2024 HDL Workshop - Exploring the Biology and Clinical Utility of High Density Lipoproteins Agenda

Co-Hosted by Dr. Anna Schwendeman and Dr. Anand Rohatgi

Hilton Chicago Hotel
Chicago, IL
May 18-19, 2024

The HDL Workshop provides an opportunity for researchers in the HDL community to discuss the latest developments in the field. This highly interactive international forum features short talks and stimulating discussions among the attendees and speakers. All times are in CST.

Day 1: HDL Structure/Function – Saturday, May 18, 2024

1:30 PM–1:35 PM  Welcome and Introduction  
Anna Schwendeman, PhD (Professor Pharmaceutical Sciences, University of Michigan)  
Co-Chair

1:35 PM–2:10 PM  Apolipoprotein A-I, A Combination Lock that Dictates HDL Maturation  
Sean Davidson (Professor and Vice Chair for Research, Department of Pathology and Laboratory Medicine, University of Cincinnati)

2:10 PM–2:45 PM  Enhancement of HDL-associated Elastase Inhibitor Activity Prevents Atherosclerosis Progression  
Scott Gordon, PhD (Assistant Professor, Saha Cardiovascular Research Center, Department of Physiology, University of Kentucky College of Medicine)

2:45 PM–3:00 PM  Early Career Abstract Presentation: ApoE Adopts an Antiparallel Dimer in Discoidal Lipoproteins  
Michael Strickland, PhD (Postdoctoral Research Associate, Dr. Gwendalyn J. Randolph Laboratory, Department of Pathology and Immunology, University of Washington, Saint Louis)

3:00 PM–3:15 PM  Early Career Abstract Presentation: Understanding the Biogenesis of Trypanosome Lytic Factor, a Unique HDL that Lyses African Trypanosome Parasites  
Sara Fresard, BS (PhD Candidate, Jayne Raper Lab, Hunter College and the Graduate Center, City University of New York)

3:15 PM–3:30 PM  Coffee Break
3:30 PM–4:05 PM  **Cuban Policosanol Increases Cholesterol Efflux Capacity as High-Density Lipoprotein Functionality in Healthy Japanese Volunteers**  
Yoshinari Uehara, PhD (Professor, Fukuoka University)

4:05 PM–4:40 PM  **ApoA-1 and ApoA-II Proteoform Structure and Function**  
John Wilkins, MD (Associate Professor of Medicine (Cardiology) and Preventative Medicine, Northwestern University)

4:40 PM–5:15 PM  **Mechanisms of ABCA1 lipid translocation and interaction with APOA-I**  
Stephen (Steve) Aller, PhD (Associate Professor, Department of Pharmacology & Toxicology, University of Alabama at Birmingham)

5:15 PM – 5:30 PM  **Early Career Talk: Correlations of Lipid Species in HDL-sized and Whole Plasma Measured by Mass Spectrometry**  
Eric Leszczynski, PhD (Postdoctoral Fellow, University of South Carolina)

5:30 PM–6:05 PM  **Jack Oram Award Winner and Keynote Lecturer**  
Ana Jonas, Ph.D. (Professor Emerita of Biochemistry, College of Medicine and School of Molecular and Cellular Biology, University of Illinois at Urbana-Champaign)

6:05 PM–8:00 PM  **Poster Presentations and Happy Hour**

**Day 2: Neurodegenerative Disease – Sunday, May 19, 2024**

7:30 AM-12:00 PM  **Breakfast**

8:30 AM–9:05 AM  **Lipoprotein metabolism and Alzheimer’s Disease**  
Cheryl Wellington, PhD (Professor & Vice Chair of Research for the Department of Pathology and Laboratory Medicine, Djavad Mowafaghian Center for Brain Health, University of British Columbia)

9:05 AM–9:40 AM  **Apolipoprotein A-I in the Brain**  
Maki Tsujita, PhD (Junior Associate Professor, Graduate School of Medical Sciences, Nagoya City University)

9:40 AM–10:15 AM  **TBD**  
Emily Ricq, PhD (Co-Founder, VP Discovery Biology, Kisbee Therapeutics)

