March. 4	Kingkey Palace Hotel		
14:00-22:00	Registration		
March. 5	Ballroom I & $I\!I$, -1F, Kingkey Palace Hotel		
Projects	Keynote and Introduction to GSC and the Importance of Standards in Megasequencing Projects		
Chair: Dr. Jack	A Gilbert (University of Chicago/Argonne National Laboratory, USA)		
08:30-09:15	Keynote Talk: The Role of Contextual Data in Making Sense of Genomes and Metagenomes Rita Colwell (University of Maryland, USA).		
	The Genomic Standards Consortium (GSC)		
09:15-09:45	Dawn Field (Centre for Ecology and Hydrology, UK)		
09:45-10:00	Sequencing, Sequencing, and Sequencing Jun Wang (BGI, China)		
10:00-10:30	Group Photo & Coffee Break		
MegaGenome	Projects I: Animal and Plant Megagenomics		
_	Amaral-Zettler (Marine Biology Laboratory, USA) & Tatiana Tatusova		
	er for Biotechnology Information, USA)		
5 min introduc			
	Genome Assembly and Functional Study of Oyster		
	Xiaodong Fang (BGI, China)		
	The International Oryza Map Alignment Project		
	Rod Wing (Arizona Genomic Institute, USA)		
10:30-12:00	Rice reference genome assembly and database services in Japan		
	Takeshi Itoh (National Institute of Agrobiological Sciences, Japan)		
	The BGI Plant Reference Genomes Project		
	Xun Xu (BGI, China)		
12:00-13:30	Lunch Feast Restaurant, 1F, Kingkey Palace Hotel		
	Projects II: Viral Megagenomics		
_	ng (Centre for Ecology and Hydrology, UK) & Yiming Bao (National Center for		
	Information, USA)		
5 min introduc	•		
3 mm merodae	Clinical Metagenomics for Diagnosis and Discovery of Viral Pathogens		
	Charles Chiu (University of California, San Francisco, USA)		
	Uncovering the Plant Virome: Problems and Solutions		
	Ulrich Melcher (Oklahoma State University, USA)		
13:30-15:40			
	Standardizing Metadata Associated with NIAID Genome Sequencing Contor Projects and their Implementation in NIAID Riginformatics		
	Center Projects and their Implementation in NIAID Bioinformatics Resource Centers		
	Richard Scheuermann (U.T. Southwestern Medical Center, USA)		

	Viral metagenomic analysis of several bat populations and fresh water samples
	Zhengli Shi (Wuhan Institute of Virology, CAS, China)
	Viral high-throughput next generation sequencing at JCVI
	Timothy Stockwell (J. Craig Venter Institute, USA)
	Viral discovery by metagenomics sequencing of clinical samples
	Gane Ka-Shu Wong (University of Alberta, Canada)
15:40-16:00	Coffee Break
MegaGenome	Projects III: Fungal Megagenomics.
Chair: Linda Aı	maral Zettler (Marine Biological Laboratory, USA)
5 min introduc	tion by Chair
	Bioinformatic Portal System for Fungal Functional, Comparative and Evolutionary Genomics Jaeyoung Choi (Seoul National University, Korea)
	Exploring the microbial world multiple cells at a time!
16:00-17:30	Patrick Chain (Los Alamos National Laboratory, USA)
10.00-17.30	Fungi Indoors: Creating the Appropriate Databases for Fungal Research
	Jason Stajich (University of California, Riverside, USA)
	UNITE database for molecular identification of fungal communities in
	metagenomic studies.
	Kessy Abarenkov (University of Tartu, Estonia)
17:30-17:50	Coffee Break
	Evening Lecture: Genomics, Metagenomics and Data Standards
17:50-18:50	James Tiedje (Michigan State University, USA), introduced by Dr. Dawn Field (CEH, UK)
19:30	Banquet Ballroom III & IV, -1F, Kingkey Palace Hotel
March. 6	Ballroom I & II , -1F, Kingkey Palace Hotel
	Morning Lecture: Confronting the Rare Biosphere
08:30-09:00	Mitchell Sogin (Marine Biological Laboratory, Woods Hole, USA), introduced
08.30-03.00	by Dr. Frank Oliver Glöckner (Max Planck Institute for Marine Microbiology,
	Germany)
	ost-associated Biome Projects
	rsch-Mizrachi (National Center for Biotechnology Information, USA)
5 min introduc	T
	PanOCT: Automated Clustering of Orthologs Using Conserved Gene
	Neighborhood for Pan-Genomic Analysis of Bacterial Strains and Closely
9:00-10:00	Related Species
3.00 20.00	Granger Sutton (J. Craig Venter Institute, USA)
	MetaHIT: Exploring the Human Microbiome
	Junjie Qin (BGI, China)

