Conference Learning Objectives
In addition to the specific educational objectives of each presentation, by the end of the scientific symposia, the participant will be able to

1. Recognize genetic and environmental factors which are involved in the development of complex diseases.
2. Understand the genome-wide association approach (the strengths and weaknesses) for the identification of genetic susceptibility to complex diseases.
3. Describe the potential risks of birth defects associated with assisted reproductive technologies.
4. Identify genetic pathways and molecular defects responsible for visual impairment in humans and model organisms.

Please note that 25% of each presentation will be allocated for questions, audience participation and interaction.

WEDNESDAY, NOVEMBER 11

0800-1200 BOARD OF DIRECTORS MEETING – Strathcona Room
1200-1800 STRATEGIC PLANNING SESSION – By Invitation Only – Angus Room

THURSDAY, NOVEMBER 12

0800-1200 REGISTRATION - Van Horne Ballroom Foyer
0800-1000 COMMITTEE MEETINGS
CREDENTIALS – Room 1982
EDUCATION – Room 1976
EXAMINATIONS – Room 1978
NOMINATIONS – Room 1980
0900-1200 POSTER SET UP – Van Horne Ballroom B
1000-1200 COMMITTEE MEETINGS
AWARDS – Room 1982
CLINICAL PRACTICE – Room 1976
ETHICS AND PUBLIC POLICY – Room 1978
PRENATAL DIAGNOSIS – Room 1980
SCIENTIFIC PROGRAM AND SPONSORSHIP – Room 1974
1200-1345 LUNCH AND KEYNOTE ADDRESS – Van Horne Ballroom A
Moderator: Martin J. Somerville, PhD, FCCMG, Edmonton, AB
1200-1210 WELCOME AND OPENING REMARKS
1210-1240 KEYNOTE ADDRESS
1240-1300 LUNCH
THURSDAY, NOVEMBER 12 (continued)

1300-1345  **KEYNOTE ADDRESS – ENVIRONMENTAL INFLUENCES ON TRANSGENERATIONAL EFFECTS**
*Speaker: Judith Hall, OC, MD, FCAHS, FRCP, FCCMG, Vancouver, BC*
*Speaker of the Royal College of Physicians and Surgeons of Canada*
*Conférencière du Collège royal des médecins et chirurgiens du Canada*
Objectives: By the end of this session, participants will be able to:
1. List six adult complex diseases associated with IUGR.
2. Distinguish monozygotic from dizygotic twins.
3. List “new” features of a family history.

1345-1445  **ORAL ABSTRACT PRESENTATIONS – Van Horne Ballroom A**
1345-1405  **RAPID ANEUPLOIDY DETECTION FOR LOW RISK PREGNANCIES: A SUITABLE REPLACEMENT FOR G-BANDING?**
*Speaker: Marsha Speevak, PhD, FCCMG, Mississauga, ON*
1405-1425  **HYPERPHOSPHATASIA WITH SEIZURES, NEUROLOGIC DEFICIT AND CHARACTERISTIC FACIAL FEATURES: FIVE NEW CASES OF MABRY SYNDROME**
*Speaker: David Cole, MD, PhD, BSc, FRCP, FCCMG, Toronto, ON*
1425-1445  **UNDERSTANDING THE MOLECULAR PATHOGENESIS OF MALFORMATION SYNDROMES IN AN ISOLATED POPULATION**
*Speaker: Kym Boycott, MD, PhD, FRCP, FCCMG, Ottawa, ON*

1445-1645  **COMMITTEE MEETINGS**
- **ACCREDITATION OF CENTRES – Room 1982**
- **BIOCHEMICAL GENETICS – Room 1974**
- **CONSTITUTION & BYLAWS – Room 1976**
- **CYTOGENETICS – Room 1978**
- **MOLECULAR GENETICS – Room 1980**

1645-1745  **CCMG/CAGC POSTER PRESENTATIONS – Van Horne Ballroom B**
1800-1930  **CCMG/CAGC WELCOME RECEPTION – Mt. Stephen Hall**
1800-2100  **EXHIBITORS SET UP – Van Horne Ballroom C**

FRIDAY, NOVEMBER 13

0700-0830  **REGISTRATION – Van Horne Ballroom Foyer**
0700-0830  **CONTINENTAL BREAKFAST – Van Horne Ballroom C**
0700-0830  **PEACE COMMITTEE MEETING – Room 1976**
0730-0830  **CCMG/CAGC JOINT PLANNING COMMITTEE MEETING – Room 1974**
0730-1700  **EXHIBITS OPEN – Van Horne Ballroom C**
FRIDAY, NOVEMBER 13 (continued)

