manner.

We looked at each stream of care, and decided that we needed to do it differently. At the end of this journey, we've discovered we can save \$4,000-\$5,000 per patient. There have been several white papers written about the impact and scope of integrated care – which are available for download: (COPD, Thoracic Surgery and comment, ICC Overview, ICC 2.0)

A lot of U.S. systems are looking at the whole care delivery cycle, and are starting to think about rewiring how the system works. In Canada, it worked because the Minister provided the space to take a look at Integrated Care and evaluate how it works. This was a unique opportunity and can lead to transformative results.

For example, before a typical patient might arrive and stay for 8 days then get discharged (could potentially be exposed to hospital-based infections, might have overstays). Under ICC, we provide confidence between surgical and home care teams and assign a navigator that assists the patient. This allows the patient to be discharged earlier – and instead of being readmitted to the hospital (if they have concerns following the discharge) they are treated out in the community. Reducing the length of stay in a hospital is where a large amount of savings came.

Recognize that the current reimbursement model is a big consideration. We need to think about how to change the rules and how they influence decision making.

Conclusion

Part of what we can do is to create the argument to help drive change. We need to pick areas to focus and prioritize, but the other side is to manage the health economics alongside clinical argument. It requires us to all do a little more than your own job.

The average hospital person is concerned about procurement and the perception of procurement, so how do we create a safer space, where we can share a little more about internal problems with external partners/companies. Would like to get to a co-design place where we can identify a few problem statements every 6 months, and then work out from there.



Question & Answers

Question: There's a disconnect between Hospitals and technology companies – they want to connect, but we're not inviting them into the table. Lots of companies that want to do business, but we don't know how to do it?

We don't do a terrible job reaching out, but we could do better creating the space to engage with entrepreneurs. Partnering can sometimes mean that they have the logo up on the wall, but not a real effort to jointly tackle and overcome problems in a shared way

Question: As a vendor, when I meet the president of a care provide I have 15 minutes to explain myself. Vendors need to stop selling products and understand the market, and customer.

There is a gap between companies and care providers, though there is a desire on the part of the healthcare system is go beyond transactions. However, for companies it can be hard to justify the staff time it takes to understand the problems. For example, in my first three months working at HP Health they laid of 36,000 staff globally, and for those who were left on the vendor side, it was painful because the cupboards were bare in terms of our understanding of the underlying problems facing hospitals. This meant getting to solution and value was really difficult – on both sides.

There is a capacity issue as well on the hospital side. I'm on the board of Guelph General, and we have +24 unfunded beds (nurses working 15% extra every day). When at that crisis point, hard to allocate the staff to find the time to unravel what is required and engage with vendors.

Question: Can you elaborate on how hospitals think about adopting new technologies?

Hospitals are unique businesses, they are caring businesses. Hospitals are government funded, so have restricted dollars to allocate for investment. It's not easy to make the case to invest in something which will result in a ROI in 5 years, we can't just make a simple business-to-business transaction. This environment leaves a gap between entrepreneurs and hospitals. There are few vehicles to allow for interchange of ideas and partnerships – but something like Synapse can support this because there is need and demand for this.

From the hospital perspective, it's often a multi-year process to adopt a new technology. There are ways to make it quicker, through the research groups (i.e., by testing and validating a technology through a trial, which can generate front-line clinical demand for the product). The hospital systems represent tons of data (i.e., time in hospital, patient information) that should be used to make the case for a product, since evidence based decisions are the only way that it's going to go forward.

Question: Can you expand on the gap between vendor/company groups and hospitals?

Technology is not the issue, there is more than enough to resolve issues. But vendors need to truly understand healthcare – and hospitals need to truly understand vendors. If you think about the exponential growth of technology in the last 5 years, the moment you adopt technology it is already obsolete. Vendors need to help healthcare providers better understand how technology is



transforming how care can be provided: moving to a service-based model away from a capital based model.

In addition, it's important to understand vendors work – especially as it relates to the RFP process, which limits to proposals from companies that have deep pockets and capacity to go through the 12-18 month process.

Question: How do hospitals make a determination between technologies?

There is a gap in ability to evaluate technology – the procurement officer is not an expert in everything. Given the changes in automation, IT, etc. there is a need to have an expert panel to evaluate technology.

Have to understand how the company is delivering value, and this is a process that is not easy, and cannot usually be done quickly. Going back to the company takes time, and then more time to evaluate their solution. We need in Hamilton a fast-track way to evaluate healthcare solutions.

