



# **Symposium Theme:**

"Inclusive Genomics to Promote Health Excellence"

Co-sponsored by the Center for Global Genomics and Health Equity and the Center for Computational Biomedicine at the University of Pennsylvania Perelman School of Medicine

Wednesday, May 14, 2025 – Thursday, May 15, 2025

Biomedical Research Building (BRB) Gaulton Auditorium, 421 Curie Boulevard, Philadelphia, PA 19104

#### Wednesday, May 14: (Day 1): Population Genomics and Health Risk

12:00 – 12:05PM Welcome and Introduction (E. Michael Ostap, PhD, Professor of Physiology, Interim Senior

Vice Dean and Chief Scientific Officer, Perelman School of Medicine at University of Pennsylvania)

12:05 – 12:15PM Sarah Tishkoff, PhD, Introduction to the Center for Global Genomics & Health Equity at Penn

12:15 – 1:45PM Speakers and Discussion Theme 1

## Theme 1: Leveraging Global Variation for Equitable Global Health

- 12:15-12:45PM, Glennis Logsdon, PhD (University of Pennsylvania), "Genetic, epigenetic, and functional diversity of human centromeres"
- 12:45-1:15PM, Charles Lee, FRSC (The Jackson Laboratory), "Genetic variation on the Y chromosome across 180,000 years of human evolution"
- 1:15-1:45PM, Evan Eichler, PhD (University of Washington), "Complete human genomes and the complexity of genome structural diversity"

1:45 – 2:15PM Discussion with Moderator (Sarah Tishkoff, PhD)

2:15 – 2:45PM Break/coffee/refreshments

2:45 – 4:15PM Speakers and Discussion Theme 2

#### Theme 2: Impact of Demographic History and Natural Selection on Genomic Variation and Health Risk

- 2:45-3:15PM, Mashaal Sohail, PhD (National Autonomous University of Mexico), "The multi-scale complexity of human genetic variation beyond continental groups"
- 3:15-3:45PM, Omer Gokcumen, PhD (SUNY Buffalo), "From the Andes to the Lab Bench: Integrating Genomic, Evolutionary, and Functional Perspectives on amylase gene variation"
- 3:45-4:15PM, Anna C. F. Lewis, DPhil (Harvard Medical School), "Equity and the development, validation, and implementation of polygenic risk scores"

4:15 – 4:45PM Discussion with Moderator (Iain Mathieson, PhD)

4:45PM Closing remarks followed by reception/light refreshments

#### Thursday, May 15: (Day 2):

#### **Genomic Variation and Precision Medicine**

12:00 – 12:05PM Welcome and Introduction: Daniel J. Rader, MD, Seymour Gray Professor of Molecular Medicine, Chair Department of Genetics, Perelman School of Medicine at University of Pennsylvania)

12:05 – 12:15PM Bogdan Pasaniuc, PhD, Introduction to the Center for Computational Biomedicine

12:15 – 1:45PM Speakers and Discussion Theme 3

### Theme 3: Genomic Variation Enables Equitable Precision Medicine

- 12:15-12:45PM, Eimear Kenny, PhD (Icahn School of Medicine at Mount Sinai), "Population Genetics in an era of Genomic Health"
- 12:45-1:15PM, Amadou Gaye, PhD, MSc, BSc (Meharry Medical College), "The Role of Genomic Diversity in Reducing Disease Disparities"
- 1:15-1:45PM, Daniel Geschwind, MD, PhD (University of California, Los Angeles), "Building a diverse biobank in Los Angeles The UCLA ATLAS Community Health Initiative"

1:45 - 2:15PM Discussion with Moderator (Bogdan Pasaniuc, PhD)

2:15 – 2:45PM Break/coffee/refreshments

2:45 – 4:15PM Speakers and Discussion Theme 4

## **Theme 4:** Equity in Polygenic Prediction

- 2:45-3:15PM, Jibril Hirbo (Vanderbilt University Medical School), "Inequities in clinical healthcare: what has lack of representation and models got to do with it?"
- 3:15-3:45PM, Alicia R. Martin, PhD (Harvard Medical School), "Genomics for the world: a comprehensive framework for genetic studies in diverse populations"
- 3:45-4:15PM, Elizabeth Atkinson, PhD (Baylor College of Medicine), "Empowering gene discovery and accelerating clinical translation for diverse admixed populations"

4:15 – 4:45PM Discussion with Moderator (Bogdan Pasaniuc, PhD)

4:45PM Closing remarks followed by reception/light refreshments