GEORGIAN TRIANGLE LIFELONG LEARNING INSTITUTE





GTLLI is a non-profit organization, founded in 1995.

We offer university-level lectures given by experts from various fields.

GTLLI is maintained by volunteers and funded by lecture registration fees.

For more information: www.GTLLI.ca email: info@GTLLI.ca or call: 705-300-3251

GTLLI COURSE REGISTRATION 2024–2025

TICKETS

(includes videos)

Ea	rly Bird	After June 30
Perspectives (5 lectures)	\$50	\$60
Fall Series (6 lectures)	\$60	\$72
Winter Series (6 lectures)	\$60	\$72
Spring Series (6 lectures)	\$60	\$72
	(PLUS HST)	

NON-REFUNDABLE & NON-TRANSFERABLE

Please check the website regularly for updates when tickets will be available for purchase.

To receive GTLLI member communications,

please go to <u>www.gtlli.ca</u> to create an account and you will receive email updates.

Feel free to share this brochure with your family and friends.

We look forward to another engaging lineup for the 2024-25 season!

PERSPECTIVE SERIES 2024: A COLLECTION OF INDEPENDENT LECTURES Sep 6, 13, 20, 27, Oct 4

This five-part series is a collection of independent lectures designed to enlighten, engage and inform. This year, the topics provide a window on forensics, art, health, free will and autocracy.

SEP 6: FORENSIC SCIENCE AND THE EXONERATION OF STEVEN TRUSCOTT

This lecture will describe what forensic entomology is and explain the use of insect evidence in death investigations with case examples. Of particular focus will be one of the most notorious murder cases in Canada—the 1959 conviction of Steven Truscott for the murder of Lynne Harper near Clinton, ON. In 2007, the Ontario Court of Appeal declared a wrongful conviction and a miscarriage of justice and Truscott was acquitted of the murder charges. Dr. VanLaerhoven will share her important role in this acquittal.

Dr. Sherah VanLaerhoven is a Professor in the Faculty of Science at the University of Windsor with a specialty in Forensic Entomology. She completed her Ph.D. (Entomology, University of Arkansas) in 2001. Dr. VanLaerhoven is a Past Chair of the American Board of Forensic Entomology. In addition to research, teaching, and supervising graduate students, she assists Ontario police services, the Ontario Forensic Pathology Service and lawyers in death investigations when insect evidence is involved.

SEP 13: MIRROR, MIRROR ON THE WALL: A COLLECTION OF ARTISTS' SELF PORTRAITS

This illustrated lecture will explore the genre of self-portraits to demonstrate their various functions in the history of art. These beautiful works, covering a variety of time periods and styles, reveal that, in addition to capturing the artist's likeness, self-portraits served some highly practical purposes. **Sonia Halpern** (M.A. Queen's University) is an Art Historian who has taught for three decades at Western University, where she has received numerous awards for her teaching. Sonia is the author of multiple academic articles, two humorous poetry books (*The Life and Times of Transition Girl and the Revised and Expanded edition*), and a book of original music compositions. (Klezmer Kitty).

SEP 20: MAKING SENSE OF SCIENCE FOR OPTIMAL HEALTH & WELL-BEING

Chocolate lowers blood pressure, wine is good for your heart, so the research says. Have you ever wondered if claims like these are trustworthy? In this session, participants will learn how to differentiate between good and poor-quality research as well as where to go to find the best research on everything related to aging optimally.

Maureen Dobbins, RN, Ph.D. is a professor in the School of Nursing at McMaster University, and Scientific Director of the National Collaborating Centre for Methods and Tools, funded by the Public Health Agency of Canada. She has worked tirelessly for three decades on improving public health decision-making to support the attainment of optimal health and well-being for every person living in Canada.

PERSPECTIVE SERIES CONTINUED BELOW

PERSPECTIVE SERIES 2024 CONTINUED: A COLLECTION OF INDEPENDENT TOPICS Sep 6, 13, 20, 27, Oct 4

SEP 27: THE SCIENCE OF FREE WILL

Do "you" make decisions, or are decisions made for "you", by the unconscious activity of a trillion brain cells (and thus... is free will just an illusion)? This lecture will discuss the neuroscientific research that informs our understanding of the science of free will and considers implications for moral responsibility and justice, a sense of personal identity, and the meaning of being "you".