Question: I worked with hospitals in the US, which made big bets in EPIC and CERNER. Most failed, but it took 3-5 years to stand up before returning value. Getting the innovative culture right is important – for example London Health Sciences, where we had a month-long trial, the decision to buy was made in 2 weeks. What should we engage as we wait for EPIC to come online?

EPIC is one of the technology anchors at St. Joseph's, but it isn't the only one – there are other systems. As a start-up, you either find the billion-dollar idea which everyone clamours to buy, or you get into the ecosystem and look to have zero friction for implementation. Hospitals in Ontario are buying information systems – there is no getting away from that – so as an entrepreneur you've got to decide how you're going to engage them.

Question of how best to engage is a big issue for me. The primary directive of a hospital is to deliver better care given the financial constraints. One thing that I see as helpful, is the identification and publication of three problem statements that I want to deal with this year. I don't want more as I only have a certain amount of time, and even if I find great ideas, there remains the question the time to required implement them all.

People want to have innovation, but unless you find the energy and the focus to engage you end up with a lot of orphans, which isn't useful. There is just a limited amount of time among the few people in the city who are innovative and in a position to effect transformative change.

Question: With few focus areas and few doors to enter, how do you engage the small entrepreneurs when the bias is going to be towards big guys? Can you speak to importance of change management and clinical champions who are going to drive success?

A good way to enter the procurement system is to get a trial through the research group. You can carry out a trial, and develop the body of evidence required to allow the hospital to make a decision about procurement. The fact is that all hospitals have an information system – whatever it might be



– so companies are going to have to figure out how to develop from scratch a solution designed to integrate into an existing system or develop something that can integrate into all systems without friction. For St. Joseph's, we have the challenge of making a success of our system, and then we'll have greater flexibility to engage.

Question: What are the drivers that companies should consider around cost drivers for hospitals?

Re-admittance, length of stay, ED visits are three of the primary costs drivers – and it's useful for companies to think about how their technology resolves these issues to drive adoption. Have to prove ROI on bundling of care.

St. Joseph's has put 15,000 patients through the ICC model, pulling data from across all our information system. There was enough of a change in the health economics, that we were able to drive this to become "new normal". This gives us the opportunity for technology to be included in lieu of a person – for example, integrating remote-monitoring, which had been tested for a years, but now we have a process (ICC) to deploy it.

Government is thinking critically about how it funds care. For example, government has released a hip-and-knee bundle. So instead of just being paid for the knee surgery, the hospital can ask for all the money to provide pre/post operative care (e.g., \$8,500 to do all the procedures and post-op care). St. Joseph's can now manage the entire procedure from start-to-end, then if we reduce time of stay, deploy remote monitoring at home, etc., will be able to re-invest savings back into the system.

Then have an environment to work with companies to explore risk-sharing and game-changing efforts around the process to deliver a better overall outcome, which will allow us to capture efficiencies, and further re-invest savings. This is a new market/business model. Could allow for value-based procurement, to share the risk.

An example of a company is Innocare, which is managing the pre-knee replacement and post-operative processes. Their solution provides real-time information to the surgeon to bring back patients who may need to be seen early to avoid costly re-admittance.

We don't know how large the ICC is going to be, but it could allow for opportunities for reinvestment – building out our capacity. The question is then becomes how do we move from simple procedures (e.g., hip/knee) and move to care that could benefit from greater early intervention but are more complex (e.g., mental health, addiction)

Q: There are three imperatives driving adoption: administrative, moral and financial. The train that's coming is value-based payments – big successes are in Canada, because US surgeons are worried about reimbursements.

The market in the US is changing dramatically – to provide value to the patient that is measurable. The systems that are successful are the ones that are integrated, which have a payer at the top (e.g., Kaiser).



Q: How do you shorten the RFP process? For example, Kensington eye institute procurement process?

This is the co-design / alternative procurement that MaRS is trying to do. Working on what the problem statement is, and then go to a minimum prototype. From an investor perspective, it helps companies if they can show that they're working directly with hospitals.

Co-design process can take you beyond the RFP process, helping to engage the broader community of stakeholders.

For example, St. Joseph's did a sprint over three Saturdays with students to look at some of our issues. One takeaway was the need to provide a better problem statement (i.e., we just gave 33 pages of data, rather than defining problems), and we need to do a better job at judging outcomes. The suggestion that the students identified was care navigation: assisting patient to navigate the care system. What was interesting, was the clinicians who said "we have a care navigator", but the patient didn't know ("I don't have that information on my phone"). We exposed a problem, we thought we had a solution already deployed, but the customer didn't have the knowledge – this means that we can solve it with application of the right technology.

