



THE GARROD
ASSOCIATION



VIRTUAL CPD CONFERENCE

May 5–7, 2021

GARROD SYMPOSIUM

UNIQUE POPULATIONS, UNIQUE IEMS



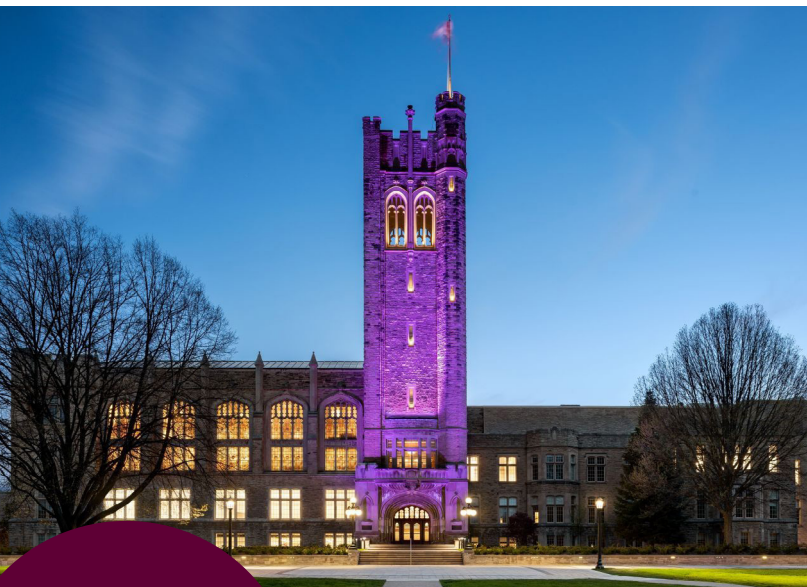
HEALTH SCIENCES
Continuing Professional
Development



**McMaster
Children's Hospital**



London Health Sciences Centre



Accredited for up to

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MOC
Section 1
credits

TARGET AUDIENCE

Physicians, Registered Nurses, Laboratory Technicians,
Genetic Counsellors, Registered Dietitians, Researchers,
Clinical Specialists, and Students.

LEARNING OBJECTIVES

By the end of the activity participants will be able to:

- Learn about new metabolic disease therapies including gene therapies, small molecule therapies, and enzyme replacement therapies.
- Expand their knowledge of metabolic diseases in Indigenous populations.
- Learn about metabolic diseases in Amish, Mennonite and Hutterite populations.
- Share experiences in providing metabolic genetic services to new immigrants.

*Please note: 25% of the scientific program will be interactive.

FOR INFORMATION

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Agenda

Wednesday, May 5, 2021

10:45–11:45	Nurse/Genetic Counselor Webinar Session Chairs: Melanie Napier and Christina Parkinson Case Studies Dietitians Webinar Session Chairs: Amy Pender and Suzanne Ratko Fatty Acid Oxidation Disorders Mary Sowa , MS, RD, CSP Children's Hospital of Orange County, California, USA COVID Management – Open Discussion
11:45–12:00	BREAK & VIRTUAL EXHIBIT HALL
12:00–12:15	Welcome & Introductions Murray Potter , MD, FRCPC, FCCMG, Biochemical Geneticist McMaster Children's Hospital; Professor and Chair Department of Pathology and Molecular Medicine McMaster University, Hamilton, ON Andreas Schulze , President of Garrod Association, MD, PhD, FRCPC, Professor Paediatrics and Biochemistry University of Toronto, Toronto, ON
12:15–13:45	PLENARY Session I–New Therapies–Part 1 Session Chair: Tony Rupar
12:15–13:00	DNA: From Diagnosis to Treatment. The Modern Age of Diagnosing and Treating Metabolic Diseases Aneal Khan , MSc, MD, FRCPC, FCCMG President, MAGIC Clinic Ltd., Calgary, AB 1. Summarize the technological basis for DNA and RNA transfer technologies in metabolic diseases 2. Appreciate how measures of clinical efficacy can be dependent on the technology used 3. Recognize how different types of gene transfer methods might be suitable for different types of metabolic diseases
13:00–13:45	New Aspects of Fabry Disease Including Treatment With Pharmacological Chaperones Daniel G. Bichet, M.D. , Professor of Medicine, Pharmacology and Physiology, University of Montreal, co-principal investigator of the Canadian Fabry Disease Initiative, Nephrologist, Hôpital du Sacré-Cœur de Montréal 1. Become familiar with early recognition of Fabry disease 2. Recognize the concept of misfolded amenable mutations corrected by a pharmacological chaperone 3. Review the renal and cardiac changes observed after intravenous enzyme replacement therapy or oral pharmacological chaperone treatment
13:45–14:45	Break, Exhibitors & Poster Viewing
14:45–16:30	PLENARY Session II–Unique Populations Session Chair: Chitra Prasad

