

**National Human Genome Research Institute  
National Institutes of Health  
August 29 – September 27, 2019**

**Agenda**

**Bldg 35A, Room 610**

	<b>Topic</b>	<b>Speaker</b>
<b>Aug. 29 (Thur)</b>		
8:00 – 8:30 am	Registration	Please bring Passports and visas
8:30 – 8:45 am	SURVEY and PHOTO	
8:45 – 9:00 am	Welcome	Dr. Eric Green Director, NHGRI  Dr. Max Muenke Chief, Medical Genetics Branch, NHGRI
9:00– 10:00 am	The Human Genomics Landscape, Circa 2019	Dr. Eric Green Director, NHGRI
10:00 – 10:30 am	BREAK	
10:30 – 11:30 pm	Overview: Approach to Clinically- Oriented Genetics and Genomics	Dr. Ben Solomon Managing Director, GeneDx
11:30 am – 12:30 pm	Common Conditions and Disease Patterns	Dr. Ben Solomon Managing Director, GeneDx
12:30 – 1:30 pm	LUNCH	
1:30 – 2:30 pm	Patterns of Inheritance and Key Terminology	Dr. Ben Solomon Managing Director, GeneDx
2:30 – 2:45 pm	BREAK	
3:00 – 4:50 pm	CLINICAL CENTER TOUR*:  Metabolic Unit Group A: 3:00-3:30 Group B: 3:40-4:10  Pediatric Unit (1NW) Group B: 3:00-3:30 Group A: 3:40-4:10  Clinical Center (4:20-4:50)	Drs. Kong Chen and Stephanie Chung Clinical Investigators, NIDDK and Co-directors, Metabolic Clinical Research Unit, NIH Clinical Center  Dr. Cynthia Tifft Deputy Clinical Director, NHGRI  Ms. Laura M. Lee, MS, RN Director, Office of Patient Safety and Clinical Quality NIH Clinical Center
4:50 – 5:00 pm	Survey	

\*Break into 2 groups

**Bldg. 45 (Natcher Conference Center), Room F1/F2**

	<b>Topic</b>	<b>Speaker</b>
<b>Aug. 30 (Fri)</b>		
7:45 – 8:00 am	SURVEY	
8:00 – 9:00 am	The Role of Race, Ethnicity and Socioeconomic Status in Clinical Genetics Research	Dr. Eliseo Perez-Stable Director, NIMHD
9:00 – 10:00 am	NIH Undiagnosed Disease Program	Dr. William Gahl Director, Undiagnosed Disease Program NHGRI
10:00 – 10:30 am	BREAK	
10:30 – 11:30 am	Skeletal Dysplasias	Dr. Julie Hoover-Fong Director, Greenberg Center for Skeletal Dysplasias Associate Professor of Genetic Medicine and Pediatrics, Johns Hopkins University
11:30 – 1:00 pm	LUNCH	
1:00 – 2:00 pm	Gene Therapy for Sickle Cell Anemia	Dr. Matt Hsieh Staff Clinician, Cellular and Molecular Therapeutics Branch, NHLBI
2:00 – 3:00 pm	Auto-Inflammatory Disorders	Dr. Dan Kastner, Scientific Director, NHGRI
3:00 – 3:30 pm	BREAK	
3.30- 4:30 pm	Genetics of Complex Traits	Dr. Lawrence Brody Director, Division of Genomics and Society, NHGRI
4:30 – 5:30 pm	Genetics of Lipid Disorders	Dr. Robert Shamburek Clinician/Scientist, Lipid Section Cardiovascular Branch, NHLBI
5:30- 5.45 pm	SURVEY	