	The Moulet Missehisms Dusiest, Funlaving the Deletionship Detugen	
	The Merlot Microbiome Project: Exploring the Relationship Between Plant Associated Microbes and the Health and Wealth of Merlot Vines	
	Jack Gilbert (University of Chicago/Argonne National Laboratory, USA)	
	Ant Microbiome: Exploring the Host-associated Microbiome of Ant	
	Species	
	Corrie Moreau (Field Museum of Natural History, USA)	
10:00-10:30	Coffee Break	
	tagenomics Projects	
Chair: Folker Meyer (Argonne National Laboratory, USA)		
5 min introduc		
	Utra High-throughput Microbial Ecology: Software, Sequencing and	
	Practice for Studying Tens of Thousands of Environments	
	Greg Caporaso (University of Northern Arizona, USA)	
	The Earth Microbiome Project: A New Paradigm in Geospatial and	
	Temporal Studies of Microbial Ecology	
	Jack Gilbert (University of Chicago/Argonne National Laboratory, USA)	
	Mining Soil Metagenomes for Meaning	
10:30-12:30	James Tiedje (Michigan State University, USA)	
	Cryptic Drivers of Soil Microbial Diversity	
	Jacob Parnell (NEON INC, USA)	
	Plankton community genomics in the Tara-Oceans expedition	
	Patrick Wincker (Genoscope, France)	
	Microbes Thriving in the Hot Subsurface Australian Aquifers	
	Bharat Patel (Griffith University, Australia)	
12:30-13:30	Lunch Feast Restaurant, 1F, Kingkey Palace Hotel	
Towards a Ge	nomic Observatories Network	
Chair: Dawn F	ield ((Centre for Ecology and Hydrology, UK)	
10 min introdu	uction by chair	
	The Moorea Genomic Observatory	
	Neil Davies (UC Berkeley - Moorea, USA)	
	The L4 Genomic Observatory	
	Jack Gilbert (University of Chicago/Argonne National Laboratory, USA)	
	The Promise of 'Site-based' Research: MIRADA -LTER Project	
	Linda Amaral-Zettler (Marine Biological Laboratory, Woods Hole, USA)	
13:30- 15:00	The Micro B3 Project: Biodiversity, Bioinformatics, Biotechnology	
	Frank Oliver Glöckner (Max Planck Institute for Marine Microbiology,	
	Germany)	
	Building Linkages Between Genomic Observatories and GEO BON	
	Makiko Mimura (Kyushu University, Japan)	
	Open Discussion with Speakers in Panel session	
	What is the special value of 'site-based' genomic research?	
	How do we define a 'genomic observatory'?	

	How should we build the Network?		
15:00-15:30	Coffee Break		
Policies and St	licies and Standards for Reproducible Research: From Theory to Practice		
Chairs: Susann	Chairs: Susanna-Assunta Sansone (University of Oxford, UK) & Scott Edmunds		
(GigaScience, BGI, China)			
15:30-17:30	An Overview of the Evolving Portfolio of Data Sharing Enablers: BioSharing Susanna-Assunta Sansone (University of Oxford, UK) Revolutionizing Data Dissemination: GigaScience Scott Edmunds (GigaScience, BGI, China) Funders: The US National Science Foundations Perspective Rita Colwell (University of Maryland, USA) Case Study: Alfred P. Sloan Foundation's Microbiology of the Built Environment Program Paula J. Olsiewski (Alfred P. Sloan Foundation, USA) Breaching the Single Bio-domain Share Reproducible Research, Transcending Individual Life Science Domains: ISAcommons Philippe Rocca-Serra (University of Oxford, UK) Sharing and Not Sharing, the MG-RAST Experience Folker Meyer (Argonne National Laboratory, USA) From Open Data Sharing to Insights Via Community Participation: A Structural Genomics Case Study Srikrishna Subramanian (Institute of Microbial Technology, India) "AppStore" in Life Science with OMICS Data Content, BGI-GeneBank Project Yong Zhang (BGI, China) Editors TBA Clare Garvey (Genome Biology/BioMed Central) Perspective from Nature Biotechnology on data standards and policies Craig Mak (Nature Biotechnology/Nature PG)		
17:30-19:00	BGI Visit (OPTIONAL)		
18:30	Dinner Feast Restaurant, 1F, Kingkey Palace Hotel		
March. 7	Ballroom I & $I\!I$, -1F, Kingkey Palace Hotel		

The Alfred P Sloan Foundation Microbiology of the Built Environment Session

Chair: Jack A. Gilbert (University of Chicago/Argonne National Laboratory, USA) 5 min introduction by Program Officer - Paula J. Olsiewski (Alfred P. Sloan Foundation) The Indoor Standards - What Parameters Do We Need to Record?

