

# 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

#### 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 Koehorst - 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 Matthijnssens

**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:** <u>Is predicting function from meta-omics data possible?</u> **Michael Wagner - University of Vienna** 

18.45 GSC 21 conference dinner

# 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.