**Bldg 35A Room, 610**

	<b>Topic</b>	<b>Speaker</b>
<b>Sept. 3 (Tue)</b>		
7:45 – 8:00 am	SURVEY	
8:00 – 9:00 am	A Clinical Approach to a Patient with a Suspected Genetic Disorder	Dr. Adebowale Adeyemo Deputy Director, Center for Research in Genomic and Global Health, Associate Investigator, National Human Genome Research Institute, NHGRI
9:00 – 9:30 am	BREAK	
9:30 – 11:30 am	Cytogenetics	Dr. Jeanne Meck Director, Prenatal Diagnosis & Cytogenomics, GeneDx
11:30 - 1.00 pm	LUNCH	
1:00 – 2:00 pm	Clinical Aspects of Cytogenetic Disorders	Dr. Clesson Turner Clinical Geneticist, Walter Reed National Military Medical Center
2:00 – 3:00 pm	Sickle Cell Disease, The Global Health Burden	Dr. Vence Bonham Senior Advisor to the NHGRI Director on Genomics and Health Disparities, NHGRI
3:00 – 3:30 pm	BREAK	
3.30- 4:30 pm	Microbiome	Dr. Hernan Lorenzi Assistant Professor Infectious Disease Group J. Craig Venter Institute
4:30 – 5:30 pm	Neurogenetics	Dr. Sonja Scholz Investigator, Neurodegenerative Diseases Research Unit, NINDS
5:30- 5.45 pm	SURVEY	

**Meet at The Gateway Visitor's Center, NIH**

	<b>Topic</b>	<b>Speaker</b>
<b>Sept. 4 (Wed)</b>		
8.00 – 8.15 am	Survey on the bus	
8:30 am – 5:00 pm	<p>Field Trip-            NIH Intramural Sequencing Center            (NISC) 8.30-10.30 am            5625 Fishers Lane            Rockville, MD 20852</p> <p>National Center for Advancing            Translation Sciences (NCATS)            11.00-12.40 pm            9800 Medical Center Dr., Rockville,            MD 20850</p> <p>GeneDX 1.00- 4.30 pm            207 Perry Pkwy, Gaithersburg, MD            20877</p> <p>Survey on the bus</p>	

**Bldg. 45 (Natcher Conference Center), Room F1/F2**

	<b>Topic</b>	<b>Speaker</b>
<b>Sept. 5<sup>th</sup> (Thur)</b>		
7:45 – 8.00 am	SURVEY	
8.00 – 10.00 am	Grant Writing- Part 1: The structure of a grant proposal (General and K43)	Dr. Beth Fischer, Assistant Professor of School of Education, University of Pittsburgh  Dr. Michael Zigmond, Professor Emeritus, University of Pittsburgh
10:00 – 10:30 am	BREAK	
10:30 – 12:30 pm	Grant Writing- Part 1 continued: The process of preparing and submitting a proposal	
12:30 – 1:30 pm	LUNCH (can include group discussions)	
1:30 – 3:00 pm	Group discussion: Candidates present their specific aims to their group and get feedback	
3:00 – 3:30 pm	BREAK	
3:30 – 5:30 pm	Grant Writing- Part 2 (focus on specific aims): Insights from group discussions, review of basic principles of a fundable set of specific aims, final Q & A	
5:30 – 5:45 pm	SURVEY	

**Manjit has group list**

**Bldg. 45 (Natcher Conference Center), Room F1/F2**

	<b>Topic</b>	<b>Speaker</b>
<b>Sept. 6<sup>th</sup> (Fri)</b>		
7:45 – 8:00 am	SURVEY	
8:00 – 9:15 am	Overview of Fogarty Extramural Programs	Dr. Laura Povlich Fogarty International Center/NIH
	The Emerging Global Leader Award (K43): A Career Development Award for LMIC Investigators	Dr. Christine Jessup, Fogarty International Center/NIH
9:15 – 9:45 am	Research and Development at USAID: Opportunities for Engagement	Dr. Megan Miller Research Program Officer Center for Development Research, USAID
9:45 – 10:15 am	An Overview of Clinical Gene Therapy	Dr. Kenneth Cornetta Professor of Clinical Medical & Molecular Genetics, Indiana University School of Medicine
10.15 - 10.45 am	BREAK	
10.45 - 11.45 am	CRISPR/Cas9 Technology	Dr. Shawn Burgess Senior Investigator, Translational and Functional Genomics Branch, NHGRI
11.45 - 1.00 pm	LUNCH	
1:00 – 2:00 pm	Genetics of Alzheimer's Disease and Related Dementias	Dr. Marilyn Miller Program Director, Genetics of Alzheimer's Disease, NIA
2:00 – 3:00 pm	Genetics of Mood and Anxiety Disorders	Dr. Francis McMahon, Chief Human Genetics Branch, NIMH
3:00 – 3:30 pm	BREAK	
3:30 – 4:30 pm	Genetic and Environmental Contributions to Psychiatric and Substance Use Disorders	Dr. Brion Maher Professor of Mental Health Johns Hopkins Bloomberg School of Public Health
4:30 – 5:30 pm	Epigenetics in Human Health and Disease	Dr. Laura Elnitski Senior Investigator, Translational and Functional Genomics Branch, NHGRI
5:30 – 5:45 pm	SURVEY	

