

September 1<sup>st</sup> – September 30<sup>th</sup>, 2016

# An International Summit in



# Human Genetics and Genomics

The International Summit in Human Genetics and Genomics is sponsored by the National Human Genome Research Institute, the National Institutes of Health (NIH) and other NIH Institutes & Centers (NIDCD, NIDCR, NEI, NHLBI, NIMHD, NINR and FIC); the Foundation for the National Institutes of Health (FNIH); and profit and non-profit partners.

As mortality rates decline, congenital birth defects and genetic diseases are increasing the world's burden of disease and disability. Developed nations have taken effective measures to reduce this burden, but the developing world is lagging behind, draining their resources and their economies.

These burdens can be effectively lessened, as many genetic conditions are now either treatable or successfully managed with the help of a growing number of proven technologies. Hence, we created this initiative: An International Summit in Human Genetics and Genomics.



**NIH** National Institutes of Health



A 5-year initiative, from 2016-2020, to help developing nations increase their knowledge, infrastructure, systems and technologies in genetic and genomic research and medicine.



An International Summit in Human Genetics and Genomics will help resource-poor countries build their knowledge base in genetics and genomics, and reduce the disparities in health, scientific knowledge and technologies between the developed and developing nations. Scientists, clinicians and health professionals will interact with experts in the field, establish collaborations and networks that will help them address their public health challenges and decrease the impact of genetic diseases in their nations.

## SUMMIT Goals

- To help developing nations build knowledge, infrastructure and systems to facilitate genetics and genomics in research and medicine.
- To expand the knowledge base and foster international collaborations in genetics and genomics.
- To integrate accurate genomic information and its related technologies in research and clinical practice.
- To introduce the concept of newborn screening for early detection of genetic disorders.
- To provide an understanding of the ethical, legal and social implications (ELSI) of genomic information.
- To provide tools to researchers and professionals to increase public and political awareness of the importance of genetics and genomics in healthcare.
- To reduce health disparities and the burden of disease and disability on the economies of developing nations.

## SUMMIT Program

- Cross-cutting talks across the spectrum in genetics and genomics.
- Two weeks of general talks in basic, clinical and computational genomics.
- Two weeks of advanced talks in specialties of interest to candidates.
- Laboratory training in state-of-the-art laboratories in cytogenetics, molecular genetics, biochemical genetics, newborn screening and clinical bioinformatics.
- In-depth training at world-renowned hospitals such as the Children's National Health System; INOVA Health System Hospitals; The Johns Hopkins Hospital; MedStar Washington Hospital Center; the National Institutes of Health Clinical Center; and the University of Maryland Medical Center.
- An introduction to next-gen sequencing, exome sequencing, gene panels, etc., for research, prevention, diagnosis and treatment of genetic disorders.
- Definition of the role of counseling and support groups in managing inherited diseases.

## How to Apply

### Who is eligible:

Early- to mid-career professionals, research scientists (Ph.D.), physicians (M.B.B.S./M.D.), dentists (D.D.S./D.M.D.), dentist-scientists, nurses (Ph.D./M.S.), counselors (Ph.D./M.S.), and graduate and medical, dental and graduate school trainees can apply. The curriculum will be in English. Selected candidates will be fully sponsored (travel, local transportation (in the US), lodging- same sex, 2 persons/ room, per diem).

### Where to apply:

Apply via e-mail to [mkaur@mail.nih.gov](mailto:mkaur@mail.nih.gov). Applications will be accepted till all seats are filled.

*Seats are limited, so please apply early.*

### What to include:

A CV/resume, three letters of recommendation (from supervisor/ employer, head/chair of department and professors for current trainees) and a cover letter (max three pages, excluding CV/ resume) indicating:

- Your interest in attending the Summit.
- The impact the Summit will have on your career in Genetics/Genomics.
- Your plans to implement the knowledge gained to address public health challenges in your nation.
- Your ability and commitment for continued evaluation over a 5-year period.

For more details on how to apply visit:

[genome.gov/InternationalSummit](http://genome.gov/InternationalSummit)

The first Summit is scheduled from September 1st – September 30th, 2016.

## Confirmed Speakers

Eric Green, M.D., Ph.D.  
Dan Kastner, M.D, Ph.D.  
Charles Rotimi, Ph.D.  
Lawrence Brody, Ph.D  
Leslie Biesecker, M.D.

Maximilian Muenke, M.D.  
Melissa Meredith, M.D.  
Paul Kruszka, M.D., M.PH.  
William Gahl, M.D., Ph.D.  
Ellen Sidransky, M.D.