0830-1200  CCMG/CAGC SYMPOSIUM – CAGC Organized – Van Horne Ballroom A
Moderator: Stephanie A. Kieffer, MS, CGC, CCGC, Vancouver, BC

0830-0835  INTRODUCTION AND ANNOUNCEMENTS

0835-0920  THE FEASIBILITY OF REGULATING ONTARIO GENETIC COUNSELLORS – RESULTS OF A
TARGETED SURVEY (CAGC SMALL PROJECTS GRANT UPDATE)

Speakers: Christopher Trevors, MS, CGC, Toronto, ON and Nada Quercia, MSc, CCGC,
CGC, Toronto, ON

Objectives: By the end of this session, participants will be able to:
1. Report on the results of a provincial study entitled: The Attitudes towards and
   Feasibility of Professional Regulations of Genetic Counsellors in Ontario.
2. Introduce the Ontario Regulated Health Professionals Act as it applies to Genetic
   Counsellors.
3. Help the audience appreciate the complexities and difficulties of professional
   regulation for Genetic Counsellors in Ontario.

0920-1010  CONGENITAL ANOMALY SURVEILLANCE IN CANADA – PAST, PRESENT AND FUTURE

Speaker: R. Brian Lowry, MD, DSc, FRCPC, FCCMG, Calgary, AB

Objectives: By the end of this session, participants will be able to:
1. Describe surveillance.
2. Distinguish between active and passive systems.
3. Describe evaluation methods.

1010-1025  REFRESHMENT BREAK

1025-1115  DUCHENNE MUSCULAR DYSTROPHY AND EMERGING THERAPIES

Speaker: Jean Mah, MD, MSc, FRCP, FRCPC, Calgary, AB

Objectives: By the end of this session, participants will be able to:
1. Outline the clinical features and natural history of Duchenne muscular dystrophy (DMD).
2. Know the current management of DMD.
3. Understand emerging / new therapeutic strategies for DMD.

1115-1200  BRIDGING THE GAP: THE TRANSLATIONAL CARE MODEL

Speaker: Christèle du Souich, MSc, CCGC, CGC, Vancouver, BC

Objectives: By the end of this session, participants will be able to:
1. Describe the Translational Care Model.
2. Illustrate how this model is applied to rare diseases.
3. Demonstrate how it can be used to develop approaches to ameliorate social and
   medical concerns.

1200-1330  LUNCH WITH EXHIBITORS – Van Horne Ballroom C

1200-1330  ROYAL COLLEGE SPECIALTY COMMITTEE IN MEDICAL GENETICS MEETING – Room 1976

1345-1630  ANNUAL GENERAL MEETING – Van Horne Ballroom A

1800  FOUNDERS AWARD DINNER – the Bison – 211 Bear Street
SATURDAY, NOVEMBER 14

0800-0830 CONTINENTAL BREAKFAST – Van Horne Ballroom C

0800-1200 REGISTRATION – Van Horne Ballroom Foyer

0800-1400 EXHIBITS OPEN – Van Horne Ballroom C

0830-1200 CCMG/CAGC SYMPOSIUM – CCMG Organized – WHOLE GENOME ASSOCIATION STUDIES – Van Horne Ballroom A

Moderator: Jan M. Friedman, MSc, MD, PhD, FABMG, FACMG, FRCPC, FCCMG, Vancouver, BC

0830-0835 INTRODUCTION AND ANNOUNCEMENTS

0835-0920 PLAYING TOGETHER: EPIDEMILOGICAL ISSUES IN GENOME-WIDE ASSOCIATION STUDIES

Speaker: Julian Little, PhD, Ottawa, ON

Objectives: By the end of this session, participants will be able to:
1. Identify epidemiological aspects of the design, conduct and analysis of genome-wide association studies.
2. Describe potential biases that may influence the results of genome-wide association studies, such as in the selection of study participants, population stratification, and genotyping error (differential, non-differential).
3. Assess critically the public health value of genome-wide association studies, in particular implications for disease prediction and for gene-environment joint effects.

0920-1010 GWAS AND POSTGWAS IN COMPLEX DISEASES.

Speaker: Jerome I. Rotter, MD, Los Angeles, CA

Objectives: By the end of this session, participants will be able to:
1. Summarize recent findings of family, epidemiologic, physiologic, and linkage studies of the common inflammatory bowel diseases, Crohn’s disease and ulcerative colitis.
2. Explain how understanding the genetic susceptibility to etiologically complex gastrointestinal/inflammatory diseases can improve our knowledge of their pathogenesis.
3. Describe how the identification of genetically high-risk individuals can be used to improve prognostic assessment and guide therapy.