It is easiest to start/do the small things.



Time allotted | 20 Minutes

Topic: Communicate

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

Discussion	Presenter
The Hamilton Health Innovation Week (April 23-29) was a great success! More than 15	Alex Muggah
events took place over the week with hundreds of participants from across Ontario and	(Synapse)
around Canada attending: http://hamiltonhealthinnovationweek.ca	
Hamilton Health Innovation Week 2018 (#HHIW2018) was a showcase for innovators	
and practitioners pushing the boundaries of health innovation. HHIW2018 serves as an	
opportunity to learn how practitioners can, and are, turning great ideas into practical	
real-world solutions that improve patient health, simplify care delivery, and bend the	
cost curve.	
Cost curve.	
Thank you to everyone who came out to an event, to those who hosted events, and to	
our sponsors who made it possible.	
Ontario Chamber of Commerce: Championing the Health & Life Sciences Sector as	Alex Muggah
Essential to Our Economy	(Synapse)
Thursday May 10 0:20 are to Come	
Thursday, May 10 9:30am to 6pm	
MaRS Discovery District & University of Toronto	
On May 10 initial mention and forms industry, accounts and complete to form a Outstain!	
On May 10, join participants from industry, research, and services to frame Ontario's	
health and life sciences sector as a competitive advantage and help develop an	
effective sector narrative. Featuring a keynote address from Dr. Molly Shoichet,	
Ontario's first Chief Scientist.	
Morning work sessions in which participants will dig into the big issues impacting the	
sector and develop recommendations for advocacy; and an afternoon event featuring	
expert speakers, lively debate, and new ideas for raising the profile of the health and	
life sciences sector with government and the public.	
Big DiF – May 10	Alex Lee
	(Innovation
Hosted by Innovation Factory, the <u>Big DiF</u> brings together the Hamilton community	Factory)
(and Hamilton supporters) to celebrate entrepreneurship and innovation in our city and	
recognize our partners and sponsors who help make IF possible. Use this as an	
opportunity to recognize one person who goes above and beyond for the community –	
an award we call the Mark Chamberlain DiFizen of the Year Award.	
Register <u>here</u>	
MEDEDGE 2.0	Alex Muggah
	(Synapse)



Discussion	Presenter
MedEdge 2.0 is Richmond Hill's and the GTA's Premier Life Sciences Business Summit. The event takes place every June and gives industry professionals the opportunity to meet with entrepreneurs, investors, government agencies and key partners in Ontario's health sector. A more intimate event with structured networking, roundtables and 1-on-1 prescheduled meetings with subject matter experts to help you find partners, build connections and make sales!	
When: Tuesday, June 19, 2018 from 8:00 a.m. to 2:00 p.m. Where: Richmond Hill Country Club, 8905 Bathurst St, Richmond Hill, ON	
The Ontario Bioscience Innovation Organization (OBIO®) today released its latest report, 'Use It or Lose It: Industry Solutions to Ontario's Commercialization Gap', with recommendations from health science company executives on how to create the conditions for the growth of Ontario's health science industry.	Alex Muggah (Synapse)
This report is the result of a survey of 135 Ontario health science industry executives, looking at the growth of Ontario's health science sector and the opportunities for future development. The report makes five recommendations to ensure Canadians derive the benefits that accrue from a successful health science economy: regional prosperity, knowledge economy jobs, increased patient satisfaction, and improved health outcomes.	
Overview of the Report:	
 Ontario's health science industry is starting to grow and mature with over half of companies in the preclinical or clinical stage of development, and one in five with their most advanced project generating sales or expanding their markets. But companies continue to face barriers to scaling up in Ontario which fall across four main themes: financial, infrastructure, ecosystem and talent. Industry had five recommendations which include improved access to capital, globally competitive tax policies, consolidated funding programs, and most importantly stronger local infrastructure and access to local markets, including a system of early adopter health care providers with expertise in piloting, adopting and championing new technologies. 	
Hamilton Economic Development Department is hosting an investment-focused tour of Hamilton on May 9 th . Working with Ministry of Economic Development & Growth's	Jennifer Paterson
(MEDG's) Ontario Investment Office (OIO) - specifically with the Investor Services Branch located in Toronto. Approx. 9 members of the delegation are based in the Toronto and approx. 15 members have been hired by the Province's as FDI Investment Representatives - they are tasked to generate investment leads for the province. These FDI Investment reps represent the following markets: USA, France, Germany, U.K. Switzerland, Sweden, Austria the Netherlands and India.	(EcDev)



