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Zahra Shakeri

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Dr. Zahra Shakeri is the NSERC Tier II Canada Research Chair in Precision Public Health and Health Informatics and an Assistant Professor of Health Informatics and Information Visualization at the Institute of Health Policy, Management and Evaluation, Dalla Lana School of Public Health, University of Toronto. She holds cross-appointments with the Faculty of Information and the Schwartz Reisman Institute for Technology and Society, University of Toronto.

In 2022, Dr. Shakeri founded the Health Informatics, Visualization, and Equity (HIVE) Lab, which develops responsible AI for public health, clinical decision support, and data-driven storytelling that advances health equity. Her research program integrates natural language processing, information visualization, AI safety, causal inference, and social media analytics to create patient-centred digital health solutions. Dr. Shakeri earned her PhD in Computer Science from the University of Calgary and completed postdoctoral training in the Gehlenborg Lab, Department of Biomedical Informatics, Harvard Medical School.

Research Expertise: Medical AI, Health Equity, Natural Language Processing, Data Visualization, Large Language Models, Precision Public Health

Collaboration Interests: AI Deployment, Human Factors in AI, Mental Health



Yalini Senathirajah

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I am an informatician with a background in biology, veterinary medicine, web technologies and biomedical informatics. My research interests include novel approaches to electronic health record design, human-computer interaction and cognition, mHealth and global health. Past and current projects include the use of web technologies and mobile computing for medicine and health promotion (particularly in underserved populations), data visualization and the effects of technology on social networks, health, and civil society. Other interests include free/open source software, innovation development and how to effect adoption of informatics innovations into practice, particularly for pandemic/emergency response and AI adoption.

Research Expertise: Biomedical informatics, especially new approaches to health IT design; digital health tools for underserved/less mainstream populations; studies of Covid/pandemic response and technologies for rapidly addressing emerging threats such as pandemics; large-scale data analysis for long Covid

Collaboration Interests: Digital composable approaches to creating tools for both clinicians and providers; adapting technologies to different communities.

**Jean Chen**jean.chen@utoronto.ca<https://www.rotman-baycrest.on.ca/sp/index.php/chen-lab/lab/>

My research centers on developing advanced, quantitative MRI techniques to decode the complex relationship between brain metabolism, vascular health, and structural decline. particularly in aging populations and those with neurodegenerative conditions. We are also interested in modulating neurofluid dynamics using photobiomodulation (PBM).

Research Expertise: My research centers on developing advanced, quantitative MRI techniques to decode the complex relationship between brain metabolism, vascular health, and structural decline. particularly in aging populations and those with neurodegenerative conditions. We are also interested in modulating neurofluid dynamics using photobiomodulation (PBM).

Collaboration Interests: "Explainable AI", specifically: AI using multimodal data to predict personalized brain-aging trajectories AI in predicting therapeutic outcome in aging and disease AI in quantitative fMRI - using in silico tissue models to generate neural networks that can decode brain physiology from easily obtained signals such as resting-state fMRI.

TEMERTY
CENTRE FOR
AI RESEARCH
AND EDUCATION
IN MEDICINE

Maurizio De Pittamaurizio.depitta@uhn.ca<https://medbio.utoronto.ca/faculty/de-pitta>

Maurizio De Pitta is an Assistant Professor in Physiology and Medical Biophysics at the University of Toronto and a Scientist at the Krembil Research Institute, University Health Network. He is a computational neuroscientist working at the interface of biophysical modeling, applied mathematics, and AI, with a focus on neuron–glial interactions and astrocyte physiology. He leads interdisciplinary research on how neurons, glial cells, and vascular systems interact to shape brain function in health and disease. His work has contributed to the development of computational glioscience, integrating multiscale modeling with experimental and clinical data. He has published in leading journals and co-authored Computational Glioscience (Springer).