14:45–15:30	Caring for Children and Youth New to Canada: Resources and Considerations for Health Care Providers Andrea Hunter , MD, FRCPC, DTM&H (UK), Consultant Pediatrician, McMaster Children's Hospital, Refuge: Hamilton Centre for Newcomer Health; Program Director Pediatric Residency Program; Associate Professor, McMaster University, Hamilton, ON 1. Describe the demographics of newcomer children and youth to Canada 2. Outline how culture may impact health and developmental issues 3. Describe the extent of and the challenges and health issues facing immigrant and refugee families in Canada, and discuss steps that health providers can take in caring for, and advocating with newcomer families
15:30–16:00	Genetic Research with Manitoba's Hutterite and Mennonite Communities: Navigating Tradition and Innovation Cheryl Rockman-Greenberg , MD, CM, FRCPC, FCCMG, Distinguished Professor Departments of Pediatrics & Child Health and Biochemistry & Medical Genetics University of Manitoba and Clinician Scientist, Children's Hospital Research Institute of Manitoba, Winnipeg, MB 1. Recognize the challenges in pursuing genetic research in Manitoba's unique populations 2. Summarize 3 approaches to patient engagement in research and delivery of genetic services for Inherited Metabolic Diseases in Manitoba's unique populations 3. Discuss the impact of the drug approval process in Canada on access to new therapies for unique populations
16:00–16:30	Working With the Old Order Amish and Mennonite Populations: Successes and Challenges in the Delivery of Healthcare and Targeted Genetic Testing of Newborns and Adults Victoria Mok Siu , MD, FRCPC, FCCMG, Medical Director, Medical Genetics Program of Southwestern Ontario; Associate Professor, Department of Pediatrics, Schulich School of Medicine and Dentistry Western University, London, ON 1. Discuss cultural traditions of the Old Order populations, which need to be considered in the provision of healthcare 2. Recognize factors, which affect uptake of targeted newborn and carrier screening 3. Describe successful implementation strategies for optimal care of Old Order families with genetic/metabolic disorders
16:30–16:45	Closing Remarks and Evaluations

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Thursday, May 6, 2021

12:15–13:45	PLENARY Session III – New Therapies Part 2 Session Chair: Murray Potter
12:15–13:00	Novel Enzyme Substitution Therapy for Adults with Phenylketonuria (PKU) Cary O. Harding , MD, Professor, Molecular and Medical Genetics, and Pediatrics Oregon Health & Science University, Portland, OR, USA 1. Review the Phase 3 trial data that forms the basis of regulatory approval for the use of pegvaliase (Palyngiq™) treatment in PKU 2. Provide a practical approach to the induction and titration of pegvaliase therapy using specific case studies 3. Illustrate the management of pegvaliase related hypersensitivity reactions
13:00–13:45	Nutrition Management of Patients receiving enzyme therapy for PKU Krista Viau , PhD, RD, CSP, Metabolic Dietitian Boston Children's Hospital, Boston, MA, USA 1. Identify the dietitian's roles in the initiation and treatment of adults with PKU with pegvaliase 2. Describe nutrition assessment and management strategies during titration and maintenance pegvaliase therapy 3. Discuss nutrition counseling considerations for increasing dietary protein intake
13:45–14:45	BREAK, EXHIBITORS & POSTER VIEWING
14:45–16:00	PLENARY Session IV – Indigenous Health Session Chair: Jagdeep S. Walia
14:45–15:30	Protective or Deleterious? the Unresolved Debate of the Effect of the CPT1A p.P479L Variant on Inuit and West Coast First Nations Health Laura Arbour , MSc, MD, FRCPC, FCCMG, Professor Department of Medical Genetics University of British Columbia, Vancouver, BC Affiliate Professor, Division of Medical Sciences University of Victoria, Victoria, BC 1. Demonstrate the known population distribution of the CPT1A p.P479L variant in Canada and other circumpolar countries 2. Describe the evidence for both deleterious and protective effects of the CPT1A p.P479L variant 3. Consider the benefits and potential harms of population screening and intervention
15:30–16:15	Pyruvate Carboxylase Deficiency in Indigenous Populations: Prevalence and Phenotype Aziz Mhanni , MD, FRCPC, FCCMG, FACMG, PhD Consultant, Medical Genetics and Genomics, Associate Professor Department of Pediatrics and Child Health; Department of Biochemistry and Medical Genetics Max Rady College of Medicine, Rady Faculty of Health Sciences, University of Manitoba, Winnipeg, MB 1. Discuss the genetic epidemiology of pyruvate carboxylase deficiency 2. Recognize the phenotypic spectrum of pyruvate carboxylase deficiency 3. Describe the neuroradiologic abnormalities in pyruvate carboxylase deficiency
16:15–16:30	CLOSING REMARKS AND EVALUATIONS

