

Center for Personalized Genetic Healthcare

Genetics Education Symposium

Genetics and Genomics:
Roadmap for Clinical Practice

September 5, 2013

Intercontinental Hotel and Bank of America
Conference Center
Cleveland OH 44106

Register Online
www.ccfcmc.org/genetics

A Message from the Course Directors

Dear Colleagues -- Welcome!

The concept and promise of personalized health care informed by genetics has been anticipated for decades. The future is now: current advances in genetic and genomic discoveries are being utilized to identify and tailor patient care. Properly implemented genetic- and genomic medicine-enabled health care can provide great value, as highlighted in the Keynote Lecture.

The goal of the 2013 Genetics and Genomics Education Symposium is to host a forum for health care providers addressing topics surrounding the delivery of evidence-based genetic and genomic medicine. Throughout the day, we will address the following:

- implications of genetic and genomic information on patient care
- emerging genomic technologies
- utility of patient-care models informed by genetic and genomic information
- successful clinical partnerships across multiple specialty and subspecialty practices implementing genetic and genomic tools

As molecular and genomic innovations continue to emerge, understanding fundamental genetics principles and accessing clinical resources will play an integral role in the successful integration of genetics and genomic medicine practices into daily clinical practice. Furthermore, this forum will showcase the role genetics professionals play as members of the healthcare team at the point of care, resulting in value-based delivery of precision medicine.

We believe that the integration and utilization of genomic information across all medical disciplines will create a clinical roadmap for practice and serve as the epitome for tailoring care for patients and their families. We hope you will join us for what promises to be an informative event!

Sincerely,

Rocio Moran, MD & Charis Eng, MD, PhD



Rocio Moran, MD



Charis Eng, MD, PhD

Course Overview

This program, presented by Cleveland Clinic Genomic Medicine Institute, will review the latest advances in genetics and genomics, and provide state-of-the-art information to healthcare providers treating patients with genetic conditions. Expert Cleveland Clinic faculty will present case-based presentations highlighting the integration of genetics and genomics into clinical practice across multiple disciplines.

Target Audience

This activity is designed for healthcare providers specializing in Primary Care, Cardiology, Genetics, Neurology, and Pediatrics and Nursing. Students with an interest in expanding their knowledge of genetic and genomic medicine and related topics are encouraged to attend.

Learning Objectives

After completing this educational activity, attendees will be able to do the following:

- Explain the current landscape and impact of genetic and genomic medicine in clinical practice
- Discuss practical approaches for the diagnosis, evaluation and management of patients with common genetic disorders
- Explore the field of genetic counseling and the role of a clinical genetic counselor as a member of the healthcare team
- Analyze and discuss unique genetic case presentations from various subspecialties (Cardiology, Endocrinology, Neurology, Obstetrics and Gynecology, Oncology, Pediatrics) and practical approaches to diagnosis and management
- Explore updates in Pathology and Laboratory Medicine related to state of the art genetic diagnostic technologies
- Discuss the ethical, social, legal implications (ELSI) of genetic and genomic medicine

Course Featured Topics – Lectures

- Landscape of Genetic & Genomic Medicine: Emerging diagnostic, evaluation and management strategies for inherited conditions
- Genetics Primer: Overview of genetic and genomic medicine and the role of Geneticists and Genetic Counselors as a part of the healthcare team
- Genetic Testing Updates: Non-invasive prenatal testing and whole exome sequencing (WES)
- Clinical Decision Support: Implementation of an electronic genetics-focused clinical decision support tool for Primary Care and Oncology
- Case-based Lectures: Multidisciplinary cases highlighting the integration of genetics into mainstream clinical practice (Adult and Pediatric tracks available)

Activity Directors

Rocio Moran, MD

Medical Director, General Genetics Clinic
Center for Personalized Genetic Healthcare

Charis Eng, MD, PhD

Hardis Chair, Genomic Medicine Institute
Director, Center for Personalized Genetic Healthcare
Medical Director, Cancer Genetics Clinic