Dr. Bruce McKay is the Dean of the Faculty of Human and Social Sciences and the Dean of the Wilfrid Laurier International College at Wilfrid Laurier University. His research focuses on recreational and self-medicinal alcohol and drug use in university students and the mechanisms by which psychoactive drugs affect brain functions. Dr. McKay grew up near Woodstock, Ontario, and completed his post-secondary education at Laurentian University, the University of Calgary, and the Baylor College of Medicine.

OCT 4: DEMOCRACY AND AUTOCRACY IN THE AGE OF AI

How will the rise of Artificial Intelligence shape the future of democracy and dictatorship? This talk examines how a variety of states are using (or planning to use) AI to strengthen their regimes. I argue that while AI may offer some advantages to democracies, it also has the potential to make dictators more informed, resilient, and efficient.

Dr. Seva Gunitsky (Ph.D. Columbia University) is an Associate Professor of Political Science at the University of Toronto. He is the author of *Aftershocks: Great Powers and Domestic Reforms in the Twentieth Century,* named by *Foreign Affairs* as one of the best books of 2017. Some of his work has appeared in *Foreign Affairs, Foreign Policy, The Washington Post* and *The New Republic.*

FALL SERIES CONTINUED BELOW

FALL SERIES 2024: THE FUTURE OF FARMING IN CANADA Oct 18, 25, Nov 1, 8, 15, 22

What is the future of farming in Canada in light of an aging workforce (40% of farmers will retire in the next 10 years!), greater dependence on migrant workers, serious impacts of climate change and food security issues? This series will address these concerns as well as the positive signs of increased use of ecological agriculture and new innovative farming practices that give hope for the future.

OCT 18: THE BATTLE FOR THE FUTURE OF FARMING IN CAN-ADA

This lecture will give a big picture overview of the precarious future of farming in Canada. It will consider key issues such as: the long-term shift of value and control away from farmers; the shrinking farming population; the changing nature of farm labour; the resource and pollution intensity of industrial agriculture; and the urgent need to support more sustainable farming techniques and livelihoods.

Tony Weis is a Professor in the Department of Geography and Environment at Western University. His research focuses on the social inequalities, biophysical instabilities, and interspecies relations associated with agriculture and food systems. He is the author of 'The Ecological Hoofprint: The Global Burden of Industrial Livestock' (2013) and 'The Global Food Economy: The Battle for the Future of Farming' (2007).

OCT 25: IF YOU ATE TODAY, THANK A MIGRANT WORKER

This lecture will describe the historical and contemporary context of migrant agricultural workers in Canada, revealing the hidden realities of those who grow our food. The presentation will discuss migrants' central role in agriculture; living and working conditions; health and safety issues; family impacts; challenges accessing rights and benefits, including health care; and the role of advocacy and community groups. **Janet McLaughlin** is an Associate Professor of Health Studies and a Research Associate at the International Migration Research Centre at Wilfrid Laurier University. For 20 years, she has been researching and publishing on issues related to migrant agricultural workers. Dr. McLaughlin is cofounder and co-coordinator of the Migrant Worker Health Project and the Migrant Worker Health Expert Working Group (<u>www.migrantworker.ca</u>)

NOV 1: FOOD SECURITY IN CANADA

To counter fears of food shortages, modern agriculture produces excess, resulting in wasted food. The climate crisis and associated erratic weather, loss of biodiversity, pollution of nitrogen, phosphorus and novel entities and overexploitation of land and water, threaten food security. While respecting ecological relationships and addressing income inequality and poverty, we could balance adequate, healthy consumption with sufficient, sustainable production.

Ralph Martin grew up on his family farm in Wallenstein, ON. After earning a Ph.D. (Plant Science, McGill University, 1990) he taught at the Nova Scotia Agricultural College. In 2001, Ralph founded the Organic Agriculture Centre of Canada and in 2011, was appointed Professor of Plant Agriculture, at the University of Guelph. In 2019, he retired and published the book, 'Food Security'.

FALL SERIES CONTINUED BELOW

FALL SERIES 2024 CONTINUED: THE FUTURE OF FARMING IN CANADA Oct 18, 25, Nov 1, 8, 15, 22

NOV 8: SUSTAINABLE FARMING AND CLIMATE CHANGE SOLUTIONS

Agriculture has a significant impact on our climate and environment, with farms generating more than 10% of Canada's total greenhouse gas emissions, but there is a growing movement to make farming more sustainable. With examples from across the country and from his own farm, Brent will describe how innovative Canadian farmers are reducing their emissions, increasing natural habitat and biodiversity, and sequestering millions of tons of atmospheric carbon in their soils.

