Metabolic Health: From Molecules to Populations
September 11-12, 2023
Cornell University, Ithaca, New York
Location: Biotechnology Building G10 + Statler Ballroom, Statler Hotel | Zoom

**DAY 1**
**12:00-12:15** Biotechnology Building G10

**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

Welcome/introductions and invite participants to have lunch at tables in G10
Symposium Co-Chairs, Laura Alonso, MD, Director, Joan and Sanford I. Weill Center for Metabolic Health, Weill Cornell Medicine (WCM), and Julia Finkelstein, MPH ScD, Associate Professor, Nutritional Sciences, CU-Ithaca

**12:20-12:45** Lunch

**12:45** 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)

*Note: 15-minute talks + Questions* [Trainees: Cole, Darko, Bennett]

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 Shu-Bing Qian, PhD, James Jamison Professor, Division of Nutritional Sciences
Manipulating cysteine stress response using synthetic mRNA

1:35-1:50 Shahin Rafii, MD, Chief, Regenerative Medicine, WCM
Molecular determinants of pancreatic islet endothelium for the treatment of diabetes

1:55-2:10 Huguet Landa, 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
Tim McGraw, PhD, Professor of Biochemistry, WCM

(Open to the entire campus and broadcast *via* live stream)

[Note: 15-minute talks + Questions] [Trainees: Palma Molina, Fahim]

2:45-2:50 **Introduction by session co-chairs:** Sander Kersten, PhD and Tim McGraw, PhD

2:50-3:05 **Joeva Barrow PhD RD**, 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

4:30 **[Transition to Statler Hotel]**

4:45-6:00 **Statler Hotel check-in for WCM attendees**

5:30 **Set up posters in Statler Ballroom Foyer [DNS staff; Palma Molina, Ji]**

6:00-6:45pm **Poster Session and Wine/Cheese**
Statler Hotel Ballroom Foyer

6:45pm **Transition to buffet dinner in Statler Hotel Ballroom; Collect posters**
[Keynote trainees: Sinha, Fahim]

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 [Zoom]

Introduced by Pat Cassano, PhD, The Alan D. Mathios Professor and Director, Division of Nutritional Sciences

8:30-11:00pm **Evening Social – Steve Atwood Band**
Statler Hotel Ballroom
### DAY 2  
Biotechnology Building G10

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| 7:30-8:15am | Breakfast  
[Note: Bag storage is reserved in Biotechnology Building Room #202] |
| 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  
(Open to the entire campus and broadcast via live stream)  
[Note: 15-minute talks + Questions] [Trainees: Sinha, Ji] |
| 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, 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 Weill Center for Metabolic Health
Saurabh Mehta, MBBS ScD, Introduction to the Center for Precision Nutrition for Health

WG 1  Cross-campus collaborations on insulin secretory capacity and stem cell biology
Laura Alonso, MD, Director, Joan and Sanford I Weill Center for Metabolic Health, WCM
Praveen Sethupathy, PhD, Professor of Physiological Genomics and Director, Center for Vertebrate Genomics, CU-Ithaca

WG 2  Cross-campus collaborations on obesity and adipocyte biology
Fred Maxfield, PhD, Professor of Biochemistry, WCM
Tim McGraw, PhD, Professor of Biochemistry, WCM
Sander Kersten, PhD, Schleifer Family Professor and Director, DNS [2024]
James Lo, MD PhD, Associate Professor, WCM

WG 3  Cross-campus collaborations on obesity interventions and population studies
NIH Food is Medicine
Saurabh Mehta, MBBS ScD, Janet and Gordon Lankton Professor, DNS
Sangeeta Kashyap, MD, Assistant Chief for Clinical Affairs, Div. of Endocrinology, WCM
Alpana Shukla, MD, Associate Professor, WCM

Trainee WG  Trainees networking session

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]
[Trainees: Larvie, Cole]

1:30pm  Consensus development for overall recommendations and action items
[Trainees: Larvie, Cole]

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