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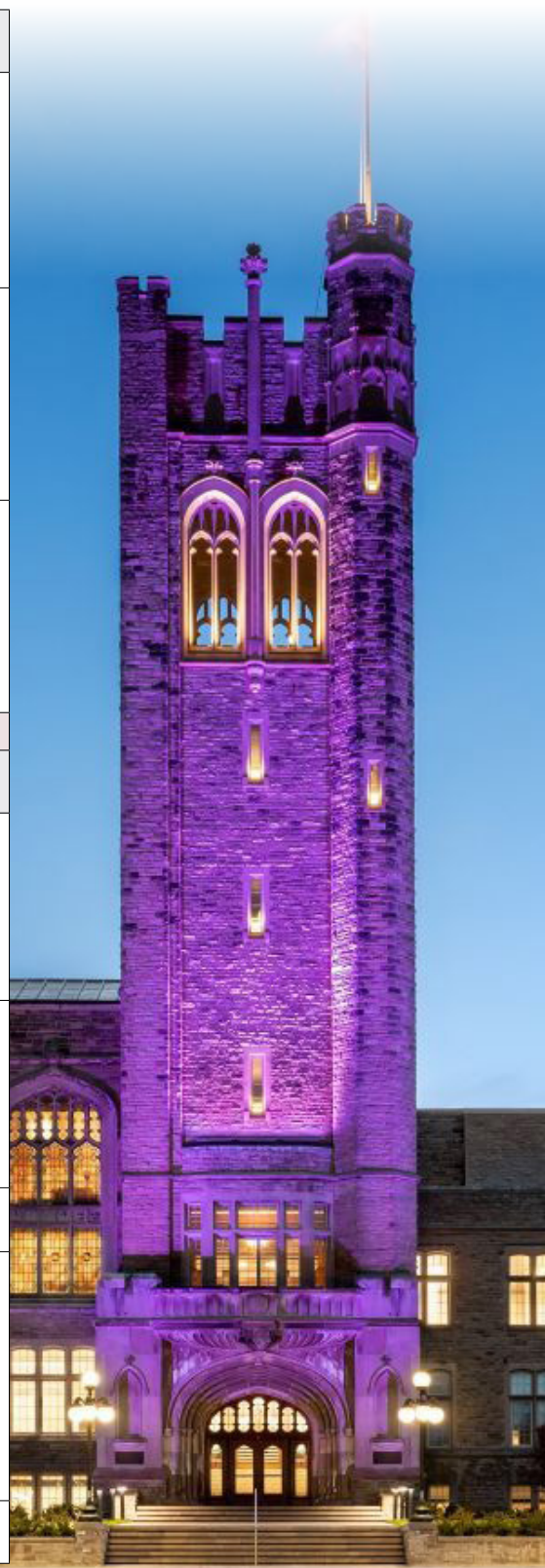