His research investigates how neuron–glial interactions influence information processing, cognition, and brain resilience. Using multiscale computational models, machine learning, and multimodal data, his lab studies astrocyte roles in synaptic dynamics and neurodegeneration. In this framework, his current focus is on developing biologically interpretable digital twins to model disease progression, identify biomarkers, and support personalized therapeutic strategies for brain disorders. Dr. De Pitta visits Singapore annually for both professional and personal reasons.

Research Expertise: computational neuroscience, biophysical models, physics-inspired neural networks

Collaboration Interests: Digital composable approaches to creating tools for both clinicians and providers; adapting technologies to different communities.



Vaishali Krishnanandan

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Research Expertise: Medical Oncology; Clinical Trials; Lung Cancer

Collaboration Interests: Medical Oncology; Clinical Trials; Lung Cancer



Abi Sriharan

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Dr. Abi Sriharan is a scholar of AI governance and implementation whose work examines how organizations make decisions, govern knowledge, and adapt during AI-enabled transformation with a specific focus on the future of work and learning.

She is a Professor (Status) at the Institute of Health Policy, Management and Evaluation at the University of Toronto and the Scientific Director of the Krembil Centre for Health Management and Leadership, Senior Scientist in AI at the Schulich School of Business. She co-chairs the AI Evidence Observatory, a pan-Canadian initiative supported by more than 30 organizations advancing responsible AI, workforce learning, and system-level capability.

Dr. Sriharan leads multi-year research programs funded by CIHR and SSHRC on AI implementation, the future of work, and workforce transformation in health systems.

Research Expertise: AI implementation in healthcare; responsible AI governance; learning health systems; organizational behaviour; workforce transformation; human-AI interaction; implementation science; medical and health-professions education; digital transformation and system-level innovation.

Collaboration Interests: Real-world implementation and evaluation of clinical AI; Human-AI interaction, trust, and workflow integration; AI-ready medical and health-professions education and workforce upskilling; Governance, safety, and accountability frameworks for AI; Interdisciplinary approaches integrating engineering, social science, and clinical expertise; and Joint grant development on responsible and translational AI.



Mohammad Noaen

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Dr. Mohammad Noaen is an Assistant Professor of Health Informatics in the Institute of Health Policy, Management and Evaluation (IHPME) at the Dalla Lana School of Public Health (DLSPH), University of Toronto. He received his PhD in Computer Engineering from the University of Calgary and completed postdoctoral training at Harvard Business School, IPME, and DLSPH. His research spans health informatics, multimodal artificial intelligence, precision public health, environmental health, and transportation planning.

Research Expertise: health informatics, multimodal artificial intelligence, precision public health, digital health, genomics, environmental health, and transportation planning.

Collaboration Interests: Multimodal AI for healthcare, including integration of clinical, imaging, and patient-generated data; AI-driven public health and precision population health; environmental health and climate resilience; responsible and equitable AI in health systems; and intelligent digital platforms for patient feedback and healthcare system improvement; AI and reinforcement learning in transportation planning.



Anne Martel

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Anne Martel is a Professor in Medical Biophysics at the University of Toronto and a Senior Scientist at Sunnybrook Research Institute where she holds the Tory Family Chair in Oncology. She is also a Vector Faculty Member.

Her research program focuses on applications of machine learning and artificial intelligence to detection, diagnosis, and prediction/prognosis in cancer. In particular, she is interested in developing multi-modal models capable of integrating clinical data, radiology, digital pathology images and genomics data. Dr. Martel is a fellow of MICCAI, an international society which represents scientists and engineers working to develop and implement image analysis methods applied to medicine. As well as serving as a board member and conference and scientific co-chair of MICCAI, she is a senior member of SPIE and currently serves as a senior editor for the journal Medical Image Analysis.

Research Expertise: AI for detection, diagnosis and prediction in oncology; AI in Digital Pathology; AI in Radiology

Collaboration Interests: Development of multi-modal predictive models for management of cancer patients; Development of federated learning methods; Development of methods to extract and analyze clinical records and free text notes; Novel stain-free microscopy methods.



