2017 Scientific Planning Committee

- Amy Goldstein, MD
- Marni Falk, MD
- Johannes K. Ehinger, MD, PhD
- Zofia Chrzanowska-Lightowlers, PhD
- Amy Goldstein, MD
- Marni Falk, MD

2017 Scientific Meeting Faculty

- Mark Jankowski, PhD
- Joao Passos, PhD
- Marcelo Moraes, PhD
- Sumit Parikh, MD
- Zdenka Kral, PhD
- Colleen Clarke Muraresku
- Mirta Rodriguez, MD
- Toby Robinson, MD
- Amy Goldstein, MD
- Marni Falk, MD
- Johannes K. Ehinger, MD, PhD
- Zofia Chrzanowska-Lightowlers, PhD
- Amy Goldstein, MD
- Marni Falk, MD

2017 CME Chair

- Erin Hislop, MD

Course Co-Chair

- Peter Stacpoole, PhD, MD
- Sumit Parikh, MD
- Danuta Krotoski, PhD
- William T. Pu, PhD
- Joao Passos, PhD
- Sumit Parikh, MD
- Colleen Clarke Muraresku
- Vamsi K. Mootha, MD
- Marcia Haigis, PhD
- Carla Koehler, PhD
- Cole Haynes, PhD

Course Co-Chair, CME Chair

- Peter Stacpoole, PhD, MD
- Sumit Parikh, MD
- Danuta Krotoski, PhD
- William T. Pu, PhD
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2017 Symposium Location

Hilton Alexandria Mark Center
5000 Seminary Road
Alexandria, VA 22311

www.umdf.org/symposium/hotel2017

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Symposium Information

- Hilton Alexandria Mark Center
- 43 acres of botanical preserve
- Delectable cuisine at our award-winning restaurant, Finn & Porter
- Completed remodel

CME Credits

- 1 CME credit for each 60 minutes of attendance
- 10 CME credits available
- 25 hours of credits available

Target Audience

- Neurologists
- Geneticists
- Researchers/Scientists
- Pediatrics
- Internal Medicine
- Gastroenterology
- Endocrinology
- Genetics
- Cardiology
- Nephrology
- Neurology
- Obstetrics/Gynecology
- Dermatology
- Oncology

Learning Objectives

- Understand the ways in which animal models of mitochondrial disease can help us better understand mitochondrial mechanisms in humans, and develop new concepts in the pathophysiology of human mitochondrial diseases, as well as therapeutic interventions.
- Understand the impact of mitochondrial diseases on mitochondrial function and structure, and learn the role of the mitochondrial respiratory complex in this process.
- Explain the current knowledge of mitochondrial RNA and RNA processing.
- Explain the new therapeutic techniques in altering mitochondrial function, including mitochondrial donation, the use of mTRALES (mitochondrial transfer), CRISPER technology, and small molecular and pharmaceutical agents.
- Consider the lessons learned with other rare diseases in terms of therapeutic drug development, and how to partner with the FDA for critical trial design.
- Learn of the advances in mitochondrial function in the diseases of aging, including cancer, Alzheimer disease and amyotrophic lateral sclerosis.
- Learn of new patient practices, new drugs, and personalized clinical trials that are being utilized to bring effective treatments to mitochondrial disease patients.
- Learn and understand the pathology of the inner mitochondrial membrane, the mitochondrial cristae, the IMM membranes, and the pathophysiology of both syndromes.

10th Annual Mitochondrial Medicine and Biology Conference

June 28 - July 1, 2017
Hilton Alexandria Mark Center
Alexandria, VA 22311

Mitochondrial Medicine 2017
Washington DC

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Mitochondrial Medicine 2017

2017 Course Description

The United Mitochondrial Disease Foundation and Children's Hospital Medical Center of Akron (CHMCA) have joined efforts to sponsor and organize a CME-accredited national symposium. Mitochondrial disease is more common than previously recognized and mitochondrial pathophysiology is now recognized as an important aspect of many disease processes, including heart disease, cancer, AIDS and diabetes. There have been significant advances in the molecular genetics, proteomics, and -omic and clinical aspects of mitochondrial disease. This conference is directed toward the clinician interested in all aspects of mitochondrial medicine. The content of this educational program was determined by rigorous assessment of educational needs and includes survey, program feedback, expert faculty assessment, literature review, medical practice, and new medical knowledge. The format will include didactic lectures from invited experts. There will be ample time for professional discussion both in and out of the meeting room. This is a one day meeting aimed at those with clinical interests.

Target Audience

- Neurologists, Geneticists, Researcher/Scientists, Pediatrics, Internal Medicine, Nephrologists, Cardiologists, Endocrinologists, Genetic Counselors, Advanced Practice Nurses, Physicians Assistants, RNs, Occupational Therapy, Physical Therapy and Speech-Language Pathology, Nutrition, Therapist and Fellow/Pediatric Endocrinologists.

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9:45 am Break

MSeqDR Workshop
11:45 a.m. - 12:45 p.m.
Amy Goldstein, MD

10:45 a.m. - 11:45 a.m.
Sumit Parikh, MD
Mitochondrial Medicine

MMS Workshop Sessions
The Salk Institute for Biological Studies, La Jolla, CA

8:00 am
Dynamics, Mitophagy
Platform: Mitochondria Division, University of California Davis, Davis, CA
Jodi Nunnari, PhD

9:30 am
Mechanisms of Maternal Mitochondrial Inheritance
Ding Xue, PhD, Newcastle University, UK

12:30 pm Lunch

Thursday, June 29, 2017

Morning Session
Platforms: Mitochondria in Aging and Age-Related Diseases

8:30 am
Presession: The Ugly Side of Mitochondria

Johns Hopkins University, Baltimore, MD

9:00 am
Investigating Mitochondrial Parkinopathies and the Role in Parkinson's Disease

Harvard Medical School, Boston, MA
Vamsi K. Mootha, MD

9:30 am
Harnessing Hypoxia as a Therapy for Mitochondrial Disease

New York University School of Medicine, New York, NY
Michael Schlame, MD

12:30 pm Lunch

Afternoon Session
Platforms: Late-breaking Science

1:30 pm
Mitochondrial UPR and Pathogenic Bacteria

Worcester, MA
Cole Haynes, PhD

2:00 pm
Mitochondria-Associated ER Membranes in Alzheimer Disease

Newcastle University, UK
Carlos T. Moraes, PhD

3:30 pm
Brunch

Friday, June 30, 2017

Morning Session
Platforms: Mitochondria and Barth Syndrome

8:00 a.m.
Young Investigator Workshop

University of Colorado, Boulder, CO
Pascal F. Egea, PhD

9:00 a.m.
Drug Development for Barth Syndrome

University of Oxford, UK
Johannes K. Ehinger, MD, PhD

12:30 pm Lunch

Afternoon Session
Platforms: Late-breaking Science

1:30 pm
Institute of Molecular Biology in Parkinson's Disease

University of Arizona, Tucson, AZ
Xinnan Wang, MD, PhD

2:00 pm
Mechanisms of Mitochondrial RNA Structural RNA Composition

University of Colorado, Boulder, CO
Zofia Chrzanowska-Lightowlers, PhD

3:00 pm
Mitochondrial Disease

Harvard Medical School, Boston, MA
Alfonso Ferrante, MD, PhD

Total Full Registration Fee: $775