RESEARCH DAY 2018

DURHAM COLLEGE
SUCCESS MATTERS

ADVANCING INNOVATION AND ENTREPRENEURSHIP

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TIME	DESCRIPTION	ROOM	SPEAKERS
8 a.m.	Registration Hot breakfast	SSB Lobby SSB 116	
9 a.m.	Welcome		Don Lovisa, president, Durham College (DC)
9:05 a.m.	Opening remarks		Debbie McKee Demczyk, dean, Office of Research Services, Innovation and Entrepreneurship (ORSIE), DC
9:10 a.m.	Keynote address: The future is here—how do you get involved? Graham Binks, CEO of primeFusion Inc., will provide the keynote address, discussing how innovation takes flight when it is turned into action. He will share examples and techniques for collaboration between researchers and business leaders, so they can identify and achieve the most valuable results.		Graham Binks, chief executive officer (CEO), primeFusion Inc.
9:40 a.m.	Demo of an artificial intelligence-enabled home health care solution DC has launched the new Hub for Applied Research in Artificial Intelligence for Business Solutions (the AI Hub), offering industry partners access to technical expertise, state-of-the-art facilities and platforms, and student talent to uncover business insights while providing intelligent and autonomous solutions that increase productivity and growth. The AI Hub collaborated with its first industry partner, iCare Home Health Services Inc. (iCare) with funding from the Natural Sciences and Engineering Council of Canada (NSERC) to bring advanced artificial intelligence (AI) features to iCare's mobile application, Health Expresso, for distant healthcare delivery. In this session, the team will demo this AI-enabled feature on the company's mobile application.	SSB 116	Rick Menassa, president, iCare Home Health Services Inc. Amit Maraj, professor, School of Business, IT & Management (BITM) and researcher, the AI Hub, DC James Pierson, third-year student, Computer Programmer Analyst program Nicholas Carpenter, third-year student, Computer Programmer Analyst program Joey Lees, third-year student, Computer Programmer Analyst program Matthew Wierzbicki, third-year student, Computer Programmer Analyst program
9:45 a.m.	Networking break	SSB 116	

CONCURRENT BREAKOUT SESSION 1

TIME	STREAM	DESCRIPTION	ROOM	SPEAKERS
	Faculty stream	**Introducing the AI Hub** In a field evolving as quickly as AI where experience is limited, the importance of faculty in an applied research program cannot be overstated. The AI Hub, launched in late 2017, has received funding from Ontario Centres of Excellence (OCE) and NSERC to support multiple projects with industry partners. This session will introduce the team of researchers associated with the AI Hub and identify the many ways in which faculty can engage with the AI Hub.	SSB 117	Danny Aniag, professor, BITM and researcher, the AI Hub, DC Stephen Forbes, professor, BITM and researcher, the AI Hub, DC Amit Maraj, professor, BITM and researcher, the AI Hub, DC Andrew Mayne, professor, BITM and researcher, the AI Hub, DC Sam Plati, professor, BITM and researcher, the AI Hub, DC
10:15 a.m.	Student stream	**Applied research:** **impact on the student experience** Student involvement in applied research projects is a form of experiential learning, providing opportunities for students to apply techniques and methods learned in the classroom to real-world environments. In this session, you will hear student researchers discuss their experience and how it has helped them to enhance their employability skills and make good career choices.	SSB 118	Nicholas Carpenter, third-year student, Computer Programmer Analyst program Joey Lees, third-year student, Computer Programmer Analyst program Matthew Wierzbicki, third-year student, Computer Programmer Analyst program James Pierson, third-year student, Computer Programmer Analyst program Vibha Tyagi, manager, Applied Research Partnerships, ORSIE
	Industry stream	**Enhancing productivity of small and medium-sized enterprises through technology adoption** DC partners with growth-oriented small- and medium-sized enterprises (SMEs) in Durham Region and the Greater Toronto Area who wish to adopt technology to improve their operations and increase their productivity. This session will highlight case studies demonstrating how DC helped businesses to become more innovative and efficient with funding support from OCE.	SSB 119	Clint MacDonald, professor and researcher, BITM, DC Dan Ruby, business development manager, Ontario Centres of Excellence