Brent Preston co-owns and operates The New Farm, an organic vegetable operation near Creemore. Brent is the co-founder and President of Farmers for Climate Solutions, a pan-Canadian coalition of farm organizations that advocates for better climate policy in agriculture. He is the author of 'The New Farm: Our Ten Years on the Front Lines of the Good Food Revolution', a national bestseller.

NOV 15: ECOLOGICAL APPROACHES TO FARMING

Integrating agriculture with ecological systems dynamics will advance soil health, improve biodiversity, reduce fossil energy plus toxic inputs and balance the role of livestock with available non-polluted land and water. Options include traditional and new techniques to recycle nutrients, reduce tillage, optimize inputs and field operations with 'smart' equipment and re-calibrate feed and food production. **Ralph Martin** grew up on his family farm in Wallenstein, ON. After earning a Ph.D. (Plant Science, McGill University, 1990) he taught at the Nova Scotia Agricultural College. In 2001, Ralph founded the Organic Agriculture Centre of Canada and in 2011, was appointed Professor of Plant Agriculture, the University of Guelph. In 2019, he retired and published the book, 'Food Security'.

NOV 22: NEW INNOVATIVE FARMING IN CANADA

The speaker will initially share his sustainable farming practices. He will then highlight some of the latest innovations that will revolutionize how potatoes will be grown both in the tropics and in Canada. Peter will share how the diploid potato will change how we breed and grow potatoes. He will discuss new urban farming practices such as aeroponics and hydroponics.

Peter VanderZaag (Ph.D. University of Hawaii 1979), is a potato scientist who has worked in 60 countries. Peter was based with the International Potato Centre in several African countries and then in SE Asia and China. He also served as Adjunct Professor at several universities in Asia and has supervised over 30 graduate students. Peter and his family own a large potato farm which focuses on sustainable farming practices.

WINTER SERIES CONTINUED BELOW

WINTER SERIES 2025: SPORT AND SOCIETY: ACHIEVEMENTS, CHALLENGES & OPPORTUNITIES Jan 10, 17, 24, 31, Feb 7, 14

Sport is more than simply activity, leisure, or competition. Sport in society extends into community development, engineering, digital media, gender equity, big data, and human potential. This series will open your eyes to the ways in which sport and society are intertwined, and how the impact of this can be felt in unexpected ways!

JAN 10: THE POSSIBILITIES AND CHALLENGES OF SPORT-FOR-DEVELOPMENT

Sport for development refers to the organization and implementation of sport programs to support community/social development. The foundational claim of such programs is that, when organized thoughtfully, sport can make a modest contribution to health promotion, gender empowerment, community cohesion and conflict resolution (among other goals). This talk explores some key opportunities but also cautions, in pursuing social development through sport.

Dr. Simon Darnell is a social scientist and Associate Professor in the Faculty of Kinesiology and Physical Education at the University of Toronto. He also serves as the Director of the Centre for Sport Policy Studies at U of T. His research examines the relationships between sport, international development, peacebuilding; sport and politics; and social activism in sport culture.

JAN 17: SPORTS ENGINEERING: OPTIMIZING EQUIPMENT AND PERFORMANCE

"Faster, higher, stronger" is the Olympic motto, and today's athletes are faster than ever. However, the biggest gains in sports performance have come from advances in equipment, not the athlete. In this talk, Prof. McPhee describes how computer models and AI are used to optimize sports equipment and performance, with applications in golf, baseball, Olympic cycling, wheelchair basketball and hockey. **Dr. John McPhee** is a Professor of Systems Design Engineering and the Canada Research Chair in Biomechatronic System Dynamics at the University of Waterloo. He is ranked in the top 2% of scientists worldwide by Stanford University and works with Cleveland Golf, the US Golf Association, Golf Digest, the Canadian Sports Institute, Trajekt Sports, Bladetech Hockey and Fencing Canada.

JAN 24: IMPACT OF DIGITAL & SOCIAL MEDIA ON SPORT

Sports fans now consume sport via digital platforms on mobile whenever and wherever they are. Researchers have been observing and studying the impact of the digital ecosystem on fans, athletes, and sport organizations alike. This presentation will cover the trajectory of intersection of digital media and sport, providing insight into the good, the bad, and what the future might hold.

Dr. Ann Pegoraro, (Ph.D.) is the Lang Chair in Sport Management and the Director of the International Institute for Sport Business and Leadership at the Gordon S. Lang School of Business and Economics at the University of Guelph, Canada. Her research centers on emerging issues in sport management with a particular focus on the intersection of sport and digital media.