Symposium Faculty

Peter Aziz, MD

Associate Staff, Pediatric Cardiology

Carole Burke, MD

Staff, Digestive Disease Institute

Tom Frazier, PhD

Director of Research, Center for Autism

Nathan Kraynack, MD

Staff, Pediatric Pulmonary Medicine

Felicitas Lacbawan, MD

Section Head, Molecular Genetics Pathology

David Longworth, MD

Chair, Medicine Institute

Tara Mastracci, MD

Staff, Vascular Surgery

Jessica Mester, MS, CGC

Genetic Counselor, Center for Personalized Genetic Healthcare

Timothy Moss, MD, PhD

Assistant Staff, Center for Personalized Genetic Healthcare

Steven Nissen, MD

Chair, Department of Cardiology

Joseph Parambil, MD

Staff, Respiratory Institute

Sumit Parikh, MD

Staff, Center for Pediatric Neurology

Holly Pederson, MD

Staff, General Surgery (Breast Services)

Shashirekha Shetty, PhD

Staff, Molecular Pathology

Jamie Stoller, MD, MS

Chair, Education Institute
Section Head, Respiratory Therapy

Wilson Tang, MD

Staff, Cardiovascular Medicine

Kathryn Teng, MD

Director, Center for Personalized Healthcare

Elias Traboulsi, MD

Director, Center for Genetic Eye Disease
Director, Graduate Medical Education

Laurie Tsilianidis, MD

Associate Staff, Center for Pediatric Endocrinology

Symposium Planning Committee

Elias Traboulsi, MD

Ryan Noss, MS

7:00 am **Registration & Continental Breakfast**

7:00 am - 9:00 am **Continental Breakfast**

General Sessions

8:00 am **Opening Remarks**
Charis Eng, MD, PhD
Chair, Genomic Medicine Institute
Medical Director, Cancer Genetics Clinic

8:15 am **Genetics Primer: Strategies for Identifying Common Inherited Conditions in at Risk Patients**
Rocio Moran, MD
Medical Director, General Genetics Clinic, Center for Personalized Genetic Healthcare
Genomic Medicine Institute

8:45 am **The Role of Genetic Counselors in the Healthcare Team**
Jessica Mester, MS, CGC
Center for Personalized Genetic Healthcare
Genomic Medicine Institute

9:15 am **Tomorrow's Clinical Sequencing Today – WES/WGS Diagnostic Applications: Molecular Diagnosis of Undiagnosed Disease Conditions**
Felicita Lacbawan, MD
Molecular Pathology
Pathology & Laboratory Medicine Institute

9:45 am **Break**

10:00 am **Integration of Genetics: National Human Genome Research Institute (NHGRI) Roadmap into Clinical Practice**
Charis Eng, MD, PhD
Chair, Genomic Medicine Institute

10:30 am **Genomics: What is it and Why Should we Care**
Timothy Moss, MD, PhD
Center for Personalized Genetic Healthcare
Genomic Medicine Institute

11:00 am **MyFamily: Refocusing on the Clinical Value of Family Health History**
Charis Eng, MD, PhD
Chair, Genomic Medicine Institute

Kathryn Teng, MD
Director, Center for Personalized Healthcare
Medicine Institute

11:30 am **Ethical, Legal & Social Implications of Genomic Medicine**
TBD

12:00 pm **Lunch Presentation: Genetics and genomics in the Era of Value-based Healthcare**
David Longworth, MD
Chair, Medicine Institute

