Photo Taken at the
HIT 3rd Meeting

10/05/2018 11:13

Health & Information Technology Research Group
Established 2017 at Thunder Bay
Ontario - Canada

Health Information Technology Research Group

Mission Statement

For decades, Canadian healthcare professionals have operated within a challenging, rapidly changing, and fragmented healthcare system. Today, this environment is even more complex as sweeping healthcare reform and market forces transform the way healthcare is delivered and managed. This profound shift is multi directional involving the structure, policies, logistics, ethics and the culture of work. New alliances and unlikely partnerships are beginning to emerge. Belief systems, values, and attitudes are shifting. There are various thought leaders who believe that we going to see a major change in healthcare because of the ongoing AI revolution, the integration of natural intelligence and the need for convergence sciences. The main focus of the HIT is to promote communication and cooperation among core professionals in Biology, Nursing, Medicine, Psycology, Health Sciences, Bioinformatics, Cognitive Sciences, Language and Technology experts along with Computer Science towards enhancing the healthcare system.

Goals and Objectives

- To apply theoretical knowledge and technical skills to drive the improvement of connected healthcare
- Supporting shared decision-making between patients and providers
- Providing personalized self-management tools and resources
- Building social support networks
- Delivering accurate, accessible, and actionable health information
- Facilitating the meaningful use of health IT and the exchange of health information among health care and public health professionals
- Enabling quick and informed responses to health risks and public health emergencies
- Providing new opportunities to connect with culturally diverse and hard-to-reach populations
- Providing sound principles in the design of care programs
- Increasing Internet and mobile access
- Invest in the digital transformation of the healthcare systems

Current Members:

S. Zaki Ahmed, MD, TBRHSC
Chris Mushquash, PhD, C.Psych, TBRHRI
Manal Alzghoul, PhD, School of Nursing
Kristen Jones, PhD, School of Nursing
Carlos Zerpa, PhD, Kinesiology
David Savage, MD, TBRHSC
Patrick Martel, MD, TBRHSC
Arnold Kim, MD, TBRHSC
Ingeborg Zehbe, PhD, Biology
Robert Jackson, PhD, Biology
Amarjit Chahal, PhD, TBRHSC
Jinan Fiaidhi, PhD, Computer Science
Sabah Mohammed, PhD, Computer Science
Kalle Kauranen, MSc, omputer Science
Phillip Osial, MSc, Computer Science
Isabelle Lemee, PhD, Languages
Vicki Kristman, PhD, Faculty of Health Sciences
Gordon Hayman, PhD, Psychology
Jody Schmidt, Informatics, TBRHSC
Paolo Sanzo, PhD, Kinesiology
Jeremy Cole, MD, TBRHSC
Eryk Przysucha, PhD, Kenisiology
Kathryn Sinden, PhD, Kenisiology
Brenda Magajna, PhD, Biotechnology
Meilan Liu, PhD, Mechanical Engineering
Kevin Pang, PhD, Computer Science
Curtis Ball, MSc, TBRHSC
Taryn Klarner, PhD, Kenisiology
Zubair Fadlullah, PhD Computer Science

HIT Group Coordinators: Drs. Sabah Mohammed & Jinan Fiaidhi
sabah.mohammed@lakeheadu.ca & jfiaidhi@lakeheadu.ca

Partners

St. Joseph's Care Group

Northern Ontario School of Medicine

Lakehead UNIVERSITY

THUNDER BAY Regional Health SCIENCES CENTRE

Lakehead UNIVERSITY

HIT 1st Workshop

Friday October 12, 2018 9:00AM-1:00PM at Teaching Common

Emerging Technologies and Approaches in Healthcare and Health Sciences

CALL FOR ABSTRACTS

As we become more integrated into a global world, technological advances and teaching innovation that are grounded in Science have become crucial. Rapid advancements in medical and health sciences and information technology provide promising resources that require many academic disciplines to work together. Developing new collaborative tools, approaches and defining new methodologies to improve the health of the population, while engaging patients and encouraging them to take accountability for maintaining their own health will play a key role in improving the outcomes and transforming healthcare delivery. The aim of this workshop is to encourage and enable the exchange of information related with the advance and support of Health Science related to these emerging technologies.

Research Group
NORTHWESTERN ONTARIO

Workshop is organized by the Health Information Technology Research Group (HIT)
http://flash.lakeheadu.ca/~mohammed/HIT_RGroup.pdf

Call for Abstracts

Topics
Quantitative Analytics in Health Sciences
Health Sciences Apps
Patient Centered Methods
Public Health
Healthcare Design
IT Health Adds-On

Organizing Committee
Dr. Calos Zerpa (Chair)
Dr. Sabah Mohammed (Co-Chair)
Dr. Vicki Kristman (Co-Chair)
HIT Members
_____

Submission Details
Email your abstract to one of the chairs on
czerpa@lakeheadu.ca
mohammed@lakeheadu.ca
vkristma@lakeheadu.ca
Submission Due Date:
September 30, 2018

THE ABSTRACT FORMAT
The HIT 1st Workshop provide an opportunity to present your research findings related to any of the workshop areas of interest. The presentations slots are 10 minutes, and a written version of your abstract (up to 500 words in MS Word). The expectation is that participants will have read the paper and hence the oral presentation focusses on key findings and then opportunity for discussion. All paper sessions will include a discussant. In your submission for the abstract, please use structured abstract headings (e.g. introduction, methods, results, discussion) for your 200-400 word abstract. If accepted, your abstract will appear as you have submitted it, in the booklet of abstracts.