WINTER SERIES CONTINUED BELOW

WINTER SERIES 2025 CONTINUED: SPORT AND SOCIETY: ACHIEVEMENTS, CHALLENGES & OPPORTUNITIES Jan 10, 17, 24, 31, Feb 7, 14

JAN 31: THE STRUGGLE FOR GENDER-EQUITY IN SPORT

This presentation will address challenges that remain in achieving gender equity in sport, focusing particularly on preventing and addressing genderbased violence. At all levels of sport, research indicates that girls and women face higher rates of psychological and sexual abuse and neglect than their male counterparts. Strategies for designing and delivering safe, equitable and healthy sport will be discussed.

Dr. Gretchen Kerr, Ph.D., is a Professor and Dean in the Faculty of Kinesiology and Physical Education at the University of Toronto. Gretchen authored Canada's first national prevalence study of maltreatment among national team athletes and contributed to the Universal Code of Conduct to Prevent and Address Maltreatment, a policy mandated for all National Sport Organizations.

FEB 7: THE "DATAFICATION" OF SPORT: SPORTS ANALYTICS AND TECHNOLOGICAL CHANGE

Sport has a history of technological innovation and disruption. The sports analytics movement that first gained prominence early this century is a case in point: it brought new technologies for analyzing sport performance and challenged conventional ways of understanding success on the playing field. This lecture considers the evolution of sports analytics and its significance in reshaping the sport industry.

Dr. Brad Millington is an Associate Professor in the Department of Sport Management at Brock University. His research focuses on two main areas of study: sport media and technology; and sport and environmental sustainability. He currently leads a Social Sciences and Humanities Research Council-funded project on the implications of sports analytics for work and communication in the Canadian sport industry.

WINTER SERIES CONTINUED BELOW

WINTER SERIES 2025 CONTINUED: SPORT AND SOCIETY: ACHIEVEMENTS, CHALLENGES & OPPORTUNITIES Jan 10, 17, 24, 31, Feb 7, 14

FEB 14: THE PARADOX OF HUMAN POTENTIAL AND THE DEVELOPMENT OF SPORTING CHAMPIONS

One of the most obvious challenges in youth sport is the increasing push to identify and stream young athletes into high-performance systems aimed at providing 'optimized environments' to increase athletes' likelihood of eventual success. My research focuses on understanding the process of athlete development, particularly the extent to which early stages of learning and skill acquisition relate to later success. **Dr. Joe Baker**, Ph.D. Queens, is the Tanenbaum Research Chair in Sport Science, Data Modelling and Sport Analytics at the University of Toronto. His research considers the varying influences on optimal human development, ranging from issues affecting athlete development and skill acquisition to barriers and facilitators of successful aging. Joe is the author/editor of 13 books and over 300 peer-reviewed articles and book chapters.

SPRING SERIES CONTINUED BELOW

SPRING SERIES 2025: ARTIFICIAL INTELLIGENCE: HERE, THERE AND EVERYWHERE Mar 21, Apr 4, 11, 25, May 2, 9

Artificial Intelligence (AI) has been described as the development of computerized systems capable of performing complex tasks that historically only a human could do, such as reasoning, making decisions and solving problems. In this series, our speakers will explain how AI has already impacted many aspects of our lives. In addition, they will share their views on the future possibilities of AI, as well as the ethical considerations surrounding the use of this technology.

MAR 21: AN INTRODUCTION TO ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING

This lecture offers an introduction to Artificial Intelligence (AI) and Machine Learning (ML), emphasizing the Deep Learning revolution. Attendees will learn AI terminology, historical background, and key concepts. It aims to provide a starting point and important context for beginning to understand the different technologies and issues that arise surrounding AI.

Dr. Graham Taylor is a Canada Research Chair and Professor of Engineering at the University of Guelph. He is the founder and Academic Co-Director of the University of Guelph Centre for Advancing Responsible and Ethical AI (CARE-AI) and is a Faculty Member at the Vector Institute for AI. In 2016, he was named as one of 18 inaugural CIFAR Azrieli Global Scholars. In 2018, he was honoured as one of Canada's Top 40 under 40. In 2019, he was named a Canada CIFAR AI Chair. He is the Academic Director of NextAI, a non-profit accelerator for AI-focused entrepreneurs. From 2021-2013 he served as Vector's Research Director.