1:15 pm **Afternoon Sessions: Adult/Pediatric Breakout Sessions**

Adult Track

1:15 pm - 1:35 pm	Challenge of Genetics in Cardiovascular Medicine Steven Nissen, MD Chair, Department of Cardiology Heart and Vascular Institute
1:35 pm - 1:55 pm	Breast Cancer: Strategies for Identifying and Managing High Risk Patients Holly Pederson, MD General Surgery-Breast Services Digestive Disease Institute
1:55 pm - 2:15 pm	Colon, Polyps and Cancer: How to Identify Hereditary Causes? Carole Burke, MD Digestive Disease Institute
2:15 pm - 2:35 pm	Genetics of Hereditary Hemorrhagic Telangiectasia (HHT) Joseph Parambil, MD Pulmonary, Allergy and Critical Care Medicine Respiratory Institute
2:35 pm - 2:55 pm	Break
2:55 pm - 3:15 pm	Integration of Genetic Strategies in the Management of Cardiomyopathy Wilson H. Tang, MD Department of Cardiovascular Medicine Heart and Vascular Institute
3:15 pm - 3:35 pm	Integrating Genetic Strategies into the Management of Patients with Alpha-1 Antitrypsin Deficiency Jamie Stoller, MD, MS Respiratory Institute Chair, Education Institute
3:35 pm - 3:55 pm	The Role of Genetics in Guiding Surgical Care Tara Mastracci, MD Vascular Surgery Heart and Vascular Institute

3:55 pm - 4:25 pm **Take Two Genes (A Glass of Red Wine) and Call Me in the Morning**
Charis Eng, MD, PhD
Chair, Genomic Medicine Institute

4:25 pm Adjournment

4:30 pm **Reception**

Pediatric Track

1:15 pm - 1:35 pm	Genetics of Glycogen Storage Disease Laurie Tsilianidis, MD Center for Pediatric Endocrinology Pediatric Institute
1:35 pm - 1:55 pm	Integration of Genetics Strategies in the Management of Patients at Increased Risk for Long QT Syndrome Peter Aziz, MD Pediatric Cardiology Pediatric Institute
1:55 pm - 2:15 pm	Autism and Genetics Tom Frazier, PhD Director, Center for Autism Pediatric Institute
2:15 pm - 2:35 pm	Mitochondrial Disease Diagnosis in a Genomic World Sumit Parikh, MD Center for Pediatric Neurology & Neurosurgery Neurological Institute
2:35 pm - 2:55 pm	Break
2:55 pm - 3:15 pm	Genomic Microarray Testing Updates Shashirekha Shetty, PhD Molecular Pathology Pathology & Laboratory Medicine Institute
3:15 pm - 3:35 pm	Congenital Genetic Eye Diseases Elias Traboulsi, MD Director, Center for Genetic Eye Diseases Cole Eye Institute Director, Graduate Medical Education
3:35 pm - 3:55 pm	Cystic Fibrosis: Diagnosis and Management in the Era of Personalized Medicine Nathan Kraynack, MD Pediatric Pulmonary Medicine Pediatric Institute

Venue & Accommodations

InterContinental Hotel and Bank of America Conference Center located at 9801 Carnegie Ave., Cleveland OH 44106

Parking

Parking is available in the 100th Street Visitor's parking garage (Parking Lot 2) for a charge of \$10 per day. Valet parking is available at the hotel for an additional charge.

Room Rates

\$225.00 per night

Please call [216.707.4000](tel:216.707.4000) or [877.707.8999](tel:877.707.8999) or visit www.ichotelsgroup.com to reserve your room today.

Americans with Disabilities Act

The Cleveland Clinic Foundation Center for Continuing Education fully intends to comply with the legal requirements of the Americans with Disabilities Act.

If you need assistance, please notify Charlene Mitchell, Genomic Medicine Institute, 216.445.1839 at least two weeks prior to the activity.

General Information

For additional information about this activity, contact the Continuing Medical Education (CME) office at:

Local: 216.448.0777

Email: cmeregistration@ccf.org

Web Address www.ccfcmecme.org/genetics

Accreditation

The Cleveland Clinic Foundation Center for Continuing Education is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians.

The Cleveland Clinic Foundation Center for Continuing Education designates this live activity for a maximum of 7.75 *AMA PRA Category 1 Credits*™. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

Participants claiming CME credit from this activity may submit the credit hours to the American Osteopathic Association for Category 2 credit.

The Ohio Board of Nursing will accept at face value the number of contact hours awarded for an educational activity that has been approved for CE by a nationally accredited system of CE approval. Therefore, the 7.75 *AMA PRA Category 1 Credits*™ will be accepted for nursing credits.