Carole Lunny

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Carole Lunny, PhD, is a methodologist in evidence synthesis. She finished two postdocs; one with the University of British Columbia (UBC) and the second at the University of Toronto. Dr Lunny is PhD trained as a Clinical Epidemiologist and Methodologist with Cochrane Australia, Monash University. Working with these organisations has refined her skills in knowledge translation, machine learning, network meta-analysis (NMA), development of critical appraisal tools, and grant writing.

Dr. Lunny's current work focuses on the development of a risk of bias tool for NMAs, and the development of an AI for quality and bias assessment of systematic reviews (ROBIS and AMSTAR 2) called WISEST. However, she is most widely known internationally for her seminal research into 'overviews of systematic reviews' (i.e. umbrella reviews, meta-reviews). <https://tcairem.utoronto.ca/faculty/carole-lunny>

Research Expertise: Methodology, bias and quality of clinical studies, systematic reviews and network meta-analysis, evidence synthesis methods

Collaboration Interests: AI implementation; Mental health; Medical education



Mireille Norris

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Dr. Mireille Norris is an Internist and Geriatrician at Sunnybrook Health Sciences Centre and an Associate Professor of Medicine at the University of Toronto. She also serves as Medical Director at Bendale Acres Long-Term Care Home. Her clinical and academic interests include dementia care, fall prevention, and the social determinants of health in older adults.

She is actively involved in mentorship through the Sunnybrook Program to Access Research Knowledge (SPARK), and previously served as the inaugural Faculty Lead for Black and Indigenous medical learners within the Department of Medicine from 2021-2025. In addition, she has conducted research on race-concordant mentorship in collaboration with the Black Physicians' Association of Canada, with support from BPAO, MeDS, and a SHARE grant from the Department of Medicine at the Temerty Faculty of Medicine.

Her contributions to mentorship and equity-focused initiatives have been recognized with both an Impact Award and a Mentorship Award at Sunnybrook. Her work is grounded in advancing health equity, inclusive medical education, and care for underserved communities.

Research Expertise: Medical education research focused on mentorship of marginalized learners. Dementia care focused on racialized and Black seniors.

Collaboration Interests: Medical education (dementia education CPD) in resource-poor areas.



Sinha Samir

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Dr. Samir Sinha is a Geriatrician and Clinician Scientist at Sinai Health System and the University Health Network in Toronto, a Professor of Medicine at the University of Toronto, the Director of Health Policy Research at Toronto Metropolitan University's National Institute on Ageing, as well as a Fellow of the Canadian Academy of Health Sciences.

A Rhodes Scholar, Samir is a highly regarded clinician and international expert in the care of older adults. As a former member of the Government of Canada's National Seniors Council and a current member of its Ministerial Advisory Board on Dementia he helped to develop and now oversee Canada's National Dementia Strategy and recently led the successful development of Canada's new National Long-Term Care Services Standard.

Internationally, he serves as an Adjunct Professor at the Johns Hopkins University School of Medicine and the International Centre for Future Health Systems at the University of New South Wales. Furthermore, as a longstanding member of the American Red Cross Scientific Advisory Council, he remains committed to supporting the implementation and administration of unique, integrated and innovative models of geriatric care and support that reduce disease burden, improve access and capacity and ultimately promote health.

Research Expertise: My areas of expertise specifically relate to ageing in general and geriatric medicine along with the development of care practices and models of care, health policies and strategies including the use of digital technologies and AI in the care of older persons.

Collaboration Interests: I have longstanding collaborations in Singapore and have advised the MOH, NHG, the Agency for Integrated Care, and Tsao Foundation on ageing-related best practices. I would welcome collaborations on technologies that enable healthy ageing and ageing in place, better support people living with dementia and their caregivers.