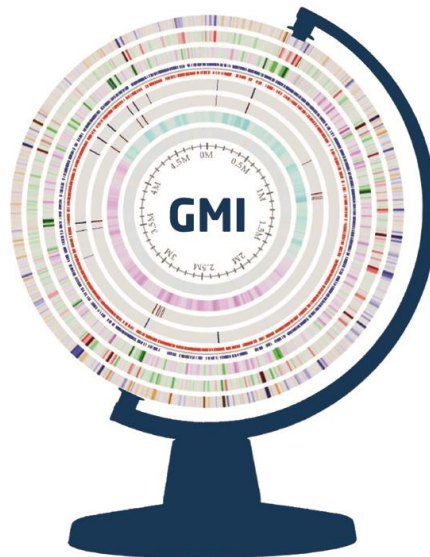


11th Global Microbial Identifier Program



Global Microbial Identifier

16 - 18 May 2018
Centre International de Conférences, Geneva, Switzerland

Tentative Programme

Last updated: 26.02.18

Day 1: Wednesday 16th May 2018

Interactive discussions on the impact of Whole Genome Sequencing on Global Health and Food Safety guided by The World Health Organization

Whole Genome Sequencing (WGS) allows the identification and characterization of microorganisms with a level of precision not previously possible. As the most sensitive and specific tool available today, it is revolutionizing the way in which countries detect, assess, investigate, manage and monitor disease threats. WGS enables cross-referenceable typing systems across animal, environmental, food and human sectors. WGS is a technology with the ability to more rapidly and accurately identify the source of an outbreak and track its evolution allowing for swift responses to be mounted, preventing cases and saving lives. It is also fast becoming an important tool for surveillance of antimicrobial resistance (AMR) and clinical management of communicable diseases. Realizing the true power of WGS as a tool for global health is dependent on the open and widespread sharing of pathogen sequence and relevant meta data.

Aim

To provide advice to WHO on the benefits and risks to global health of rapid, widespread sharing of sequence data and associated meta data and to highlight potential roles for WHO in this area of work.

Objectives

- To identify the short and long-term benefits to public health, clinical medicine, and biomedical research of global data sharing of sequence and metadata.
- To identify risks associated with any constraints to global data sharing of sequence and metadata.
- To identify the different roles WHO could play in global data sharing of sequence and meta data.

Format

The process will focus on facilitated discussion and consensus building. There will be limited presentations:

- OPENING: setting the scene
- Overview of WHO WGS activities
- Global data sharing and the meeting process and objectives

Day 2: Thursday 17th May 2018

Active Systems and Barriers to International Data Sharing		
08:30-08:50	Welcome – the future of WGS	
08:50-09:10	Active Systems and Overcoming NGS Barriers in the Developing World	Enrique Delgado, UNAM, MX
09:10-09:20	Genomic Data Sharing under Nagoya Protocol – Future International Initiatives	George Haringhuizen, RIVM, NL
09:20-09:40	The Vision of Sharing	Eric Stevens, US FDA, USA
09:40-10:00	Metagenomic Sewage Surveillance	Frank Moeller Aarestrup, DTU, DK
10:00-10:30	Discussion Panel: Data Sharing	
10:30-11:00 Coffee Break		
Advances in the Use of WGS in Clinical Microbiology and Functional Genomics		
11:00-11:20	Biology and Epidemiology of Shiga Toxin-Producing E. coli – NGS Investigations	Eelco Franz, RIVM, NL
11:20-11:40	Practical Issues in Implementing Next-Generation-Sequencing in Routine Diagnostic Microbiology	John WA Rossen, University of Groningen, NL
11:40-12:00	Prospective Genomic Surveillance in a Clinical Environment: Tracking Resistance and its Mobilization.	Lynn Bry, Harvard Medical School, USA
12:00-12:20	The Impact of Pathogen Genomics in U.S. Public Health	Greg Armstrong, US CDC, USA
12:20-12:40	NGS Provides Functional Insight into the Survival and Persistence of Bacterial Pathogens: The Case of Salmonella	Jie Zheng, US FDA, USA
12:40-13:50 Lunch		
NGS Proficiency Testing and New Areas		
13:50-14:10	Next Generation Sequencing Technologies for Plant Pest Diagnostics	Baldissera Giovani, EUPHRESKO, FR
14:10-14:30	UNSGM PT + GMI PT Bacs	Rene Hendriksen, DTU, DK
14:30-14:50		
14:50-15:10	Certification/PT issues in PulseNet /GenomeTrakr	Eija Trees and Ruth Timme -TBC
15:10-15:30	The CDC NGS Quality Survey	Eija Trees -TBC
15:30-16:00 Coffee Break		
AMR NGS and Accreditation of NGS Labs		
16:00-16:20	AMR Genes	David L. Trees, US CDC, USA
16:20-16:40	NARMS/Resistome Tracker	Patrick McDermott, US FDA, USA
16:40-17:00	The NCBI Pathogen Detection Browser: Integrating Antimicrobial Resistance Genotypes and Phenotypes	Bill Klimke, NCBI, USA
17:00-17:20	The EUCAST Consultations on WGS for Predicting Antimicrobial Susceptibilities	Matthew Ellington, Public Health England, UK - TBC
17:20-17:40	Establishment of Quality Control in PulseNet/GenomeTrakr	Eija Trees, US CDC / joint input from USFDA
Conclusion of Day 2		