1st HIT 2018 Workshop

Health & Information Technology Research Group

Established 2017 at Thunder Bay
Ontario - Canada

October 12, 2018, Room Li5002, Teaching Common, Cancellor Paterson Library 9:00AM-1:40PM

1ˢᵗ HIT Workshop Program October 12, 2018

- **Dr. Carlos Zerpa (Chair)**
- **Dr. Sabah Mohammed (Co-chair)**
- **Dr. Vicki Kristman (Co-chair)**

1ˢᵗ Health Information Technology Workshop Program

START TIME	START OF CONFERENCE
9:00 to 9:05	Welcome and Opening Remarks
	Dr. Jinan Fiaidhi who will introduce the chairs of HIT 2018 (Dr. Carlos Zerpa, Dr. Vicki Kristman and Dr. Sabah Mohammed)
	KEYNOTE SPEAKER
9:05 to 9:45	Introducing a design centered workflow in the collaborative construction of health care planning
	Dr. Arnold Kim, MD, TBRHSC, NOSM and Computer Science
	STUDENT RESEARCH PRESENTATIONS (Session Chair Dr. Zerpa)
9:45 to 9:55	Characterization of human papillomaviral genome variants
	Dallas Nygard, and Robert Jackson, Biology Department (Dr Zehbe Cancer Lab)
9:55 to 10:05	Static and dynamic testing of two commercial flexible-tip spring loaded cane mechanisms
	Ms. Katelyn Varga, Dr. Carlos Zerpa. Dr.Meilan Liu, Kinesiology and Engineering
10:05 to 10:15	Cascading Workflow of Healthcare Services
	Phillip Osial, Computer Science

| 10:15 to 10:25 | The Effect of Dual Tasking on Motor Performance and Cardiovascular Systems |
| | Ms. Bronte Volebregt, Dr. Carlos Zerpa. Dr.Kathryn Sinden, Kinesiology |

| 10:25 to 10:35 | Health Care Document Interoperability through the Notion of MongoDB Single View and LDA Modelling |
| | Daotong Dai, Computer Science |

| 10:35 to 10:45 | Exploring the Gene Mutation |
| | Kunwar Krishna Swaroop, Computer Science |

| 10:45 to 10:55 | Prescriptive Grammar for Clinical Prescribing Workflow |
| | Kalle Kauranen, Computer Science |

| 10:55 to 11:05 | Investigating High Performance Perfectionist Athletes' Perceptions of the Junior to Senior Sport Transition |
| | Kaylin Kainulainen, Kinesiology |

| 11:05 to 11:15 | The effect of a 6-week combined resistance and cardiovascular training program on muscular strength, endurance and body composition in young adults with a mild to moderate intellectual global delay |
| | Ms.Tyler McDougall and Dr. Eryk Przysucha, Kinesiology |

START TIME   **FACULTY RESEARCH PRESENTATIONS (Session Chair: Dr. Kristman)**

| 11:20 to 11:30 | Predicting patient admission from the emergency department using administrative data |
| | Dr. David Savage, Prof Bruce Weaver, D Wood, NOSM |

| 11:30 to 11:40 | The use of energy dissipation measurement techniques in assessing helmet impact performance |

	Dr. Carlos Zerpa, Kinesiology and Dr. Meilan Liu, Engineering
11:40 to 11:50	Introducing a novel non-invasive in vivo assessment of microvascular structure and function in humans
	Dr. Kurt Smith, Kinesiology
11:50 to 12:00	Developing a culturally relevant workplace mental health e-health application for the Canadian Indigenous population
	Dr. Vicki Kristma, Health Sciences
12:00 to 12:10	Time course of inter-limb strength transfer after unilateral handgrip training with implications for chronic stroke
	Dr. Taryn Klarner, Kinesiology
12:10 to 12:20	Motor learning of one-handed actions of children with motor problems: Practical and theoretical implication
	Dr. Eryk Przysucha, Kinesiology
12:20 to 12:30	JSON-LD as an Interchange Technology to Facilitate Health Information Exchange
	Daniel Kaukinen, Confederation College
START TIME 12:30 to 1:10	**TUTORIAL** Developing smart health app without the middleman involvement: Mini tutorial
	Dr. Sabah Mohammed and Dr. Jinan Fiaidhi
1:10 to 1:20	Panel discussion and Closing Remarks (Session Chair Dr. Vicki Kristman)
1:20 to 1:40	**LUNCH**