21st
Meeting
May 20-23, 2019
Vienna, Austria

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Agenda
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AGENDA
21st Genomic Standards Consortium Meeting

May 20th

Room “Alte Kapelle”
9:00 - 13:00 GSC Compliance and Interoperability working group session
(open meeting to all GSC21 attendees)

Room “Alte Kapelle”
13:00-17:00 GSC Board meeting (GSC Board members)

Room “Aula”
16:00-18:00 Doors Open, GSC21

18:00-18:45
Keynote: Mining sequence data -- GTDB taxonomy
Phil Hugenholtz - University of Queensland

18:45-22:00 Welcome Reception

May 21st - Room “Aula”

9:00-10:30 GSC21 Day 1 Opening Session

9:00-9:45
Welcome to GSC21 - University of Vienna
Thomas Rattei and Craig Herbold - University of Vienna

The Genomic Standards Consortium: Expanding MIxS Genomic Minimal
Information Standards and The National Microbiome Data Collaborative (NMDC)
Lynn Schriml - President, Genomic Standards Consortium
Institute for Genome Sciences, University of Maryland School of Medicine

9:50-10:10
Toward unrestricted use of public genomic data.
Nikos Kyrpides - DOE Joint Genome Institute

10:10-10:30
Evolving standards for 4D omic observation: The Global Omics Observatory Network and
the Microbial Essential Ocean Variable
Pier Buttigieg - MPI-Bremen

10:30-11:15 Coffee break and Posters

11:15 Qiagen - GSC21 Gold Sponsor
   Insights from integrating Omics Data across Research Projects
   Frank Schacherer - VP Products and Solutions

11:30-13:00 Towards Addressing The Reproducibility Crisis Session
Folker Meyer, Session Chair - Argonne National Laboratory
   11:30-11:50
   Carol Goble - Manchester, UK
   11:50-12:10
   EBI's use of CWL workflows
   Rob Finn - EMBL-EBI
   12:10-12:30 Discussion

13:00 GSC21 Group Photo

13:15-14:30 Lunch

14:30-16:30 Afternoon Workshops & Working Group Sessions
   • Benchmarking
   • Reproducibility
   • GOs : Genomic Observatories
   • GSCs role in developing MIGO - Minimum Information for Genomics Observatory

16:30-17:00 Coffee and Posters

17:00-18:00 University of Vienna historic main building tour

18:00-18:45
   Keynote: Biobanking BBMRI-ERIC
   Kurt Zatloukal - Medical University of Graz

May 22nd Room “Aula”

9:00 Opening, GSC21 Day 2

9:10-10:30
Standards and Bioinformatics For Emerging Fields Of Genomics Session

Nikos Kyrpides - Session Chair - DOE Joint Genome Institute
Scott Tighe - Session Chair - University of Vermont

9:10-9:30
Standards for Biosynthetic gene clusters
**Michelle Schorn** - Wageningen University, Netherlands

9:30-9:50
GBOL - an ontology enforcing consistent genome annotation using ShEx definitions
**Jasper Jan Koehlerst** - Wageningen University, Netherlands

9:50-10:10
MIGO - Minimum Information for Genomics Observatory - role of GSC in developing these standards
**Neil Davies** - Moorea, French Polynesia

10:10-10:30
Characterizing Genomes of Rare and Novel Originals
**Scott Tighe** - University of Vermont

10:30-11:15 Coffee break

11:15 Phase Genomics - GSC21 Titanum Sponsor
**Ivan Liachko** - CEO Phase Genomics

11:30-13:00 Metabolomics - Genomics Session
**Claire O'Donovan** - Session Chair - Head of Metabolomics, EMBL-EBI

11:30-11:50
Integrating UniProt with the other ‘omics
**Maria Jesus Martin** - Protein Function Development Team Leader, EMBL-EBI

11:50-12:10
The metabolomics use case for the Enzyme portal
**Keeva Cochrane** - Metabolomics team, EMBL-EBI

12:10-12:30
The challenges facing the integration of metabolomics with the other omics and discussion
**Claire O'Donovan** - Head of Metabolomics, EMBL-EBI

12:30-12:50
The Mosaic Challenge
**Scott Jackson** - National Institute of Standards and Technology
13:00-14:30 Lunch

14:30-16:30 Afternoon Workshops & Working Group Sessions

**Virus taxonomy and standards**
Simon Roux - DOE Joint Genome Institute

- **14:30-15:00** Longitudinal virome dynamics in infants - Jelle Matthijnsens
- **15:00-15:30** The long and the short of it: Cryptic and abundant viral populations revealed by long-read metagenomics  
  Joanna Warwick - University of Exeter
- **15:30** Roundtable: Measures and criteria for the definition of taxonomic ranks (across all domains of life + viruses)

**Compliance and Interoperability Workshop**
Ramona Walls - CyVerse

18:00 Keynote and GSC21 Conference Dinner at Restaurant “Heuriger 10er Marie”, Ottakringer Str. 222/224, 1160 Vienna

- **18:00-18:45**  
  Keynote: *Is predicting function from meta-omics data possible?*  
  Michael Wagner - University of Vienna

- **18.45** GSC 21 conference dinner

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**May 23rd Room “Aula”**

9:00 Opening, GSC21 Day 3

9:15-10:30 Standards In Medical Genomics Session
Christoph Bock - Session Chair  
Research Center for Molecular Medicine of the Austrian Academy of Sciences

- **9:15-9:35** Christoph Bock

  - **9:35-9:55** Clinical Interpretation of Human Sequence Variants: Standard Guidelines vs Real World Practice  
    Manop Pithukipakorn - Faculty of Medicine Siriraj Hospital

- **10:00-11:00** Coffee break
11:00-12:00 Functional Annotation - From Sequence to Function Session
Michael Wagner - Session Chair - University of Vienna

11:00-11:20
Illuminating the functional dark side of genomics and metagenomics
Antonio Fernandez - Max Planck Institute

11:20-11:40
Function without sequence - Cyanate and urea as substrates for marine Thaumarchaeota
Katharina Kitzinger - University of Vienna

12:00 GSC22 Hand Off

12:30 Close GSC21 - Lunch

GSC21 Satellite Meetings
Location: “Alte WU” UZA1 Campus Althanstrasse, Rooms C546/C547

May 24 - Cyanobacteria Nomenclature and Taxonomy
Satellite Meeting
Organizers: Phil Hugenholtz, Rochelle Soo
In this satellite meeting we will discuss the current issues of the nomenclature in the Cyanobacteria, propose a phylogenetic framework and try to determine nomenclature rules for populating the structure. The meeting will consist of speakers, a discussion and an annotation jamboree.

May 23-24 - GOs/GLOMICON satellite meeting
The Global Omics Observatory Network (GLOMICON) - combining Microbial. Essential Ocean Variable (EOV) ontologies.

Organizers: Neil Davies, Pier Luigi Buttigieg, John Deck, Chris Meyer, Ramona Walls
This satellite meeting will take place on afternoon of Thursday (23 May) and through Friday (noon or 5pm) 24 May. The agenda will address future directions of GOs Network and GLOMICON.