Day 3: Friday 18th May 2018

NGS in One Health – Surveillance and Investigation		
08:30-08:50	Application of WGS in Food Establishments: One Health Context	Ivan Nastasijevic, Institute of Meat Hygiene & Technology, CS
08:50-09:10	The Impact of NGS at the Intersection of Good Agricultural Practices and Human Food Consumption	Rebecca Bell, US FDA, USA
09:10-09:30	NGS in the Detection of Genetic Exchange in Streptococci and Staphylococci from Food, Human and Animal Sources	Christoph Jans, ETH, Zurich, CH
09:30-09:50	Metagenomic Approaches for Complete Char. of Human Enteric Diseases	Heather Carleton, US CDC, USA
09:50-10:10	WGS in vectorborne diseases as an add-on to public health: when and why?	Nuno Faria, University of Oxford, UK-TBC
10:10-10:40 Coffee Break		
Use of NGS in Clinical and Public Health Virology		
10:40-11:00	Virome Profiling of Sewage for Human Disease Surveillance	My Phan, Erasmus MC, NL
11:00-11:20	One Health Surveillance and Risk Prediction in Influenza	Ron Fouchier, Erasmus MC, NL
11:20-11:40	Bringing NGS to Diagnostic Virology	Judith Breuer, UCL, UK
11:40-12:00	NGS in the Clinical Virology Lab: Possibilities and Challenges	Marion Koopmans, Erasmus MC, NL
12:00-12:20	Fast and Cost-effective Sequencing of RNA Virus Genomes in Clinical Samples	Alban Ramette, University of Bern, CH
12:20-12:40	Viromes As Genetic Reservoir for the Microbial Communities in Food-Associated Environments: A Focus on Antimicrobial-Resistance Genes	Diego Mora, University of Milan, ITL
12:40-13:00	GMI Proficiency Testing- Virus	Andreas Nitsche, RKI, DE
13:00-14:10 Lunch		
14:10-16:10	WG 1-4 Break-out Session	WG 1-4 Chairs
16:10-16:40 Coffee Break		
16:40-16:50	WG1 Outcome	Joergen Schlundt, NAFTEC, SG
16:50-17:00	WG2 Outcome	Bill Klimke, NCBI, USA
17:00-17:10	WG3 Outcome	Marion Koopmans, Erasmus MC, NL
17:10-17:20	WG4 Outcome	Rene Hendriksen, DTU, DK
17:20-17:50	Concluding Discussion	
Conclusion of Day 3		

Further details

The meeting will be held at the Centre International de Conférences (CICG). A list of suggested nearby accommodation, further details and updates of the programme are available at: <http://www.globalmicrobialidentifier.org/news-and-events/11th-meeting-on-global-microbial-identifier-in-genva-switzerland>.

For any enquiries, please contact Vibeke Dybdahl Hammer, vdha@food.dtu.dk.

Registration Register for your attendance at: <https://reg.unog.ch/event/23651/>