2nd Annual

Precision Genomic Medicine Conference

THURSDAY, MAY 02, 2019

University of Iowa Hospitals and Clinics
Pediatrics Conference Center
2415 JCP (2nd level near Elevator E)
200 Hawkins Dr., Iowa City
CONFERENCE SCHEDULE

8:30  Registration/Continental Breakfast

9:00  Welcoming Remarks
Patricia Winokur, MD; Richard Smith, MD

9:15  Session 1: Maternal and Fetal Medicine in Precision Medicine
- Diagnostic whole exome analyses in detected fetal anomalies and stillbirths
  Keynote Speaker: David Goldstein, PhD
- Preimplantation genetic diagnosis and case study
  Hakan Duran, MD/Rachel Whynott, MD
- Cell-free DNA screening
  Mary-Kayt Jones, MS, CGC
- Preeclampsia biomarkers
  Mark Santillan, MD, PhD
- Pregnancy outcomes and genetics
  Andrea Greiner, MD
- Ethical considerations in prenatal screening
  Anya Prince, JD
- Panel discussion

11:45 Lunch (provided)

1:15  Session 2: Neurology and Epilepsy
- Towards precision medicine in neurology
  Keynote Speaker: David Goldstein, PhD
- Copy number variation in autism
  Ted Abel, PhD
- MRI biomarkers in myotonic dystrophy type 1 (DM1)
  Peg Nopoulos, MD
- Improved interpretation of genomic testing for developmental disorders using natural language processing-based phenome extraction from the electronic medical record
  Ben Darbro, MD, PhD

2:45 Break

3:00  Session 3: Drugs and the Genome
- Reading a pharmacogenetics report
  Colleen Campbell, PhD, MS, CGC
- Pharmacogenetic screening for pediatric cancer patients
  Jason Cleppe, PharmD
- Pharmacogenetic screening for transplant patients
  Tricia Suarez, PharmD
- Targeted therapies in epilepsy
  Michael Ciliberto, MD
- Drug repositioning
  Morgan Sturgeon, Graduate Student

4:40  Summary and adjourn
Anne Kwitek, PhD
Keynote Speaker: David Goldstein, PhD
Director, Institute for Genomic Medicine
Professor of Genetics and Development
Columbia University, New York

University of Iowa Health Care & Carver College of Medicine

- **Ted Abel, PhD**
  Director, Iowa Neuroscience Institute; Interim Chair and DEO, Department of Pharmacology; Roy J. Carver Chair in Neuroscience; Professor of Molecular Physiology and Biophysics

- **Colleen Campbell, PhD, MS, CGC**
  Assistant Director, IIHG; Director of Genetic Counseling Operations, UIHC; Clinical Assistant Professor of Internal Medicine

- **Michael Ciliberto, MD**
  Clinical Assistant Professor of Pediatrics and Neurology

- **Jason Cleppe, PharmD**
  Pediatric Oncology Clinical Pharmacy Specialist

- **Ben Darbro, MD, PhD**
  Director, Shivanand R. Patil Cytogenetics and Molecular Laboratory; Associate Professor of Pediatrics

- **E. Hakan Duran, MD**
  Clinical Associate Professor of Obstetrics and Gynecology; Clinical Research Director, REI Tissue Bank

- **Andrea Greiner, MD**
  Clinical Associate Professor of Obstetrics and Gynecology

- **Mary-Kayt Jones, MS, CGC**
  Associate Genetic Counselor, Obstetrics and Gynecology

- **Anne Kwitek, PhD**
  Associate Director, IIHG; Associate Professor of Pharmacology and Internal Medicine

- **Peg Nopoulos, MD**
  Chair and DEO, Dept. of Psychiatry; Professor of Psychiatry, Neurology, and Pediatrics

- **Mark Santillan, MD, PhD**
  Assistant Professor of Obstetrics and Gynecology

- **Richard Smith, MD**
  Director, IIHG and MORL; Professor of Otolaryngology, Pediatrics, Internal Medicine Molecular Physiology and Biophysics

- **Morgan Sturgeon, BS**
  Graduate Student, Molecular and Cellular Biology Interdisciplinary Graduate Program

- **Tricia Suarez, PharmD**
  Abdominal Solid Organ Transplant Pharmacy Specialist

- **Rachel Whynott, MD**
  Reproductive Endocrinology and Infertility Fellow

- **Patricia Winokur, MD**
  Executive Dean, Carver College of Medicine; Professor of Internal Medicine

University of Iowa College of Law

- **Anya Prince, JD**
  Associate Professor of Law
Precision Genomic Medicine utilizes an individual’s genome profile as a tool in managing patient health care. This rapidly growing field holds great promise in evolving medicine toward tailored treatments through integrative medicine, science, and technology, but it requires an underlying broad knowledge base by both the health care provider and the patient.

This educational event will provide health care professionals an introduction to the current areas of study, cases where Precision Genomic Medicine (PGM) is already employed in clinical practice, appraise what PGM can - and cannot - do, and possible benefits and challenges surrounding its implementation in standard practice. With the knowledge base gained from this conference, the health care provider should be able to decide if genomic information should be considered in their patient’s treatment.

**Educational Objectives**

Upon completion of this program learner should be able to:

- Describe clinical uses of genomic information for diagnosing and treating patient conditions
- When appropriate, integrate patients’ genomic information when predicting the best treatments for their patients’ conditions
- Explain the concepts of PGM to their patients when applicable

**Continuing Medical Education Credit**

The University of Iowa Carver College of Medicine designates this live activity for a maximum of 5.75 AMA PRA Category 1 Credits™. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

The University of Iowa Roy J. and Lucille A. Carver College of Medicine is accredited by the Accreditation Council for Continuing Medical Education (ACCME) to provide continuing medical education for physicians.

Determination of educational content for this program and the selection of speakers are responsibilities of the program director and planning committee. Firms providing financial support did not have input in these areas. Individuals with disabilities are encouraged to attend all University of Iowa-sponsored events. If you are a person with a disability who requires an accommodation in order to participate in this program, please contact the Iowa Institute of Human Genetics (IIHG) at 319-335-3688.

Everyone in a position to control the content of this educational activity will disclose to the CE provider and to attendees all relevant financial relationships with any commercial interest. They will also disclose if any pharmaceuticals or medical procedures and devices discussed are investigational or unapproved for use by the U.S. Food and Drug Administration (FDA).

**Planning Committee:**

Anne Kwitek, PhD  
Richard Smith, MD  
Colleen Campbell, PhD, MS, CGC
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