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Friday, May 7, 2021

12:15–13:45	PLENARY Session V – Adult Metabolics Session Chair: Mariya Kozenko
12:15–12:45	Neurometabolic disorders in adults: Focus on mitochondrial disease, fatty acid oxidation defects, Pompe disease and glycogen storage diseases affecting muscle Mark Tarnopolsky , MD, PhD, FRCP(C), Professor of Pediatrics and Medicine, CEO and CSO, Exerkine Corporation Director of Neuromuscular and Neurometabolic Clinic McMaster University Medical Center, Hamilton, ON 1. To describe the diagnostic approach and supports in the clinic 2. To describe the exercise and nutritional interventions used in the adult patients in our clinic
12:45–13:15	Unique Management Considerations in Adult Patients with Inborn Errors of Metabolism Hanna Faghfoury , MDCM, FRCP, FCCMG Clinical and Biochemical Geneticist University Health Network and Mount Sinai Hospital Assistant Professor of Medicine, University of Toronto 1. Review the challenges of transition from pediatric to adult care 2. Using case examples, outline common issues that arise in the management of adult IEM patients 3. Outline practical approaches for the management of adult IEM patients through the lifespan
13:15–13:45	Dietary Management: Considerations for Adults Heather Bell , RD Adult Metabolic Dietitian University Health Network / Toronto General Hospital The Fred A. Litwin Family Centre in Genetic Medicine Toronto, ON 1. Identify the unique issues for dietary management of adults living with an IEM 2. Outline practical strategies for meeting the needs of adult patients
13:45–14:45	BREAK, EXHIBITORS & POSTER VIEWING
14:45–16:00	PLENARY Session VI – Other Topics in Inborn Errors of Metabolism Session Chair: Natalya Karp
14:45–15:30	Polygenic Effects in Disease Robert A. Hegele , MD, FRCP, FACP Distinguished University Professor of Medicine and Biochemistry University of Western Ontario, London, ON 1. Contrast polygenic versus monogenic effects on phenotypes 2. Derive polygenic scores 3. Apply polygenic scores to research and clinical applications
15:30–15:45	GM2 Gangliosidosis: Canadian Perspective Jagdeep S. Walia , Secretary/Treasurer of Garrod Association, MBBS, FRCP, FCCMG, Clinical Geneticist and Associate Professor, Head, Division of Medical Genetics (Department of Pediatrics), Director of Research (Department of Pediatrics), Kingston Health Sciences Centre and Queen's University, Kingston, ON 1. Name two different populations in Canada with founder effect for GM2 gangliosidosis 2. Describe the role of three genes involved in GM2 Gangliosidosis 3. Name two upcoming different approaches to treat GM2 gangliosidosis
15:45–16:15	Group Presentation Providing Metabolic Care During COVID
16:15–16:30	Closing Remarks & Evaluation Chitra Prasad , MD, FRCP, FCCMG, Director of Metabolic Clinic, London Health Science Centre, Professor Department of Paediatrics, Section of Genetics and Metabolism, Western University, London, ON Paula J. Waters , PhD, FCCMG, Vice President of Garrod Association, Biochemical Geneticist and Affiliate Professor Medical Genetics Service, Department of Pediatrics CHUS-Université de Sherbrooke, Sherbrooke, QC
16:45–17:45	Annual General Meeting (AGM) Dr. Andreas Schulze and the Executive Team



PLANNING COMMITTEES

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Danielle Stayzer
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Registration Information

REGISTRATION FEES

(HST is additional on all fees) *HST# 11903 5988 RT0001

	On or before April 6, 2021	After April 6, 2021
Non-Members	\$225	\$275
Members (This rate includes the \$30 Garrod Association Membership dues)	\$180	\$230
Student/Trainee	\$50	\$75
Allied Health	\$50	\$75
Allied Health Garrod Association Membership dues	\$30	

CONFIRMATION OF REGISTRATION

A written acknowledgement of your registration will be sent prior to the activity. Receipts are emailed at the time of registration and an additional email will be sent after the activity, confirming your certificate of attendance is ready to download or print. Your registration is not complete unless a confirmation is received. If you have not received a confirmation within 7 days of registration, please contact the CPD office.

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The University reserves the right to cancel an activity due to insufficient registration or any circumstances that are beyond our control. Cancellations received before **April 21, 2021** will be refunded less a 25% administrative fee to a maximum of \$50.00. No refunds will be issued for cancellations received after this date.

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- That may result from the use of technologies, program, products and/or services during this activity.
- That may arise out of, or during this activity.

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ACCREDITATION STATEMENT

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