0920-1010 REFRESHMENT BREAK

1025-1115 TYPE 1 DIABETES – LIFE IN THE POST-GWA ERA

Speaker: Constantin Polychronakos, MD, FRCPC, Montreal, QC

Objectives: By the end of this session, participants will be able to:
1. Understand what the results of genome-wide association studies tell us and what questions remain unanswered.
2. Understand the possible explanations for the portion of genetics of complex diseases that remain unexplained.
3. If rare but highly penetrant variants do turn out to be a substantial part of the genetic architecture of complex traits, the audience should be ready to use their accumulating knowledge in the development of personalized medicine.
1115-1200  THE CANADIAN PHARMACOGENOMIC NETWORK FOR DRUG SAFETY: FINDING DRUG SAFETY SOLUTIONS TO SERIOUS ADVERSE DRUG REACTIONS
Speaker: Bruce Carleton, PharmD, Vancouver, BC
Objectives: By the end of this session, participants will be able to:
1. Cite the areas in which pharmacogenomics have applications at the bedside.
2. Identify ways pharmacogenomics are transforming practical clinical drug dosing strategies.
3. List the barriers that remain to the advancement of bench to bedside care.

1200-1300 CCMG SYMPOSIUM – HOT TOPIC: Clinical Application of Whole Genome Sequencing – Van Horne Ballroom A
Moderator: Jan M. Friedman, MSc, MD, PhD, FABMG, FACMG, FRCP, FCCMG, Vancouver, BC
Speaker: Marco Marra, PhD (Genetics), FRSC, Vancouver, BC
Objectives: By the end of this session, participants will be able to:
1. Summarize the advantages and limitations of highly parallel sequencing in comparison to conventional Sanger sequencing.
2. Describe how highly parallel sequencing can be used to identify genetic variants that cause or are associated with constitutional disease.
3. Describe how highly parallel sequencing can be used to identify genetic variants that cause or are associated with the development of cancers.

1300-1400 CCMG LUNCH WITH EXHIBITORS – Van Horne Ballroom C
1300-1400 POSTER REMOVAL – Van Horne Ballroom B
1400-1715 CCMG SYMPOSIUM – CALGARY SESSION – Van Horne Ballroom A
Moderators: Ross McLeod, MD, FRCP, FCCMG, and Judy Chernos, PhD, FCCMG, Calgary, AB
1400-1530  REPRODUCTIVE GENETICS
Speaker: Renée Martin, PhD, FCCMG, Calgary, AB
Objectives: By the end of this session, participants will be able to:
1. Discuss data regarding the likelihood of normal progeny following ART.
2. Discuss the particular risks of progeny from ICSI.
3. Realize that infertility per se may increase the risk of children with birth defects.

Speaker: R. Douglas Wilson, MD, FRCP, Calgary, AB
Objectives: By the end of this session, participants will be able to:
1. Describe the congenital anomalies that are associated with Assisted Reproductive Technology (ART).
2. Discuss the monochorionic twinning outcomes related to ART.
3. Review the rare genetic conditions that are at an increased risk following ART as determined in large population studies.
### SATURDAY, NOVEMBER 14 (continued)

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<tbody>
<tr>
<td>1530-1545</td>
<td>Refreshment Break</td>
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<tr>
<td>1545-1715</td>
<td>Ophthalmic Genetics</td>
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<td><strong>Choroideremia: New Findings, New Insights</strong></td>
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<td><strong>Speaker:</strong> Ian MacDonald, MD, FRCP, FCCM, Edmonton, AB</td>
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<td><strong>Objectives:</strong> By the end of this session, participants will be able to:</td>
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<tr>
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<td>1. Recognize choroideremia as an inherited disorder of trafficking.</td>
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<td>2. Identify the key clinical characteristics and laboratory findings of choroideremia.</td>
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<td>3. Assess the potential of gene therapy in retinal disorders with the example of choroideremia.</td>
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<td>1400-1700</td>
<td>Exhibitors Tear Down – <em>Van Horne Ballroom C</em></td>
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<tr>
<td>1730-2030</td>
<td>CCMG Board of Directors Meeting</td>
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<td>1800</td>
<td>Western Night – <em>Wild Bill’s Legendary Saloon</em> – 201 Banff Ave</td>
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### SUNDAY, NOVEMBER 15

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<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>0900-1200</td>
<td>PHAC Session – <em>Room 1974 – A National Mechanism for Information Sharing – By Invitation Only</em></td>
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The Canadian College of Medical Geneticists gratefully acknowledges our sponsors for generously providing unrestricted educational grants in support of the CCMG 33rd Annual Scientific Meeting.