	CONCURRENT BREAKOUT SESSION 2			
TIME	STREAM	DESCRIPTION	ROOM	SPEAKERS
10:45 a.m.	Faculty stream	**College and Community Social Innovation Fund** Social innovation is the development of innovative ideas to solve social challenges. The College and Community Social Innovation Fund is a new federal program aimed at supporting college social innovation research projects in partnership with local community organizations. Learn from the voice of experience how collaborations were developed and what socially innovative ideas were proposed.	SSB 117	Lorraine Closs, professor, School of Health & Community Services (HCS), DC Michael Williams-Bell, professor, HCS, DC
	Student stream	**3MARC challenge** 3MARC is a three-minute applied research communication challenge in which students who are engaged in applied research will compete by delivering a compelling presentation about their research work. Students will consolidate their research and research outcomes concisely for a non-specialist audience to demonstrate their ability to communicate the importance of their research project and articulate their findings. A panel of judges will select the top three winners, which will be announced during the closing remarks session.	SSB 118	Stephen Forbes, professor, BITM and researcher, the AI Hub, DC Judges: Ali Abbas Mehboob Hirji, director, corporate strategy, ORION Dan Ruby, business development manager, Ontario Centres of Excellence Kevin Dougherty, associate dean, School of Interdisciplinary Studies, DC
	Industry stream	**uBioDiscovery - microbiome profile management using AI** uBioDiscovery provides a microbiome monitoring program known as SUPERBIOME, which enables clients to improve their gut health by following a customized diet plan. This session will highlight the AI solution that was developed for SUPERBIOME to automatically predict and recommend a treatment plan based on a client's data and available historical data. This project was supported with funding from OCE and the National Research Council.	SSB 119	Aly Burtch, co-founder and managing director, uBioDiscovery Alejandro Saettone, co-founder and director of research and development, uBioDiscovery Amit Maraj, professor, BITM and researcher, the AI Hub, DC Alexander Minz, second-year student, Computer Programmer Analyst program Christopher O'Mara, second-year student, Computer Programmer Analyst program
11:15 a.m.	Networking break		SSB 116	

CONCURRENT BREAKOUT SESSION 3

TIME	STREAM	DESCRIPTION	ROOM	SPEAKERS
	Faculty stream	**Internally funded research** In this session researchers will provide an overview of two projects funded this year through the Internal Research Fund. This fund is aimed at facilitating the development of innovative research projects that support the research interests of faculty and staff and assist them in their scholarly work. The first project was conducted to understand the perceptions of paramedic students on an experiential peer teaching program with a goal of enhancing the paramedic educator's role and better prepare graduates for expanded practice. The second project is investigating the feasibility of integrating renewable energy sources (solar, wind and geothermal) to the houses located at the Whitby campus with a goal of achieving NetZero energy. This research will contribute to the discourse of reducing fossil fuel dependency and the possibilities of converting existing houses to NetZero and thus reducing the impact of carbon dioxide on our environment.	SSB 117	Dale Button, professor and researcher, School of Justice & Emergency Services (JES), DC Matthew Walton, professor and researcher, JES, DC Dr. Ali Taileb, professor and researcher, School of Science & Engineering Technology (SET), DC Christina Schmidt, third-year student, Architecture Technology program Denyse Zajakovski, third-year student, Architecture Technology program
11:30 a.m.	Student stream	**AI entrepreneurship challenge** The AI entrepreneurship challenge is a pitch contest designed to highlight the power of AI in unique and innovative business applications. Watch as entrepreneurially-minded students present their ideas to a panel of expert judges and compete for a cash prize and support from the FastStart team. Winners will be announced during the closing remarks session.	SSB 118	Jay Fisher, manager, Experiential Learning, ORSIE, DC Dean Howley, entrepreneurship coordinator, ORSIE, DC Judges: Sherry Colbourne, president and CEO, Spark Centre Teresa Shaver, executive director, Business Advisory Centre Durham Sam Plati, professor, BITM and researcher, the AI Hub, DC
	Industry stream	**Introducing the Centre for Craft Brewing Innovation (CCBI)** Learn about the CCBI team and how they helped the owner of a small company address the challenges of developing a "good tasting" craft, no-alcohol beer while providing DC students with valuable experience working on an applied research project funded by NSERC. This project enabled Ted Fleming, founder and CEO of Partake Brewing Company, to take his product to CBC's hit show Dragons' Den and capture a dragon!	SSB 119	Dirk Bendiak, retired manager quality, MolsonCoors Dave Coutts, retired plant manager, Mill Street Brewing Mike Aylward, brewmaster CCBI, DC Casey Chessman, second-year student, Horticulture – Food and Farming program Amy Boekman, second-year student, Horticulture Technician program Will Cerre, sales representative, Partake Brewing Company Chris Gillis, manager, Applied Research Business Development, ORSIE, DC

