Metabolic Health: From Molecules to Populations

September 11-12, 2023

Cornell University, Ithaca, New York

Location: Biotechnology Building G10 (unless otherwise noted) + Statler Ballroom, Statler Hotel | Zoom

DAY 1 Biotechnology Building G10

6:45am All WCM attendees arrive at 1300 York Ave and depart for Ithaca

12:00pm Welcome Rachel Dunifon, PhD, The Rebecca Q. and James C. Morgan Dean, College of Human Ecology Introduced by Pat Cassano, PhD, The Alan D. Mathios Professor and Director, Division of Nutritional Sciences

- **12:15pm** Welcome/introductions and invite participants to have lunch at tables in G10 Symposium Co-Chairs, <u>Laura Alonso, MD</u>, Director, Joan and Sanford I. Weill Center for Metabolic Health, Weill Cornell Medicine (WCM), and <u>Julia Finkelstein, MPH ScD</u>, Associate Professor, Nutritional Sciences, CU-Ithaca
- 12:20-12:45 Lunch
- 12:45pm Session 1: Diabetes Molecular mechanisms and cellular therapies Co-chairs: Laura Alonso, MD, Director, Joan and Sanford I Weill Center for Metabolic Health, Weill Cornell Medicine (WCM), and Praveen Sethupathy, PhD, Professor of Physiological Genomics and Director, Center for Vertebrate Genomics, CU-Ithaca (Open to registered attendees and broadcast *via* live stream)
- 12:45-12:50 Introduction by session Co-chairs, Laura Alonso, MD and Praveen Sethupathy, PhD
- 12:55-1:10 James Lo, MD, PhD, Associate Professor, WCM Impact of beta cell heterogeneity in normal glucose control and diabetes
- 1:15-1:30 <u>Shu-Bing Qian</u>, PhD, James Jamison Professor, Division of Nutritional Sciences Manipulating cysteine stress response using synthetic mRNA
- 1:35-1:50 <u>Shahin Rafii</u>, MD, Chief, Regenerative Medicine, WCM Molecular determinants of pancreatic islet endothelium for the treatment of diabetes
- 1:55-2:10 <u>Huguet Landa</u>, PhD, Postdoctoral Associate, Alonso Lab, WCM ATF6 promotes pancreatic beta cell proliferation in high glucose by increasing E2F1 expression and activity
- 2:10-2:45 Coffee break

2:45pm	Session 2: Obesity- Adipocytes, muscle, and molecular metabolism Co-chairs: Sander Kersten, PhD, Schleifer Family Professor and Incoming Director, Division of Nutritional Sciences <u>Tim McGraw, PhD</u> , Professor of Biochemistry, WCM
	(Open to the entire campus and broadcast via live stream)
2:45-2:50	Introduction by session co-chairs: Sander Kersten, PhD and Tim McGraw, PhD
2:50-3:05	<u>Joeva Barrow PhD RD</u> , Assistant Professor, Division of Nutritional Sciences Nipsnap1—a critical regulator for the long-term maintenance of brown adipose tissue non-shivering thermogenesis
3:10-3:25	Shannon Reilly, PhD, Assistant Professor, WCM FFA deposition in lipolytic white adipocytes
3:30-3:45	Daniel Berry, PhD, Assistant Professor, Division of Nutritional Sciences Smooth muscle cell derived Cxcl12 directs macrophage accrual and sympathetic innervation to control thermogenic adipose tissue
3:50-4:05	Faro Haczeyni, PhD, Postdoctoral Associate, Ersoy Lab, WCM Submitochondrial protein translocation upon stress inhibits thermogenic energy expenditure
4:10-4:25	Ankit Gilani, PhD, Postdoctoral Associate, Lo Lab, WCM Fam20c, an Obesity-induced Kinase, Instigates Adipocyte Inflammation and Dysfunction Leading to Type-2 Diabetes
6:00-6:45pm	Poster Session and Wine/Cheese Statler Hotel Ballroom Fover