APR 4: IMPACT OF AUTOMATION ON THE CONSTRUCTION INDUSTRY

Dr. Haas will begin by exploring how AI is making it possible to automate many aspects of construction with astonishing new tools that enable capable robots, autonomous progress tracking, wearable health monitors, AI planners, and even AI designers. Then, he will discuss its impact. Will AI make building cheaper or faster? Will it reduce the need for mass, power, and embodied energy? Finally, how do humans fit in?

Dr. Carl Haas, Professor in Civil and Environmental Engineering at the University of Waterloo, is a Fellow of the Royal Society of Canada, the US National Academy of Construction, and the Canadian Academy of Engineering. His degrees are from Waterloo University and Carnegie Mellon University. His broader research interests include AI, human-robotic systems, and the circular economy in the built environment.

SPRING SERIES CONTINUED BELOW

SPRING SERIES 2025 CONTINUED: ARTIFICIAL INTELLIGENCE: HERE, THERE AND EVERYWHERE Mar 21, Apr 4, 11, 25, May 2, 9

APR 11: USE OF ARTIFICIAL INTELLIGENCE IN MEDICINE

From ChatGPT to Google Maps to self-driving cars, artificial intelligence is changing how we function as a society. The adoption of AI in healthcare, however, has been slow. This session will focus on what AI is, how it is being used in healthcare and the impacts it will have on patients and society at large.

Dr. Muhammad Mamdani is Vice President of Data Science and Advanced Analytics at Unity Health Toronto and Director of the University of Toronto Temerty Faculty of Medicine Centre for Artificial Intelligence Research and Education in Medicine (T-CAIREM). He has published over 500 studies in peer-reviewed medical journals and is an international leader in applied AI in healthcare.

APR 25: IMPACT OF AI ON ARTS, CULTURE AND MUSIC

I gave a TED talk 8 years ago called Artificial Creativity. It had been commonplace for researchers to use AI for creative pursuits, but 5 years later tools such as ChatGPT and Midjourney took the world by storm. In this talk, I'll speak to the role that AI has been playing in art, music and literature, and where it will be in the future.

Dr. Steve Engels (BASc, MMath, Ph.D.) is a Professor, Teaching Stream in the Department of Computer Science at the University of Toronto. His research investigates areas such as artificial intelligence, video game Design, and education (and the combinations of these areas).

MAY 2: ETHICS AND ARTIFICIAL INTELLIGENCE

As Artificial Intelligence (AI) and Machine Learning (ML) applications continue to proliferate into high-stakes, socially impactful domains, it is critical that we develop a robust framework to evaluate the ethical, legal, and social implications of these emerging technologies. In this talk, I will provide a framework called the PROBES model. While not exhaustive, the PROBES model highlights six of the most important ethical considerations relating to AI/ML: Privacy, Responsibility, Opacity, Bias, Equity, and Sustainability. Each of these considerations will be illustrated through recent case studies and examples.

Joshua August (Gus) Skorburg is an Associate Professor of Philosophy, Academic Co-Director of the Centre of Advancing Responsible and Ethical Artificial Intelligence (CARE-AI), and Faculty Affiliate at the One Health Institute at the University of Guelph in Ontario, Canada. From 2018-22, he was an Adjunct Professor in the Fuqua School of Business at Duke University. He received his Ph.D. in Philosophy in 2017 from the University of Oregon. His research spans topics in applied ethics and moral psychology.

SPRING SERIES CONTINUED BELOW

SPRING SERIES 2025 CONTINUED: ARTIFICIAL INTELLIGENCE: HERE, THERE AND EVERYWHERE Mar 21, Apr 4, 11, 25, May 2, 9

MAY 9: HOW CAN ARTIFICIAL INTELLIGENCE TRANSFORM GOVERNMENT? AND SHOULD IT?

Artificial intelligence has the potential to change almost every facet of our lives. In public service, it can replace a large number of public servants, can reshape how citizens interact with their governments and can transform the way politicians represent citizens. This lecture will discuss why artificial intelligence can have such wide-ranging effects on the federal government and then explore whether it should. **Dr. Peter Loewen** is the Director of the Munk School of Global Affairs & Public Policy and a director of PEARL, the Policy, Elections, and Representation Lab. Dr. Loewen's interests have centered around politicians, citizens, and technology which are reflected in the work conducted in the lab relating to voting behaviour and public opinion; political elites and representation; artificial intelligence, governance, and democracy; and, COVID, politics, and society.