CONCURRENT BREAKOUT SESSION 4

TIME	STREAM	DESCRIPTION	ROOM	SPEAKERS
Noon	Faculty stream	**Join your research coordinators for a game of research roulette** Are you a faculty member who is not sure what exactly research is at DC? You may be doing it and not realizing it. In this session, research coordinators will explain the following benefits of research: 1. Enhance your program, your course and the student experience. 2. Support your industry partners. 3. Support the relationship between your students and your industry partners. Research coordinators will also outline how to engage in research projects, discuss how they are funded, and most importantly, untangle the process of getting research allocated on your SWF.	SSB 117	Lorraine Closs, professor, HCS, DC Linda Cheng, professor, School of Media, Art and Design (MAD), DC Wendy Smith, professor, Centre for Food, DC Phil Jarvis, professor, SET, DC Dr. David Smith, professor, School of Interdisciplinary Studies, DC Vlad Chiriac, professor, JES, DC Danny Aniag, professor, BITM and researcher, the AI Hub, DC
	Student stream	**An innovative approach to preparing students for research: AI workshops** In this session, professor Amit Maraj will highlight the modules and process for preparing students for research in AI through a series of extra-curricular workshops. Students will share how these workshops helped prepared them to learn the basics of machine learning algorithms and how data needs to be manipulated to create AI.	SSB 118	Amit Maraj, professor, BITM and researcher, the AI Hub, DC Connlaoi Smith, second-year student, Computer Programmer Analyst program Sylvia Raposo, second-year student, Computer Programmer Analyst program
	Industry stream	**Fossil Hunters – push to launch** Reptoid Games is a Toronto-based company producing high-quality digital media. Attend this session to learn about the Fossil Hunters project. The objective of this project was to implement quality assurance measures with the intention of discovering and documenting bugs and software glitches in the Fossil Hunters beta, prior to the product's launch. Notably this collaboration, funded by OCE, employed the students' computing expertise, analytical competence, and critical-thinking skills.	SSB 119	Ryan Miller, technical director, Reptoid Games John Goodwin, professor and program coordinator, Game Development program, MAD, DC Jessica Langley, third-year student, Game Development program Victoria Jones, third year student, Game Development program

AWARDS AND CLOSING REMARKS

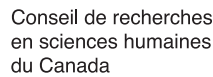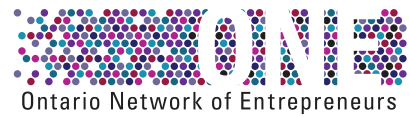| TIME	DESCRIPTION	ROOM	SPEAKERS
12:35 p.m.	During the final session of the day, student winners of the AI entrepreneurship challenge and the 3MARC challenge will be announced. As critical members of the research community, Research Ethics Board members, Research Coordinators, and this year's active researchers will be recognized and their work acknowledged. ORSIE will reveal the winner of this year's Researcher Award of Excellence. This award is presented annually to a DC faculty member who has demonstrated exemplary work over the past year to advance the culture of research.	SSB 116	Dr. Elaine Popp, vice-president, Academic, DC Debbie McKee Demczyk, dean, ORSIE, DC
12:45 p.m.	Adjourn		

GRAHAM BINKS

CHIEF EXECUTIVE OFFICER
primeFusion Inc.

Graham Binks has helped over 200 businesses to innovate with technology, with a particular focus on near term value creation. His work has crossed many industries and ranges from change leadership around core business systems, digital design and visualization, and AI.

Graham is the CEO of primeFusion Inc, and has 30 years technology leadership experience in Europe, North America and Asia. He has a decade in CTO roles for several software companies, and another decade as CIO in international businesses. Graham's client list spans four continents, and has included Nike, P&G, Citigroup, JP Morgan and Eurotunnel.

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