Discussion	Presenter
Health Leadership Academy: <u>Event Series</u>	Amanda Calzolaio
The Health Leadership Academy has a series of events in health innovation and health leadership coming up over the course of the year – with next one on June 7 th	(HLA)
 June 7 – <u>Perfectionism is Paralysis: Learn to Lead with Confidence</u> (Health Leadership Academy) Sept 13 – <u>Role of Theatre Arts in Healthcare</u> (Health Leadership Academy) Oct 4 – <u>Health Economics and the Future of Cancer Health</u> (Health Leadership Academy) 	
Niall Wallace, of <u>Gabriel Scientific</u> , shared news that they had their first Canadian orders from London health Sciences and a long-term care facility in Toronto. They have recently established a distribution / research presence in Hamilton (headquarters are in Ireland)	Niall Wallace (Gabriel Scientific)
Also had good meetings with Mohawk College, who is now a partner. Mohawk will take three-self contained projects that with application to global markets and going to put together a multi-disciplinary team to accelerate their development and deployment.	
Also had first meeting with Ohio State Innovation Board. Are going to have a call for interesting innovation around nursing that people can take back to their hospitals. May lead to access to US hospitals, and potential clinical trials. Will share further details once the call is announced.	
Finally, have confirmed that they will be the OEM supplier for Ably-Bed bedding and mattresses. Ably is a Norwegian company, currently doing a project with GERAS.	
Big Thinkers : Innovation in Business (May 16)	Karen
Inspired by <u>Terry O'Malley</u> , with MC <u>Kate Carnegie</u> , KC Media, will feature a keynote presentation from <u>Meghan Chayka</u> , Co-founder of <u>Stathletes</u> - Professional hockey's deepest performance data & analytics company, located in Niagara. Following the keynote presentation, BIG Thinkers: Innovation in Business will feature two panel discussions:	Linesman- Brown (iF)
Panel Discussion: Niagara Innovators Maximizing Data Moderator: Kevin Tuer, Managing Director, Open Data Exchange Panelists:	
 Jennifer Beckage – Partner, Data Security & Privacy Team, Phillips Lytle LLP Meghan Chayka - Co-founder, Stathletes Ransom Hawley - Founder and CEO, Caddle 	
Bob Lytle - Founder and CEO, Rel8ed.to	
Panel Discussion: Crossing Borders in Buffalo Niagara Life Sciences	



Discussion	Presenter
Moderator: <u>Barry Wright</u> , Associate Professor, Goodman School of Business, Brock University, Past Board Chair of Niagara Health System	
Panelists: Patrick Whalen Managing Director Canatone Scientific LLD	
 <u>Patrick Whalen</u> –Managing Director, Capstone Scientific LLP Franck Hivert – CEO, Oculys Health Informatics 	
• Ryan Denomme - Founder and CEO, Nicoya Lifesciences	
· <u>Sime Pavlovic</u> – CIO, Niagara Health System	
For more event details, please view the BIG Thinkers: Innovation in Business flyer	
attached. Also, for quick access to ticket purchasing, follow this	
link: http://innovateniagara.com/events/	
Ontario Brain Institute: \$50,000 ONtrepreneurs Program	Alex Muggah (Synapse)
Build Your Neurotech Venture! The ONtrepreneurs (Ontario Neurotech Entrepreneurs)	
Program catalyzes early stage entrepreneurs to commercialize brain-related	
technologies by accessing funding and support to launch or grow their neurotechnology	
ventures.	
Application for the 2018 ONtrepreneurs Competition are due by May 14, review program details	