**Bldg. 45 (Natcher Conference Center), Room C1/C2**

	<b>Topic</b>	<b>Speaker</b>
<b>Sept. 9<sup>th</sup> (Mon)</b>		
7:45 – 8:00 am	SURVEY	
8:00 – 9:00 am	Genetic Counseling	Mr. Don Hadley Certified Genetic Counselor Deputy Director, Medical Genetics & Genomic Medicine Residency, NHGRI
9:00 – 10:00 am	Variant Nomenclature	Dr. Christopher Lau Clinical Molecular Geneticist, Associate Laboratory Director, Clinical Diagnostics, Ambry Genetics
10:00 – 10:30 am	BREAK	
10:30 – 11:30 am	Variant Interpretation	Dr. Christopher Lau Clinical Molecular Geneticist, Associate Laboratory Director, Clinical Diagnostics, Ambry Genetics
11:30am-1:00 pm	LUNCH	
1:00 – 2:00 pm	Traumatic Brain Injury	Dr. Jessica Gill, Senior Investigator Acting Scientific Director, NINR
2:00 – 3:00 pm	Growing Success Stories of Genomics in African Ancestry Populations: H3 Africa and Beyond	Dr. Charles Rotimi Director, Center for Research on Genomics and Global Health, Chief & Senior Investigator, Metabolic, Cardiovascular and Inflammatory Disease Genomics Branch, NHGRI
3:00 – 3:30 pm	BREAK	
3:30 – 4:15 pm	Genetic Syndromes in Diverse Populations	Dr. Paul Kruszka, MD, MPH Associate Research Physician, NHGRI
4:15 – 5:30 pm	Patient Panel	Moderator Mr. Don Hadley Certified Genetic Counselor Deputy Director, Medical Genetics & Genomic Medicine Residency, NHGRI
5:30- 5.45 pm	SURVEY	

**Meet at The Gateway Visitor's Center, NIH**

	<b>Topic</b>	<b>Speaker</b>
<b>Sept. 10<sup>th</sup> (Tue)</b>		
7:00 – 7:15 am	Survey on the bus	
8:30 – 5:00 pm	Field Trip- Johns Hopkins University 8:30 am-12:00 pm 733 N Broadway, Baltimore, MD 21205  Lunch at JHU 12:00-12:30 pm  Kennedy Krieger Institute 12.30 pm- 2.15 pm  Maryland Newborn Screening Laboratory 2:30 pm- 4:30 pm  Survey on the bus	