Faculty Disclosure

The Cleveland Clinic Foundation Center for Continuing Education has implemented a policy to comply with the current Accreditation Council for Continuing Medical Education Standards for Commercial Support requiring resolution of all faculty conflicts of interest. Faculty declaring a relevant commercial interest will be identified in the activity syllabus.

Registration and Cancellation

Preregistration is accepted online until 2:00 pm EST on August 30, 2013. Onsite registration is available on September 5, 2013. after this date.

A full refund will be made if written notification is received by August 16, 2013. A \$10 cancellation fee will be deducted from the refund.

NO REFUNDS WILL BE ISSUED AFTER AUGUST 31, 2013.

REGISTRATION FORM

Genetics Education Symposium
Genetics and **Genomics**: Roadmap for **Clinical Practice**
Intercontinental Hotel and Bank of America Conference Center

Course 02010069

September 5, 2013

REGISTER ONLINE: www.ccfcmc.org/genetics

Cleveland Clinic employees should register or check fees online. Once you register online, please do not mail or fax in a registration form. Payment must be received prior to admittance to the activity. Purchase orders are not accepted.

Fees	Early Bird Fee Before July 15th	Rate Fee After July 15th
Physicians/Staff/Corporate	\$225	\$250
Fellows/Residents	\$75	\$100
Nurses/Allied Health Professionals	\$125	\$150
Students	\$25	\$25

Select symposium track
(1:15 pm - 3:55 pm)

- ☐ **Adult Track**
- ☐ **Pediatric Track**

☐ I require a vegetarian lunch. ☐ I will be attending the reception.

Registration fee includes: Syllabus, continental breakfast, lunch, refreshment breaks, and reception.

First Name MI Last Name Degree

Company Title

Address

City State Zip

Phone Fax Email

Specialty

Make check payable to:

The Cleveland Clinic Educational Foundation

Mailing address: The Cleveland Clinic Educational Foundation
PO Box 931653, Cleveland, OH 44193-1082

About the Genomic Medicine Institute & Center for Personalized Genetic Healthcare

Genomic Medicine Institute

Launched in 2005, the Genomic Medicine Institute (GMI) is housed in the Lerner Research Institute's Center for Genomics Research Building. GMI is specifically designed to enhance translational genomic medicine. The open design laboratory space is next to GMI's clinical unit, the Center for Personalized Genetic Healthcare (CPGH), the Genomic Medicine Biorepository (GMB) and the Genomics Core Facility.

Vision

To be the expert base for the principles and practice of genomic medicine.

Mission

To promote academic clinical practice, scholarly activity (research) and education; provide a work culture that enables us to bring genetics and genomics, through our research and clinics, into all subspecialties of the Cleveland Clinic's healthcare system; and foster innovation ultimately directed at personalized genomic-based healthcare.

Clinical Expertise

CPGH is the Cleveland Clinic's first comprehensive clinical genetics program, providing family history-based disease risk assessment and management for prenatal to adult onset disorders.

CPGH's genetic experts (6 Geneticists and 12 Genetic Counselors) work closely with Cleveland Clinic's healthcare professionals to provide genetic counseling services and, if appropriate, genetic testing. Clinical genetics care is integrated throughout the Cleveland Clinic system in 9 Clinical Institutes and 2 regional hospitals (over 22 Cleveland Clinic locations).

CPGH provides genetic counseling and testing services in the areas of

- General genetics
- Cancer genetics
- Cardiovascular genetics
- Preconception & Prenatal genetics
- Neurogenetics and Neurometabolism

Innovation (Telegenetics Evaluations)

CPGH also offers telegenetic services. Our telegenetics evaluations provide genetic counseling via two-way video conferencing. This service is currently available to Cleveland Clinic Lou Ruvo Center for Brain Health patients being evaluated for Huntington Disease and other genetic adult-onset neurological conditions.

Appointments

216.636.1768/Toll Free 800.998.4785

EPIC Order: Consult to Genetic Counseling

Visit us at www.ccf.org/genetics