10:15 AM–10:45 AM  **Coffee Break**

10:45 AM–11:45 AM  **Effects of ApoA-I (CSL112) Infusion Post AMI - Mechanistic Perspectives**  
Bronwyn Kingwell, PhD, FAICD, FAHMS (Executive Director, Research Portfolio Strategy Lead, Research Therapeutic Area Lead (Cardiovascular and Metabolic), CSL Limited)

11:45 AM–12:00 PM  **Closing Remarks**  
Anand Rohatgi, MD, MSCS, FACC, FAHA (Professor of Medicine, Internal Medicine, Division of Cardiology, University of Texas Southwestern Medical Center)  
Co-Chair
Poster Submissions

- Investigating the Role of Lipoproteins in Macrophage ER Stress  
  Jordan Bobek, BS (PhD Candidate, Biochemistry, Medical College of Wisconsin)

- Inhibition of Lecithin Cholesterol acyl Transferase by a Novel Anti-Apolipoprotein A1 Antibody Fragment  
  Tabitha Cady, BS (Lab Technician, Sean Davidson Lab, Department of Molecular and Cellular Biosciences, College of Medicine, University of Cincinnati)

- Structural Basis of Apolipoprotein A1 Activation of Lecithin: Cholesterol Acyl Transferase in High Density Lipoproteins  
  Bethany Coleman, BS, (PhD Student Sean Davidson Lab, Department of Molecular and Cellular Biosciences, College of Medicine, University of Cincinnati)

- Apolipoprotein A-I Proteoform Profile and its Association with Cardiometabolic Indices in Coronary Artery Disease: The Dallas Heart Study  
  Anamika Gangwar, PhD (Postdoctoral Researcher, Department of Internal Medicine-Cardiology, UT Southwestern Medical Center, Dallas, TX)

- Effects of external lymphatic stimulation in participants at risk of CVD exhibiting signs of subclinical lymphatic dysfunction  
  Caroline Gavidia Durand, BS (PhD Student, Montreal Heart Institute)

- Lipoprotein Particle Distribution and Function in Female Participants is Affected by Age and Dementia Diagnosis  
  Brian V. Hong, Joanne K. Agus, Susan Lei, Angela M. Zivkovic

- In vitro Modeling of the Effects of Impaired HDL on Atherogenesis in Long COVID Syndrome  
  Theodoros Kelesidis, MD, PhD (Associate Professor, University of Texas Southwestern Medical Center, Department of Medicine, Division of Infectious Diseases)

- Atherosclerosis, Lymphatic System, Inflammation, Cholesterol, Apolipoprotein A-I, Extracellular Vesicles  
  Elizabeth LaCroix, BS (PhD Student, Montreal Heart Institute)

- Pioglitazone Improves Apolipoprotein A1-Associated Proteomic Composition More Than Weight Loss in Insulin Resistance  
  Shyon Parsa, MD, BS (Internal Medical Resident, Department of Internal Medicine and Stanford Cardiovascular Institute, Stanford University Hospital)

- Conformational Dynamics of ABCA1 Dimerization  
  Hyun Deok Song, PhD (Basic Scientist Assistant I, Division of Cardiovascular Medicine, Vanderbilt University Medical Center (VUMC))

- HDL Cholesterol Confers Exceptional Cardioprotective Benefits in Native Hawaiians and Pacific Islanders  
  Austin Szatrowski (Undergraduate Researcher, Department of Medicine, Institute for Genomics & Systems Biology, The University of Chicago & Department of BioHealth Informatics, Luddy School of Informatics, Computing & Engineering Indiana University)

- A Photoconvertible Tool to Track Dynamics of Apolipoprotein A1 at the Cerebrovascular Interface in Cerebral Amyloid Angiopathy  
  Kevin Telfer, BS (PhD Candidate, Washington University School of Medicine)
Special Thanks to our Sponsors!

Gold

CSL

New Amsterdam Pharma

Silver

RAYDEL Health Confidence

Lipoid

Kisbee THERAPEUTICS

Affiliate

labcorp

moderna

Vascular Strategies LLC

Reversing Atherosclerosis

HDL Workshop