**Bldg. 45 (Natcher Conference Center), Room A/B  
And  
Bldg 31, Room B1E12**

	<b>Topic</b>		<b>Speaker</b>
<b>Sept. 11<sup>th</sup> (Wed)</b>			
7:45 – 8:00 am	SURVEY		
	Group A*	Group B*	
8:00 – 9:30 am	Molecular Genetics (Bldg 45 Room A/B)	Bioinformatics workshop (8 am-12 pm) – Bldg 31 room B1E12; Dr. Tyra Wolfsberg, Associate Director Bioinformatics and Scientific Programming Core, NHGRI	Dr. Suzanne Hart Deputy Director, Medical Genetics & Genomic Medicine Training Program, NHGRI
9:30 – 10:30 am	Genetics of Genitourinary Disorders		Dr. Melissa Merideth Attending Ob/Gyn and Geneticist Director, Medical Biochemical and Clinical Biochemical Training Programs
10:30 – 11:00 am	BREAK		
11:00 – 12:00 pm	How to Write a Scientific Paper		Dr. Max Muenke Chief, Medical Genetics Branch, NHGRI
12:00 – 1:00 pm	LUNCH		
	Group A*	Group B*	
1:00 – 2:30 pm	Bioinformatics workshop (1-5 pm) - Bldg 31 room B1E12; Dr. Tyra Wolfsberg, Associate Director Bioinformatics and Scientific Programming Core, NHGRI	Molecular Genetics (Bldg 45 Room A/B)	Dr. Suzanne Hart Deputy Director, Medical Genetics & Genomic Medicine Training Program, NHGRI
2:30 – 3:30 pm		Genetics of Genitourinary Disorders	Dr. Melissa Merideth Attending Ob/Gyn and Geneticist Director, Medical Biochemical and Clinical Biochemical Training Programs
3:30 – 4:00pm		BREAK	
4:00 – 5:00 pm		How to Write a Scientific Paper	Dr. Max Muenke Chief, Medical Genetics Branch, NHGRI
5:00 – 5:15 pm	SURVEY		

**\*Manjit has group list**

**Bldg 35A, Room 640**

	<b>Topic</b>	<b>Speaker</b>
<b>Sept. 12<sup>th</sup> (Thur)</b>		
7:45 – 8:00 am	SURVEY	
8:00 – 9:00 am	Neurocutaneous Syndromes	Dr. Dusica Babovic-Vuksanovic Chair, Department of Clinical Genomics, Mayo Clinic
9:00 – 10:00 am	Clinical Trials in the Study of Rare Diseases	Dr. Cynthia Tifft Deputy Clinical Director, NHGRI
10:00 – 10:30 am	BREAK	
10:30 – 11:30 am	Inherited Pulmonary Disorders	Dr. Bernadette Gochuico Senior Research Physician Attending Pulmonologist Medical Genetics Branch, NHGRI
11:30 – 12:45pm	LUNCH	
1:00 – 2:00 pm	Genetics of Arrhythmia and Cardiomyopathy	Dr. Elizabeth Sherwin Pediatric Electrophysiologist, CNHS
2:00 – 3:00 pm	Genetics of Cardiac Structural Defects	Dr. Laura Olivieri Pediatric Cardiologist, CNHS
3:00 – 3:30 pm	BREAK	
3:30 – 4:30 pm	What Makes Research Ethical?	Mr. Ben Berkman Faculty, NIH Department of Bioethics Deputy Director, NHGRI Bioethics Core
4:30 – 5:30 pm	Ethical Issues in Genetic Research with Stored Samples	Dr. Sara Hull Director, Bioethics Core, Office of the Clinical Director, NHGRI
5:30 – 5:50 pm	Innovative Strategies for Vision Research to Treat Eye Diseases	Dr. Santa Tumminia Acting Director, NEI
5:50 – 6:00 pm	SURVEY	

**Bldg. 35A, Room 640**

	<b>Topic</b>	<b>Speaker</b>
<b>Sept. 13<sup>th</sup> (Fri)</b>		
7:45 – 8:00 am	SURVEY	
8:00 – 9:00 am	Ophthalmic Genetics	Dr. Brian Brooks Clinical Director, Chief, Unit on Pediatric, Developmental & Genetic Ophthalmology, NEI
9:00 – 10:00 am	Genetics of Hearing Loss	Dr. Isabelle Roux Molecular Biology and Genetics Section, Otolaryngology Branch, NIDCD
10.00 - 10.30 am	BREAK	
10.30 - 11.30 am	Diabetes: Insights from Genomics	Dr. Lori Bonnycastle Staff Scientist, NHGRI
11.30 - 1.00 pm	LUNCH	
1:00 – 2:00 pm	Ethical issues arising from the application of genomics to the prevention and treatment of infectious diseases	Dr. Gail Geller Professor, Berman Institute of Bioethics and Department of Medicine, John Hopkins University Co-Principal Investigator, Johns Hopkins Center for Excellence in ELSI Research (CEER): Bridging Infectious Diseases, Genomics & Society (BRIDGES)
2:00 – 2:45 pm	How living and dying with malaria has shaped the human genome over thousands of years	Dr. Hans Ackerman NIH-Lasker Clinical Research Scholar, Investigator and Head, Physiology Unit Laboratory of Malaria and Vector Research, NIAID
2:45 – 3:30 pm	The Effect of Genetics in Tuberculosis Infection	Dr. Ray Chen Staff Clinician, NIAID
3:30 – 4:00 pm	BREAK	
4:00 – 4:45 pm	Proteomic and Genomic Approaches for Detection of Antimicrobial Resistance in Bacteria	Dr. John Dekker Lasker Clinical Research Scholar Chief, Bacterial Pathogenesis and Antimicrobial Resistance Unit, NIAID Director, Genomics Section, Microbiology Service, Department of Laboratory Medicine, NIH Clinical Center
4:45 – 5:00 pm	SURVEY	