Jeffrey Siegel (University of Texas at Austin, USA)

Minimal Metadata for the Built Environment: A MIxS Extension

Lynn Schriml (University of Maryland, USA)

The Home Microbiome Project: Unraveling the Relationship Between

Human-associated and Home-associated Microbial Signatures.

Jack Gilbert (University of Chicago/Argonne National Laboratory, USA)

The Indoor Virome!

Scott Kelley (San Diego State University, USA)

The Role of VAMPs in the MoBEDAC Initiative

Mitchell Sogin (Marine Biological Laboratory, Woods Hole, USA)

MoBEDAC - Handling Fungal Data From MicroBE

Jason Stajich (University of California, Riverside, USA)

MoBeDAC - Integrated data and analysis for the indoor and built environment

Folker Meyer (Argonne National Laboratory, USA)

10:30-11:00 | *Coffee Break*

The RCN4GSC GSC Biodiversity Working Group (GBWG) Session

Chairs: Bob Robbins (UC San Diego, USA) & Norman Morrison (University of Manchester, UK)

GBWG Meeting Updates, to Include: 1) Update on GBWG Session at TDWG, 2) Update on DwC / MiXS Alignment Meeting at JGI, Walnut Creek. 3) Update on GBIF / GSC Meeting at OERC, Oxford. Followed by Future Directions, Including Roadmap for Upcoming Meetings and Event Bob Robbins (UC San Diego, USA)

The BioVel Project and the Role to Play by Megasequencing Projects Norman Morrison (University of Manchester, UK)

The MicroB3 Project

Frank-Oliver Glöckner (Max Planck Institute for Marine Microbiology, Germany)

11:00 - 12:30

TBA

James Tiedje (Michigan State University, USA)

How Can We Coordinate Megasequencing Projects to Our Advantage. Thoughts on Model Ecosystems

Neil Davies (UC Berkeley - Moorea, USA)

Beyond the Census of Marine Life: The Life in a Changing Ocean Initiative Linda Amaral-Zettler (Marine Biological Laboratory, USA)

Discussion - 'Agile' discussion topics are to be put forward by the session chairs. Possible discussion topics include: Microbial Biodiversity: Ecosystem Puppeteers or Marionettes? Are taxonomies still relevant with the rapid progression of megasequencing projects? The biodiversity discussion sessions are lively and we encourage you to join in.

12:30-14:00	Lunch Feast Restaurant, 1F, Kingkey Palace Hotel
GSC Projects ar	
_	erk (University of Oxford, UK) & Lynn Schriml (University of Maryland, USA)
	The MIxS Family of GSC Standards
	Pieter Sterk (University of Oxford, UK) & Lynn Schriml (University of
	Maryland, USA)
	GSC's eJournal Standards in Genomic Sciences (SIGS)
	George Garrity (Michigan State University, USA)
	The GSC MIxS Compliance and Interoperability Group
14:00-15:30	Pieter Sterk (University of Oxford, UK)
	The M5 (Metagenomics, Metadata, MetaAnalysis, Models and
	MetaInfrastructure) Working Group
	Folker Meyer (Argonne National Laboratory, USA)
	The GSC Biodiversity Working Group
	Bob Robbins (UC San Diego, USA) & Norman Morrison (University of
	Manchester, UK)
15:30-16:00	Coffee Break
	Hands On and Parallel Sessions
	a) MIxS Working Group
	Chair: Pieter Sterk (University of Oxford, UK) & Lynn Schriml (University
	of Maryland, USA)
	In this session we will give a brief introduction to the MIxS checklists. In
	addition, we will give an overview of curation and data submission tools
	and discuss further needs of researchers to generate MIxS compliant
	reports.
	b) M5 Working Group Towards Better Standards for Computed Results
	Chair: Folker Meyer (Argonne National Laboratory, USA)
	The data deluge (or data bonanza) has created a series of novel problems
46.00.47.00	in biology. Simply exchanging sequence data is not sufficient. The
16:00-17:30	community has to work towards standards that enable exchanging higher
	level data products, the results of computational analyses. We will be
	describing the current state of the "ecosystem", open issues and the current plan for the path forward. Existing standards will be discussed.
	c) Virus Standards Working Group
	Chair: Yiming Bao (NCBI, USA) & Hui Wang (CEH, UK)
	This session will discuss ways to harmonize community based viral
	metadata standards with MIGS/MIMS and those of other resources such as
	the NCBI's BioSample database; what type of NGS data should be captured,
	where and how they should be captured; whether it is necessary to give
	special isolate names for viruses whose sequences are generated through
	meta-genomics, and if so how such names should be formed and
	standardized.
	Standardized.

	17:40-18:00	Closing Session: Handing Over GSC13 to GSC14 Jack Gilbert & Dawn Field
ľ	18:00-19:00	GSC Board Meeting