7:00-8:30pm Dinner

 7:15pm
 Keynote: Christopher Lynch, PhD Statler Hotel Ballroom

 Acting Director, Office of Nutrition Research, National Institutes of Health National Institutes of Health Food is Medicine

8:30-11:00pm Evening Social – Steve Atwood Band Statler Hotel Ballroom

DAY 2 Biotechnology Building G10

7:30-8:15am Breakfast

8:30am	Welcome Back to Day 2
	Session 3: Obesity – Therapeutics, Interventions, and population studies
	Co-chairs: Julia Finkelstein, MPH ScD, Associate Professor, Nutritional Sciences, and Sangeeta Kashyap, MD, Assistant Chief for Clinical Affairs, Division of Endocrinology,
	WCM (Open to the entire campus and broadcast <i>via</i> live stream)
8:35-8:40	Introduction by session co-chairs, Julia Finkelstein, MPH ScD, Sangeeta Kashyap, MD
8:40-8:55	Meng Wang, MD PhD, Assistant Professor, Division of Nutritional Sciences Genotoxic aldehydes: A metabolic cause of cancer and aging
9:00-9:15	Alpana Shukla, MD, Associate Professor, WCM Nutrient sequencing influences glucose metabolism
9:20-9:35	Marla Lujan, PhD, Associate Professor, Division of Nutritional Sciences Interventions for Metabolic Health and Obesity Prevention in PCOS
9:40-9:55	Puja Chebrolu, MD, Assistant Professor, WCM Metabolic disease prevention in the critical postpartum window
10:00-10:15	Samantha Huey, PhD, Research Associate, Division of Nutritional Sciences, Center for Precision Nutrition for Health World Health Organization Guidelines for Management of Pediatric Obesity
10:30am	Coffee Break
11:00am	Concurrent Breakout Sessions for Working Groups (WG) Closed Session: for participants of the Symposium only
	Centers and Cross-campus collaborations Laura Alonso, MD, Introduction to the <u>Weill Center for Metabolic Health</u> Saurabh Mehta, MBBS ScD, Introduction to the <u>Center for Precision Nutrition for Health</u>
WG 1	Cross-campus collaborations on insulin secretory capacity and stem cell biology <u>Laura Alonso, MD</u> , Director, Joan and Sanford I Weill Center for Metabolic Health, WCM <u>Praveen Sethupathy, PhD</u> , Professor of Physiological Genomics and Director, Center for Vertebrate Genomics, CU-Ithaca
WG 2	Cross-campus collaborations on obesity and adipocyte biology <u>Fred Maxfield, PhD</u> , Professor of Biochemistry, WCM <u>Tim McGraw, PhD</u> , Professor of Biochemistry, WCM <u>Sander Kersten, PhD</u> , Schleifer Family Professor and Director, DNS [2024] <u>James Lo, MD PhD</u> , Associate Professor, WCM

- WG 3 Cross-campus collaborations on obesity interventions and population studies NIH Food is Medicine <u>Saurabh Mehta, MBBS ScD</u>, Janet and Gordon Lankton Professor, DNS <u>Sangeeta Kashyap, MD</u>, Assistant Chief for Clinical Affairs, Div. of Endocrinology, WCM <u>Alpana Shukla, MD</u>, Associate Professor, WCM
- Trainee WG Trainees networking
- 12:30pm Lunch

1:00pm Working Lunch with Recommendations from Working Groups Closed Session: for participants of the Symposium only

- 1:00-1:10 WG1 report/recommendations [Alonso, Sethupathy; Trainee TBD]
- 1:10-1:20 WG2 report/recommendations [Maxfield, McGraw, Kersten, Lo]
- 1:20-1:30 WG3 report/recommendations [Mehta, Shukla, Kashyap]

1:30pm Consensus development for overall recommendations and action items

- 2:00pm Summary, Concluding Remarks, and Next Steps Laura Alonso, MD, and Julia Finkelstein, MPH ScD, Prizes for best early career posters and presentations
- 2:30pm Meeting Adjourned
- 3:00pm Bus departure Boxed meal provided for WCM attendees