

## Wednesday, September 7

Welcome Reception  
21C Museum Hotel, Durham  
*Second Floor Gallery*  
6:00 pm – 8:00 pm

## Thursday, September 8

FLRC Day 1  
21C Museum Hotel, Durham  
*Main Gallery and Second Floor Gallery*

**8:30** Check-in and Continental Breakfast | *Second Floor Gallery*

**9:00** Welcoming Comments | *Main Gallery*

**Saskia Neher, PhD** | University of North Carolina at Chapel Hill

**John Rawls, PhD** | Duke University

### Session I: Thinking Outside the Sphere: Weird and wonderful functions of lipoproteins

Chair: **Sarah Cohen, PhD** | University of North Carolina at Chapel Hill

9:05 **Priyanka Narayan, PhD** | NIDDK

*Understanding how lipid metabolism impacts neurodegenerative disease risk*

9:25 **Opeyemi Olabisi, MD, PhD** | Duke University

*A friend of lipid but a toxin to kidney cells: The role of APOL1 in the pathogenesis of kidney failure in African Americans*

9:45 **Lance Johnson, PhD** | University of Kentucky

*APOE, immunometabolism, and lipid droplet dynamics in microglia*

10:05 Selected Abstract

10:20 Selected Abstract

**10:35** Break

## **Session II: A Celebration of Innovation: New technologies, new insights**

Chair: **Scott Gordon, PhD** | University of Kentucky

11:00 **Michael Airola, PhD** | Stony Brook Cancer Center

*Snapshots of lipid synthesis and storage*

11:20 **Melissa Ellermann, PhD** | University of South Carolina

*Endocannabinoids modulate commensal and pathogenic Enterobacteriaceae in the gut*

11:40 **Meng Wang, PhD** | Baylor College of Medicine

*Lysosomal Lipid Signals in Longevity Regulation*

12:00 Selected Abstract

## **12:15 Lunch**

**Faculty and Staff – Lunch on Your Own**

**Trainees – Career Development Session** (Prior Registration Required)

### **Option 1 | Gallery Three**

***How to Publish in High-Impact Journals: A Panel Discussion***

**Alan Daugherty, PhD, DSc** | University of Kentucky

**Suzanne Barbour, PhD** | University of North Carolina at Chapel Hill

**Scott Gordon, PhD** | University of Kentucky

**Deb Muoio, PhD** | Duke University

### **Option 2 | Gallery Five**

***Transitional Awards from NIH***

**Karin Lindman, PhD** | Program Director, Office of Research Training and Career Development, Division of Cardiovascular Sciences, NHLBI, NIH

**Ian Williamson, PhD** | Postdoctoral Research Associate, Division of Gastroenterology, Duke University School of Medicine

**Sarah Cohen, PhD** | Assistant Professor, Cell Biology and Physiology, University of North Carolina at Chapel Hill

## **2:00 Keynote Speaker**

**Karen Mohlke, PhD** | University of North Carolina at Chapel Hill

*Molecular genetic mechanisms underlying inter-individual variation in lipid metabolism*

## **2:45 Break**

## Thursday, September 9

FLRC Day 1

Continued

### 3:15 Larry Rudel Award Lectures

Chair: Ryan Temel, PhD | University of Kentucky

Presenters selected from abstracts submitted by July 29. Cash prize for winning presentation.

3:15 Presenter 1

3:30 Presenter 2

3:45 Presenter 3

### Session III: I'm No Model: Lipid Metabolism in Unconventional Organisms

Chair: Robert Bauer, PhD | Columbia University

4:00 **Meredith Wilson, PhD** | Carnegie Institute for Science

*Imaging intestinal lipid droplet dynamics in vivo with fluorescent perilipin 2 and perilipin 3 knock-in zebrafish*

4:20 **Marina Blanco, PhD** | Duke Lemur Center

*From fruits to fats: high sugar diets predict white adipose tissue deposition and depletion in a hibernating lemur*

4:40 **Eva Hurt-Camejo, PhD** | Astra Zeneca

*Absence of atherogenesis associated with vasculo-protective properties of lipoproteins despite elevated total plasma lipids in brown bears (*Ursus arctos*)*

4:55 Selected Abstract

### 6:00 Depart hotel lobby for the short walk to Durham Bulls Baseball Stadium

### 6:15 Dinner and Baseball (Prior Registration Required)

Durham Bulls vs Scranton/Wilkes Barr RailRiders

*Pinnacle Party Deck*

Durham Bulls Athletic Park

## **Friday, September 9, 2021**

FLRC Day 2

The North Carolina Diabetes Research Center

Annual Symposium

*Haw River Ballroom*



**8:00 Buses depart 21C Museum Hotel lobby for transportation to the venue**

**9:00 Welcoming Comments**

**9:15 NCDRC Keynote Speaker**

**Scott Summers, PhD** | University of Utah

*Ceramides and the Two Phases of Lipotoxicity*

**10:15 Presentation**

**Herman Pontzer, PhD** | Duke University

TBD

**11:00 Break**

**11:15 Presentation**

**Beth Mayer-Davis, PhD** | University of North Carolina at Chapel Hill

TBD

**12:00 Lunch**

**Friday, September 9, 2021**

FLRC Day 2

Continued



**1:00 Afternoon Presentations**

**David Herrington, MD** | Wake Forest University

*TBD*

**Anna Lee, PhD** | NC AT&T State University

*Examining the Influence of Social Determinants of Health on Obesity and Diabetes among Aging African Americans*

**Morgana Mongraw-Chaffin, PhD** | Wake Forest University

*Meals for Moms: A Postpartum Medically-Tailored Meal Program to Promote Weight Loss and Blood Glucose Control Among Women with Hyperglycemia in Pregnancy*

**Svati Shah, PhD** | Duke University

*TBD*

**4:00 Closing Comments**

**4:30 Poster Session | Cocktails**

**5:45 Buses depart Haw River Ballroom for 21C Museum Hotel**

## Saturday, September 10

FLRC Day 3

21C Museum Hotel, Durham

*Main Gallery and Second Floor Gallery*

### 8:30 Continental Breakfast | *Second Floor Gallery*

#### 9:00 **Virgil Brown Lecture**

Deb Muoio, PhD | Duke University

*Mitochondrial fitness and failure in health and disease*

### Session I: The Big Picture: Systems, omics, and whole-body studies

Chair: **Svati Shah, MD, MHS** | Duke University

9:45 **Keshari Thakali, PhD** | University of Arkansas Medical Sciences

*Sex Differences in Maternal Programming of Perivascular Adipose Tissue*

10:05 **Jessica Alvarez, PhD, RD** | Emory University

*Nutritional Metabolomics to Identify Novel Pathways Linked to Body Composition*

10:25 Selected Abstract

### 10:40 Break

### Session II: Adios Adipose: Lipids in other tissues

Chair: **Rebecca Haeusler, PhD** | Columbia University

11:00 **Arion Kennedy, PhD** | North Carolina State University

*Long chain acyl carnitines and macrophage polarization*

11:20 **Taku Kambayashi, MD, PhD** | University of Pennsylvania

*Control of lipids through the skin by the immune-sebum axis*

11:40 **Phillip White, PhD** | Duke University

*A new homeostatic regulatory node at the intersection of amino acid and lipid metabolism*

12:00 **Robert Helsley, PhD** | University of Kentucky

*Carnitine Palmitoyltransferase 1a Serves as a Gatekeeper of Sexual Dimorphic NAFLD*

12:20 – Closing remarks and meeting adjourned