### Personalized/Tailored Training at ICs

	Topic	Speaker
<b>Sept. 16<sup>th</sup>– 20<sup>th</sup> (Mon-Fri)</b>		
8:00 am – 5:00 pm	Personalized Training at ICs	

**Bldg 35A, Room 610**

	<b>Topic</b>	<b>Speaker</b>
<b>Sept. 23 (Mon)</b>		
7:45 – 8:00 am	SURVEY	
8:00 – 9:00 am	Using Whole Genome Sequencing and Genomics to Understand the Clinical Impact of Human Sequence Variation	Dr. Drew Michael Associate Director, Molecular and Biochemical Diagnostics Laboratory, Children's National Health System Assistant Professor, Department of Genomics and Precision Medicine, George Washington University
9:00 – 10:00 am	Genetics of Craniofacial and Dental Anomalies	Dr. Janice Lee Clinical Director, NIDCR
10:00 – 10:30 am	BREAK	
10:30 – 11:30 am	Mosaicism	Dr. Les Biesecker Chief & Senior Investigator, Medical Genomics & Metabolic Genetics Branch, Head, Clinical Genomics Section, NHGRI
11:30 am-1.00 pm	LUNCH	
1:00 – 2:00 pm	Selected Current Molecular Treatment Approaches to Pediatric Neuromuscular Disorders	Dr. Payam Mohassel Senior Investigator, Neuromuscular & Neurogenetic Disorders of Childhood Section, NINDS
2:00 – 3:00 pm	Mitochondrial Genetics	Ms. Ellen Macnamara Certified Genetics Counselor, NHGRI
3:00 – 3:15 pm	BREAK	
3:15 – 4:45 pm	Biochemical Genetics	Dr. Nick Ah Mew Clinical Biochemical Geneticist Director, Inherited Metabolic Disorders Children's National Rare Disease Institute Associate Professor of Pediatrics The George Washington University
4:45 – 5:45 pm	Noninvasive Prenatal Genomics: The Vanguard of Genomic Medicine	Dr. Diana W. Bianchi Director, Eunice Kennedy Shriver National Institute of Child Health and Human Development
5:45- 5:55 pm	SURVEY	

**Meet at The Gateway Visitor's Center, NIH**

	<b>Topic</b>	<b>Speaker</b>
<b>Sept. 24<sup>th</sup> (Tue)</b>		
7:45 – 8:00 am	Survey on the bus	
8:00 am – 5.00 pm	Field Trip- Children's National Health System 9 am- 12 pm 111 Michigan Ave NW, Washington, DC 20010  MedStar Washington Hospital Center 12.30 pm- 4 pm 110 Irving St NW, Washington, DC 20010  Survey on the bus	

