



The Office of Health and Medical Education Scholarship welcomes:



Visiting Professor  
***Dr. Martin Pusic***  
Harvard University

## Artificial Intelligence in Health Professions Education: A Conversation About Our Future

**Friday, March 3, 2023**

**12:00-1:30pm**

**O1500 Health Sciences Centre**

RSVP to [ohmes@ucalgary.ca](mailto:ohmes@ucalgary.ca) by February 25. Lunch provided.

*Artificial intelligence* is a term that is inescapable at present; but what does it really mean? And what does this meaning mean for Health Professions Educators? In this forward-looking session, we will list some basic HPE themes to consider the implications of AI for us. What are our assumptions? How will AI affect curriculum development? Education leadership? And what does scholarship in this area look like, right now? The format will be a mix of lecture and small-group activities.

### Goals

Participants will be able to:

- Define the components of an artificial intelligence system
- Discuss the implications of AI for Health Professions Education
- List some likely next steps necessary for benefitting from AI innovations

# Biography

Dr. Pusic is a practicing Pediatric Emergency Medicine physician at the Boston Children's Hospital, with an advanced interest in the science of learning as it applies to health professions education. A predominant model for the research, in collaboration with ImageSim, involves the collection of clinical artefacts such as diagnostic images, programming of an educational intervention and the subsequent collection and analysis of learning analytic data to nurture and certify expertise development.

He obtained his medical degree from the University of British Columbia, a fellowship in pediatric emergency medicine at McGill, and his Masters (Informatics) and PhD (Human Cognition) from Columbia University. He is currently President of the Society of Directors of Research in Medical Education, Co-Chair of the American Heart Association's Education Science & Programs Subcommittee and is Co-Chair of the Royal College of Physicians and Surgeons of Canada Medical Education Research Grant Committee.

He is Associate Professor of Pediatrics and Emergency Medicine in the Harvard Medical School, Senior Associate Faculty at the Boston Children's Hospital and Scholar in Residence at the Brigham Education Institute.

## Reading

### 1. Task Force Report on Artificial Intelligence and Emerging Digital Technologies

*The Canadian Royal College called together a task force to consider the implications of AI for specialty physician education (a narrower focus than ours). We will consider the task force's recommendations.:*

<https://www.royalcollege.ca/rcsite/documents/health-policy/rc-ai-task-force-e.pdf>

### 2. Li D, Kulasegaram K, Hodges BD. **Why we needn't fear the machines: opportunities for medicine in a machine learning world.** Acad Medicine. 2019 May 1;94(5):623-5.

*This is a brief commentary where the ideas are sound, but the key is its reference list of about 10 of the key references that frame the AI discourse (currently) including studies in ophthalmology & dermatology that made us go "Oh my God!" AI could replace us.*

### Further reading:

- YouTube Videos with ideas for AI:
  - <https://youtu.be/2ePf9rue1Ao> "What is AI? – for people in a hurry" A 5 minute tour through types of AI
  - <https://youtu.be/Dr499PgPB7A> "AI in Learning" The Finns (who else) on what AI will mean for learning
- [https://www.academia.edu/download/52277738/Role\\_of\\_Big\\_Data\\_Medical\\_Teacher\\_2014\\_36\\_216-222\\_Ellaway\\_Pusic\\_Galbraith\\_Cameron.pdf](https://www.academia.edu/download/52277738/Role_of_Big_Data_Medical_Teacher_2014_36_216-222_Ellaway_Pusic_Galbraith_Cameron.pdf)
  - A survey of the new "data" environment describing its implications for Health Professions Data