

# New Course-based Master's Program in Health Informatics

**Rozita Dara**

Associate Professor & Assistant Director

School of Computer Science

January 30, 2024

# Objective

- This interdisciplinary training program will address the societal need for highly qualified personnel who are able to
  - use biological, medical, veterinary and data analytics in addition to computer science to monitor, model, and manage human and animal health and well-being at different organizational levels.
  - examine the generation, analysis, and application of data and emerging technologies to improve health and to inform decision-making regarding human and veterinary healthcare management practices and policies.
  - contribute to the improvement and development of clinical and veterinary/human healthcare technologies that are reliable, ethical, privacy-preserving, and usable.

# Overview - 1

- The program will be a partnership between OVC and the School of Computer Science; more specifically, it will be based in OVC and co-led by SoCS.
- The program will be built on existing courses related to general and analytical epidemiology, clinical research, public health policy, health communication, machine learning, statistical modeling, information privacy, and human and computer interactions.
- Possible course offering format:
  - 6 courses + a capstone project
  - 8 courses

# Overview - 2

- SoCS courses can include:
  - CIS\*6020 Artificial Intelligence
  - CIS\*6050 Neural Networks
  - CIS\*6650 Topics in Computer Science (i.e. Human and Computer Interactions)
  - CIS\*6550 Privacy, Compliance, and Human Aspects of Cybersecurity
  - CIS\*6190 Machine Learning for Sequential Data Processing
  - CIS\*6030 Information Systems
- OVC: POPM\*6200 Epidemiology I, POPM\*6210 Epidemiology II, POPM\*6290 Epidemiology, POPM\*6230 Applied Clinical Research POPM\*6510 Health Promotion, POPM\*6540 Environmental Public Health, POPM\*6550 Public Health Policy and Systems, POPM\*6600 Public Health Research, POPM\*6800 Disease Modeling, POPM\*6950 Studies in Population Medicine - Qualitative Research Methods, POPM\*6960 Systematic Reviews and Meta-Analysis, POPM\*6520 Epidemiology and Statistics, and POPM\*6530 Health Communication

# Anticipated Enrolment

**Program Delivery:** In-Class

**Anticipated Start Date :** September 25, 2024

**Duration of the program:** 16 months, can be extended to 24 months

	Domestic Intake	International Intake	Total Intake
<b>Initial Intake</b>	5	15	20
<b>Steady State</b>	5	20	25

# Program Committee Members

- **SoCS:**

- **Dr. Rozita Dara\***
- Dr. Yan Yan
- Dr. Luiza Antoni

- **OVC:**

- **Dr. Zvonimir Poljak\***
- Dr. Olaf Berke
- Dr. Theresa Bernardo

\* co-Chairs

Questions?