**Bldg. 35A, Room 640**

	<b>Topic</b>	<b>Speaker</b>
<b>Sept. 25<sup>th</sup> (Wed)</b>		
7:45 – 8:00 am		SURVEY
8:00 – 9:00 am	NCATS Program: Genetic and Rare Diseases Information Center (GARD)	Ms. Michelle Snyder Certified Genetic Counselor, Operations Manager Genetic and Rare Disease Information Center, NCATS  Dr. Anne Pariser Director, Office of Rare Diseases Research NCATS
9:00 – 10:30 am	An Update Regarding Genetic Counseling and Testing for More Common Inherited Cancers	Ms. Tiffani A. DeMarco, MS, LCGC Licensed and Certified Genetic Counselor Director, Cancer Genetics Program Inova Schar Cancer Institute – Inova Fairfax Hospital
10:30 – 11:00 am		BREAK
11:00 – 12:00 pm	Cancer Genomics	Dr. Kathy Calzone, PhD, RN, AGN-BC, FAAN Research Geneticist Center for Cancer Research, Genetics Branch NCI
12:00 – 1:30 pm		LUNCH
1:30 – 3:00 pm	Genetics of Skin Disorders	Dr. Gabriele Richard Chief Medical Officer, GeneDx
3:00 – 3:30 pm		BREAK
3:30 – 4:30 pm	Genetics of Kidney Disorders	Dr. Asha Moudgil, FASN, FAST Associate Chief Professor of Pediatrics, GWU School of Medicine Medical Director, Kidney Transplant Children's National Health System
4:30 – 5:30 pm	NCBI Genetic Databases (ClinVar, dbGAP, GTR)	Ms. Adriana Malheiro Genetic Counselor, Director, NIH Genetic Testing Registry, NCBI/NLM
5:30 – 5:45 pm		SURVEY

**Bldg 35A, Room 640**

	<b>Topic</b>	<b>Speaker</b>
<b>Sept. 26<sup>th</sup> (Thur)</b>		
7:45 – 8:00 am	SURVEY	
8:00 – 9:00 am	Harnessing the Power of “Big Data” to Improve Health and Healthcare	Dr. Nilay D. Shah Chair, Division of Health Care Policy & Research, Department of Health Sciences Research; Associate Professor of Health Services Research, Mayo Clinic, Rochester, MN
9:00 – 9:30 am	The Sustainable Development Goals, Global Health Strategies, and Newborn Screening	Mr. Mark Engman Senior Director, Public Policy and Advocacy, UNICEF-USA
9:30 – 10:15 am	Introducing and Sustaining Newborn Screening in a Developing Nation	Dr. Bradford L. Therrell Director, National Newborn Screening and Genetics Resource Center; International Newborn Screening Consultant
10:15 – 10:30 am	BREAK	
10:30 – 11:30 am	Challenges in setting up genetic services in low-resource settings	Dr. Carmencita D. Padilla Professor and Chancellor University of the Philippines Manila
11:30 am – 12:30 pm	Potential of Telemedicine in meeting health related SDG	Dr. Saroj K. Mishra Prof. & Head, Dept. of Endocrine Surgery; Nodal Officer SGPGI Telemedicine Program Sanjay Gandhi PG Inst. of Medical Sciences, Lucknow, India
12:30 – 12:45 pm	SURVEY	
12:45 – 1:45 pm	LUNCH	
1:45 – 2:30 pm	Medical Genetics Training Programs	Dr. Max Muenke Chief, Medical Genetics Branch, Director, Medical Genetics & Genomic Medicine Training Programs, NHGRI
2:30 – 3:30 pm	Presentation by Candidates (4)	
3:30 – 3:45 pm	BREAK	
3:45 – 5:45 pm	Presentation by Candidates (8)	



**Bldg 35A, Room 640**

	<b>Topic</b>	<b>Speaker</b>
<b>Sept. 27<sup>th</sup> (Fri)</b>		
8:00 – 9:00 am	Presentation by Candidates (4)	
9:00 – 10:00 am	Presentation by Candidates (4)	
10:00 – 10:30 am		BREAK
10:30 – 11:30 am	Presentation by Candidates (4)	
11:30 – 12:30 pm	Presentation by Candidates (4)	
12:30 – 1:30 pm		LUNCH
1:30 – 2:30 pm	Presentation by Candidates (4)	
2:30 – 3:30 pm	Presentation by Candidates (4)	
3:30 – 4:00 pm		BREAK
4:00 – 5:30 pm	Graduation and Closing Remarks	Program Coordinators- Ms. Manjit Kaur Program Administrator, NHGRI  Dr. Max Muenke Director, Medical Genetics & Genomic Medicine Training Program; Senior Investigator and Chief, Medical Genetics Branch, NHGRI

**Sept. 28<sup>th</sup>** All candidates must depart