

The Bartha Maria Knoppers Annual Lecture 2025

“Polygenic Risk Scores and the Human Right to Science”

Speaker Calvin Ho | JSD PCLT FRSPH



September 5th, 2025



10 - 11 AM



Leacock Building, Room 232, McGill University
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Speaker Calvin Ho | JSD PCLT FRSPH

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Risk stratification algorithms are increasingly being applied in clinical management of chronically ill patients but their clinical utility can vary from one population to another. Even if these algorithms have superior predictive performance in associating deterioration of health conditions or the need for care escalation with a risk of harm, setting-specific and dynamic recalibrations are often required. Drawing on critical insights from the ground-breaking work of Professor Bartha Maria Knoppers on the human right to science (HRS), I explain how she and her colleagues have devised a novel rights-based approach to analyse and evaluate the governance of novel medical technologies like risk stratification programs with artificial intelligence or machine learning capability. By this approach, Professor Knoppers reminds us that science (and its application in technology) is a cultural institution that is firmly rooted in the innate trait of humankind to inquire and explore. For humankind and science as a human enterprise to flourish, an open environment that secures scientific freedom and, more broadly, one's freedom to inquire must be established and sustained through clear laws and policies. Through the analytic of AI/ML software that is used to generate polygenic risk scores (PRS), I apply a rights-based approach that is inspired by Professor Knoppers to explain the characteristics that regulatory regimes require to identify and address normative and regulatory challenges.

Bartha Maria Knoppers | PH.D., AD.E., O.C., O.Q., FRSC., FCAHS

Distinguished James McGill Professor Emerita

Founder, Centre of Genomics and Policy, McGill University

Canada Research Chair in Law and Medicine 2001 - 2024

SCAN TO RSVP

**Please RSVP by
August 28th, 2025**