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
+150 people attended the 5 th annual <u>Synapse Life Science Competition</u> , proudly supported by Stryker Canada, took place on March 28 th .	Karen Linesman- Brown (iF)
The event showcased 14 teams who all presented informational posters. The top three finalists presented their innovations live on stage to a panel of industry judges, competing for over \$85,000 in cash prizes and professional resources.	
The top three finalists- Arinai, Dash MD and Amina Health – each had 25 minutes to impress the judging panel.	
Dash MD won the grand prize for their mobile personal health platform. Dash MD's platform improves the quality of care that patients receive, improves patient-oriented outcomes and connects the dots in health care by providing patients with all of the tools and resources they need to successfully manage their recovery. Dash MD currently has customers and traction working with Hamilton Health Sciences among many other Ontario hospitals and LIHN's.	
Visit <u>www.synapselifescience.com</u> for more details	
Jim Wilson shared that he had been working with a medical technology company in Kitchener-Waterloo, that is planning on creating a physical space to anchor a medical device cluster - 25,000 feet facility that will have 10-12 companies to build around them. All companies that are based in KW – spun out of Velocity / Communitech. Noted the benefit of such a space, and the need for something similar in Hamilton.	Jim Wilson (CBRE)
Jack Gauldie (VP Research, St. Joseph's) shared that St. Joseph's and Hamilton Health Sciences had a good conversation with Styker Canada.	Jack Gauldie (St. Joseph's)
Represents the first of a series of conversations they will have with them, to explore whether we can bring R&D/evaluation/innovation activities up here in Canada. All the companies they are looking to acquire will need assistance around development – for example an opiod dispenser, which doesn't yet communicate with hospital systems. Stryker is responsive to the idea of closer collaboration, and further conversations will be needed to flesh out how these might be developed	



Discussion	Presenter
<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)
Joule Grants for Physician-led Innovation	Alex Muggah (Synapse)
Joule, a subsidiary of the Canadian Medical Association (CMA), is providing grant funding to spur physician-led innovation. In this round, Joule has increased the number of grants to nine, up from five, and has increased the purse from \$150,000 to \$200,000.	
More at http://www.canhealth.com/blog/joule-offering-200000-to-drive-new-projects/	
Hamilton Delegation heading to BIO International Convention (June 4-7)	Alex Muggah (Synapse)
More than 20 members of the Hamilton life science ecosystem, including care providers, researchers, companies, and city government officials, will be heading to the BIO International Convention in Boston (June 4-7)	
The BIO International Convention is hosted by the Biotechnology Innovation Organization (BIO). BIO represents more than 1,100 biotechnology companies, academic institutions, state biotechnology centers and related organizations across the United States and in more than 30 other nations. BIO members are involved in the research and development of innovative healthcare, agricultural, industrial and environmental biotechnology products.	
To learn more, or <u>register</u> for BIO. For organizations and companies that are interested in participating, please reach out to Carolyn Reid (<u>Carolynn.Reid@hamilton.ca</u>), at the City of Hamilton Economic Development Division for more information	
Hamilton delegation headed to Norway (June 11-13)	Alex Muggah (Synapse)
Ted Scott (Chief Innovation Officer, Hamilton Health Sciences) is leading a small delegation to Norway in June, to meet with representatives from the health cluster (Norway Health Tech) a follow up on the visit by the Norwegian Health Minister to Hamilton in January. The visit is meant to identify potential partnership and	
collaboration opportunities between Hamilton organizations and Norwegian counterparts.	



Hamilton Health Innovation: Calendar Highlights

May

- May 1: OCE Discovery Day
- May 4: Annual Medical Imaging Informatics & Teleradiology Conference (MIIT)
- May 8: LSO Networking Event (LSO)
- May 10: <u>Championing the Health & Life Sciences Sector as Essential to Our Economy</u> (Ontario Chamber of Commerce)
- May 10: VentureLab Lunch & Learn: Real Estate Strategies for Startups
- May 15: <u>Capital | Talent | Tech</u>: featuring Courtney Cole (VentureLab)
- May 15-16: 3rd Annual IoT, Big Data Healthcare Summit Canada
- May 15-17: Ontario Advanced Research Computing Congress
- May 16: Big Thinkers: Innovation in Business
- May 27-30: Annual e-Health Conference and Tradeshow (in Vancouver)
- May 28-29: Genomics and Epidemiology: Promise and Pitfalls of Publicly Available Data (McMaster)
- May 29-31: <u>TrueNorth Waterloo: Tech for Good</u> (Communitech)

June (and Beyond)

- June 4-7: BIO International Convention 2018
- June 7 <u>Perfectionism is Paralysis: Learn to Lead with Confidence</u> (Health Leadership Academy)
- June 19: MedEdge Summit 2018

July (and Beyond)

- Sept 13 Role of Theatre Arts in Healthcare (Health Leadership Academy)
- Oct 4 Health Economics and the Future of Cancer Health (Health Leadership Academy)
- October 16-18: 21st TCI Network Global Conference (Institute for Competitiveness & Prosperity)

