

Annual Meeting Report

2024 NHGRI Research Training and Career Development April 7–9, 2024

The NHGRI Research Training and Career Development 9th Annual Meeting was held on April 7–9, 2024. The meeting was coordinated by Duke University and held the Westin Seattle Hotel in Seattle, WA (1900 5th Street). All sessions convened in the main ballroom were livestreamed and recordings are accessible to registrants via the Meeting Attendee Hub website, a platform of Cvent (a software company for event management) (login required).

Each year, the Annual Meeting provides a venue for all trainees supported by NHGRI across the U.S. in the fields of genome sciences, genomic medicine, and the ethical, legal and social implications (ELSI) to present their research and network with other trainees and established researchers. The meeting includes science and career development topics, workshops, invited keynote presentations, panel discussions, peer-reviewed platform and poster presentations, breakout sessions, and networking opportunities. In addition, other groups with non-NHGRI trainees engaged in genomic research were invited to attend the meeting.

All students and trainees of NHGRI training programs were invited to attend, along with the program directors, program coordinators, NHGRI staff, and NHGRI program advisors. NHGRI students and trainees are supported from Diversity Action Plan (DAP) Programs, Institutional pre- and post-doctoral Training (T32) programs, pre- and post-doctoral Individual Fellowships (F30, F31, and F32), Career Development (K) Awards, and Centers of Excellence in ELSI Research (CEER) training programs. A registration fee of \$300 was charged for all in-person attendees (\$50 for virtual trainees). A total of 397 individuals registered for the meeting including 296 students/trainees (92 DAP Trainees, 168 T32 Trainees, 9 Fellowship (F) Awardees, 14 Unsure, 10 Career Development (K) Awardees, 3 Other), 9 Training Program Staff, 16 NHGRI staff, 11 Training Program Coordinators, 50 Training Program PIs/co-PIs, 1 NHGRI RTEP advisors, 3 Duke staff, and 16 Other. In addition, there were 21 attendees invited to serve as speakers and panelists (not registered since they did not attend full meeting). Of the 397 total meeting registrants, 380 (96%) attended in-person and 17 (4%) attended virtually.

All registered trainees attending in-person were invited to submit abstracts. Of the 296 NHGRI-supported trainees who registered for the meeting, a total of 212 abstracts were submitted. Abstracts were organized into one of five focus areas, expanding from three focus areas the past years: genome sciences; genomic medicine; data sciences, health disparities, and ELSI. Trainees could opt to be considered for a platform presentation. We expanded the number of platform presentations this year to a total of 12; the remainder of abstracts were assigned to one of two poster sessions. All abstracts were made available to meeting registrants through a link on Flippingbook.com (an online publication software).

A post-meeting survey link was sent to all registrants on April 16th, 2024; a separate report on the survey responses will be shared with NHGRI program staff.

Agenda Highlights

Sunday, Apr 7

- **Welcome and Opening Remarks:** Dr. Susanne Haga, Duke University; Heather Colley, MS (NHGRI)
- **Keynote Speaker #1: Dr. Wylie Burke**, MD PhD, University of Washington
[Introduced by Dr. Susanne Haga, Professor, Duke University]

Talk title: "Genomes in Context"

(A brief Q&A session followed her presentation.)

[Note: due to technical difficulties, this talk was not livestreamed/recorded]

- **Trainee Networking Sessions [trainees asked to attend the session for their level]**

- Session #1: *My Educational Path – What are my options?* (Audience: Undergraduates/Post-bacs)

Presenter: Lucia Hindorff, PhD, MPH, NHGRI)

- Session #2: *Becoming an Effective Team Scientist* (Audience: Graduate students)

Moderators: Carolyn Hutter, PhD, NHGRI and Steven Montgomery, PhD, Stanford University

Panelists:

- Christine Beck, PhD, The Jackson Laboratory
- Jonathan LoTempio, PhD, University of Pennsylvania
- Marylyn Ritchie, PhD, University of Pennsylvania
- Session #3: *Landing Your First Post Post-Doc Job* (Audience: Post-docs/Research Associates/Instructors/Junior Faculty)

Moderator: Larry Brody, PhD, NHGRI

Panelists:

- Brent Graveley, PhD, University of Connecticut Health Center
- Joe Yost, PhD, University of Utah
- Steven Reilly, PhD, Yale University
- Angela Brooks, PhD, University of California, Santa Cruz

- Welcome Plated Dinner

[Optional Evening Workshops – registration required; space limited]

- Workshop #1: *Introduction to AnVIL Genomic Analysis, Visualization and Informatics Lab-space (registered attendees only)*

Presenters: AnVIL Team

- Workshop #2: Introduction to Disease Variants & ClinGen

Presenter: Jonathan Berg, MD, PhD, University of North Carolina at Chapel Hill

[Day 1 adjourned]

Monday, Apr 8

- **Welcome & Meeting Announcements:** Dr. Susanne Haga, Duke University
- **Plenary Talk:** Plenary Session: Career Journeys in Genetics and Genomics: A Panel Discussion
Moderator: Eric Green, MD, PhD, NHGRI

University of Washington Panelists:

- Mary Claire King, PhD
- Michael Bamshad, MD
- Bob Waterston, MD, PhD
- Gail Jarvik, MD, PhD
- Evan Eichler, PhD

A brief period of Q&A from in-person attendees followed the discussion

- **Concurrent Breakout Session #1**
(Note: There were three concurrent breakout sessions scheduled. Attendees could select whichever session they wished to attend. Sessions convened in the main ballroom were web-cast)
 - Session #1A: *Brain Sciences & Genomics*
Presenter: Jeremy Miller, PhD, Allen Institute
 - Session #1B: *Science Communication*
Moderator: Amber Jackson NHGRI
Presenters:
 - Robin Aguilar, PhD, University of Washington
 - Chris Gunter, PhD, NHGRI
 - Session #1C: *Introduction to Gene Editing Technologies & Applications*
Presenters:
 - Lea Starita, PhD, University of Washington
 - Richard James, PhD, Seattle Children's Research Institute
 - Christine Queitsch, PhD, University of Washington
 - Josh Cuperus, PhD, University of Washington
- **Trainee Platform Presentation #1 (Genomic Medicine/Data Sciences)**
Moderator: Renee Rider, MS, JD, LCGC (NHGRI)
Presenters:
 - Xavier Anderson, University of North Carolina, Chapel Hill
 - Zhi Yu, Broad Institute of MIT and Harvard

- Justin Tubbs, Massachusetts General Hospital
- Abelardo Montalvo, University of Florida, College of Pharmacy

- **Networking Plated Lunch**

- **Trainee Platform Presentations #2 (Ethical, Legal, & Social Issues/Health Disparities)**
Moderator: Ebony Madden, PhD (NHGRI)

Presenters:

- Brandy Fox, Stanford University
- Daniel Chavez-Yenter, University of Utah
- Shreya Sharma, Johns Hopkins University
- Stephanie Felker, University of Alabama-Birmingham

- **Concurrent Breakout Session #2**

- Session #2D: *Beyond Inclusion: Equity and Genomics Research with Indigenous Peoples*

Moderator: Jessica Blanchard, PhD, University of Oklahoma

Panelists:

- Susan Trinidad, MA, PhD, University of Washington
- Krystal Tsoie, PhD, Arizona State University
- Julie Beans, MPH, Southcentral Foundation

- Session #2E: *Writing an NIH Fellowship Application*

Presenter:

- Temesgen Fufa, PhD, NHGRI

Panelists:

- Jonathan Perdomo, F31 Awardee, Drexel University
- Christian Loo, F31 Awardee, University of Pennsylvania

- Session #2F: *Ethics & Governance of Gene Editing*

Moderator: Dave Kaufman, PhD, NHGRI

Panelists:

- Debra Mathews, PhD, Johns Hopkins University
- Julia Brown, PhD, University of California, San Francisco

- **Trainee Platform Presentations #3 (Genome Sciences)**

Moderator: Sandhya Xirasagar, PhD, NHGRI

Presenters:

- Jonathan Perdomo, Drexel University
- Sophia Gibson, University of Washington
- Maya Bose, University of Michigan
- Kareena Shankta, University of Pennsylvania

- **POSTER SESSION #1 Even-Numbered Posters**

[Note: Poster abstracts were made available via the meeting attendee site (log-in required)]

[Day 2 adjourned]

DAY THREE (Virtual attendance: 51)

- **CLOSED EXECUTIVE SESSION FOR TRAINING PROGRAM PIs & COORDINATORS AND NHGRI STAFF**

Presenters: Vence Bonham, JD, NHGRI and Lucia Hindorff, PhD, MPH, NHGRI

- **Greetings and Meeting Announcements:** Dr Susanne Haga, Duke University

- **Concurrent Breakout Session #3**

- **Session #3G: *Exploring Career Paths in Industry***

Moderator: Ian Nova, PhD, NHGRI

Panelists:

- Paidamoyo Chapfuwa, PhD, Microsoft Research
- François Baneyx, PhD, CoMotion & University of Washington
- Ivan Liachko, PhD, Phase Genomics
- Anna Minkina, PhD, Cajal Neuroscience

- **Session #3H: *Introduction to AI & Machine Learning in Genetics & Genomics***

Moderator: Robb Rowley, MD (NHGRI)

Panelists:

- Josh Peterson, MD, Vanderbilt University
- Stephen Montgomery, PhD, Stanford
- Jordan Smoller, MD, ScD, Harvard

- **Session #3I: *Use of Race, Ethnicity and Ancestry in Genomics Research***

[See NASEM Report: [Using Population Descriptors in Genetics & Genomics Research](#)]

Moderator: Vence Bonham, JD, NHGRI

Panelists:

- Malia Fullerton, DPhil, University of Washington
- Elizabeth Blue, PhD, University of Washington
- Burcu Darst, PhD, Fred Hutchinson Cancer Center

- **POSTER SESSION #2 (Odd-Numbered Posters)**

- **CLOSING REMARKS**

Presenter: Eric Green, MD, PhD (NHGRI)

[Meeting adjourned]

APPENDIX

- **[FULL AGENDA](#) -- 2024 NHGRI Research Training and Career Development Annual Meeting**
- **[Bios of Speakers/Panelists](#)**