

The 20th Genomic Standards Consortium Meeting

Date: May 1-4, 2018

Location: Atkinson Hall- UC San Diego, California, USA

GSC 20's 3-day meeting will highlight the nexus of genomic standards, microbiomes and advances in metabolomics, immunome and taxonomy.

Time	Wednesday, May 2 nd , 2018	Thursday, May 3 rd , 2018	Friday, May 4 th , 2018
	Theme: Metabolomics	Theme: Immunome	Theme: Taxonomy
8:30 am	doors open, check-in		
9:00 – 9:15	Meeting Kickoff: GSC President Lynn Schriml Keynote Introduction: Rob Knight - Ilkay Altintas UCSD SDSC	Keynote Introduction: Margaret Leinen Director, Scripps Institution of Oceanography, Vice Chancellor, University of California-San Diego	Keynote Introduction: Sandrine Miller-Montgomery UCSD
9:15 – 10:00	Keynote 1: Pieter Dorrestein UCSD The past, present and future of data in metabolomics and what impact standards will have.	Keynote 2: Rita Colwell University of Maryland College Park The role of standards in integrating environmental microbiology and human health.	Keynote 3: Michael Karin UCSD Gut Liver Crosstalk in HCC - is there a role for specific microbial species?
10:00 – 10:30	Morning Break	Morning Break	Morning Break
10:30 – 12:30 (30 min)	Session Chair: Lynn Schriml Speakers: <ul style="list-style-type: none"> ● Evan Bolton NCBI PubChem The need for standards in chemical information. ● Claire O'Donovan EBI Metabolics Metabolomics repositories, standards and challenges. ● Andrew Allen JCVI New Insights from Standardized Quantitative Methodology for Environmental and Functional Genomics Studies of Marine Eukaryotic Microbes. ● Gary Siuzdak Scripps Center for Metabolomics Activity Metabolomics. 	Session Chair: Granger Sutton Speakers: <ul style="list-style-type: none"> ● Victor Nizet UCSD New Examples of Detection and Deception at the Host-Pathogen Interface. ● Julie Robinson International Space Station, NASA Exploring Microbiome/Immunome and Disease on the International Space Station. ● Randi Vita Immunome Database, IEDB The Microbiome and Immunogenicity. ● Brittany Needham CalTech Bacterial Production of a Single Gut Metabolite Induces Changes in Mouse Behavior. 	Session Chair: Speakers: Pelin Yilmaz <ul style="list-style-type: none"> ● Bonnie Hurwitz University of Arizona Large-scale microbial phylogeny. ● Thomas Rattei University of Vienna Polyproteins: an obstacle for virus genome annotation. ● Rodney Brister NCBI NCBI Virus Project. What's in my tube? Why viral taxonomy matters. ● Karsten Zengler UCSD EcoFab.
12:30 – 13:30	LUNCH	LUNCH	LUNCH

<p>13:30 – 15:15</p> <p>(20 min)</p>	<p>Big Data, Metabolomics and Standards</p> <p>Session Chair: Neil Davies</p> <ul style="list-style-type: none"> ● Scott Jackson NIST (Sponsor) IMMSA: International Microbiome and Metagenomics Standards Alliance. Measurement Assurance for Innovation in Microbiome Science. ● Emiley Eloie-Fadrosh JGI, Metagenomic Program Towards the development of a National Microbiome Data Collaborative. ● Michalis Hadjithomas DNAexus Mosaic Standards Challenge and DNAexus. ● Idan Gabdank Stanford ENCODE DCC data modeling and metadata standardization vignettes. ● Han-Yu Chuang Illumina (Sponsor) Standardization of clinical Whole Genome Sequencing. 	<p>Immunome and Microbiome Big Data</p> <p>Session Chair: Folker Meyer</p> <ul style="list-style-type: none"> ● Shuiquan Tang Zymo Research (Sponsor) Improving the Accuracy and Reproducibility of Microbiome Measurements. ● Nolwenn M. Dheilly Stony Brook University Parasite Microbiome Project. ● Kevin Dudley Queensland University of Technology Epigenetic Standards. ● Elisha Wood-Charlson University of Hawai'i at Mānoa EarthCube, environmental 'omics data integration and strategies for community engagement. ● Guy Cochrane EBI/ENA EBI Metagenome Exchange registry. 	<p>Taxonomy, Databases, Standards</p> <p>Session Chair: Jim Cole</p> <ul style="list-style-type: none"> ● Simon Roux JGI Establishing standards and best practices for describing genome sequences from uncultivated viruses. ● Pelin Yilmaz Max Planck Institute for Marine Microbiology Metadata Standards for Genomic Sequence Data - MIxS Standards Family. ● Neil Davies University of California Berkeley Genomics Observatories / Biocode Commons. <p>Handoff GSC21 Vienna (May 2019)</p> <p>Meeting Close</p>
<p>15:15 – 15:45</p>	<p>Afternoon Break</p>	<p>Afternoon Break</p>	<p>Afternoon Break</p>
<p>15:45 – 16:45</p>	<p>Breakout sessions:</p> <p>GNPS demo Linking metabolome to microbiome data layers Pieter Dorrestein</p> <p>MIxS future directions GSC Compliance and Interoperability Working Group Ramona Walls, Jim Cole, Pelin Yilmaz</p>	<p>Breakout Sessions:</p> <p>Genomic Biodiversity Working Group update. Neil Davies</p> <p>C&I compliance and interoperability Folker Meyer, Pelin Yilmaz</p>	<p>Breakout Sessions:</p> <p>Coordination across Standards Initiatives Jim Cole, Pelin Yilmaz</p>
<p>16:45 – 17:00</p>		<p>Group Photo</p>	
<p>17:00</p>		<p>Reception</p>	