

NORTH AMERICA USER GROUP MEETING

SEPTEMBER 19-20, ST. LOUIS, MO
EPNEC LOBBY

Day 1

Wednesday, September 19



8:00 - 8:55 a.m. Registration and Continental Breakfast

9:00 - 9:20 a.m.

Welcome and Introduction

Jonas Korlach, Ph.D., Chief Scientific Officer, PacBio

9:20 - 9:45 a.m.

The Trials and Tribulations of High Quality Human Genome Assembly

Tina Graves-Lindsay, M.S., Group Leader for Reference Genomes, McDonnell Genome Institute (MGI), Washington University School of Medicine in St. Louis

9:45 - 10:10 a.m.

From Barcodes to Biomes: Surveying Non-arthropod Diversity through DNA Barcoding of Arthropods

Evgeny Zakharov, Ph.D., Director, Canadian Centre for DNA Barcoding

10:10 - 10:20 a.m.

Platinum Sponsor Presentation: Advanced Analytical Technologies - A part of Agilent

FEMTO Pulse® QC Checkpoints Optimize and Accelerate Large Insert SMRTbell® Library Preparations for PacBio

Bruce Kingham, M.S., Director, DNA Sequencing & Genotyping Center, Delaware Biotechnology Institute, University of Delaware

10:20 - 10:30 a.m.

Platinum Sponsor Presentation: Phase Genomics

FALCON-Phase: Phased Diploid Assemblies through Integration of PacBio and Hi-C Data

Zev Kronenberg, Ph.D., Senior Computational Biologist

10:30 - 11:10 a.m. Coffee Break

11:10 - 12:25 p.m.

Breakout Rotation 1*

12:25 - 1:40 p.m. Lunch

1:40 - 2:55 p.m.

Breakout Rotation 2*

3:00 - 3:25 p.m.

Development, Validation, and Applications of a High-fidelity, Species-specific, Eubacterial Pan-domain Microbiome Assay on the PacBio System

Garth D. Ehrlich, Ph.D., Professor of Microbiology and Immunology, and Otolaryngology-head and Neck Surgery, Drexel University College of Medicine

3:25 - 4:00 p.m. Coffee Break

4:00 - 4:25 pm

Structural Variant Calling in SMRT® Link 6.0 (powered by pbsv)

Jonas Korlach, Ph.D., Chief Scientific Officer, PacBio
Roberto Lleras, Bioinformatic Field Application Scientist, PacBio

4:25 - 4:50 p.m.

The Molecular Foundation for Wiring the Nervous System – Iso-Seq and Combinatorial Receptors

Thomas Ray, Ph.D., Postdoctoral Fellow, Department of Ophthalmology, Duke University

4:50 - 5:00 p.m.

Recap Day 1 and Preview for Day 2

Jonas Korlach, Ph.D., Chief Scientific Officer, PacBio

5:30 p.m.

Depart for City Museum (buses load from the EPNEC lobby)

6:00 - 9:00 p.m. Reception at City Museum

Join us for a casual evening – wear comfortable attire and closed toe/tennis shoes if possible. We will have full access to the museum which includes multiple slides, tunnels and various attractions.

* Breakouts will rotate through the following topics:

- "SMRT Sequencing Project Success: Start to Finish"
- "The Why, What, and How of the Iso-Seq Method: Using Full-Length Transcriptome Sequencing to Annotate Genomes and Solve Diseases"
- "Evolving SMRT Sequencing Applications"

NORTH AMERICA USER GROUP MEETING

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Day 2

Thursday, September 20



8:00 - 8:55 a.m.

Continental Breakfast

9:00 - 9:10 a.m.

Welcome: Day 2

Jonas Korfach, Ph.D., Chief Scientific Officer, PacBio

9:10 - 9:35 a.m.

SMRT-Enabled Clinical Assay for Characterizing the Mutant Transcript in Huntington's Disease

Nenad Svrzikapa, Data Scientist, WAVE Life Sciences

9:35 - 9:45 a.m.

Platinum Sponsor Presentation: Sage Science

Catching Large DNA in the SageHLS

Chris Boles, Ph.D., Chief Scientific Officer

9:50 - 11:05 a.m.

Breakout Rotation 3*

11:05 - 11:35 a.m.

Coffee Break

11:35 - 12:55 p.m.

Lightning Talks: Fast-paced Updates from our User Base

Iso-Seq as a Service: Pro Tips for Starting from RNA

Katy Munson, Research Technician, Department of Genome Sciences, University of Washington

SMRT Multiplexing to Sequence Tough Repeats in Plant Pathogenic Bacteria

Jonathan Jacobs, Ph.D., Assistant Professor, Department of Plant Pathology, The Ohio State University

A Promoter Crystal Ball: How to Use Low-Coverage PacBio® Data to Find Promoters in Non-Model Insects

Marcé D. Lorenzen, Ph.D., Associate Professor, Department of Entomology and Plant Pathology, North Carolina State University

Microbial Multiplexing for Fun and Profit: A Full-Workflow Case Study on a Collection of Diverse Isolates

Ben Auch, Innovation Lab, Genomics Center, University of Minnesota

The Long and Short of It: PacBio Amplicon Sequencing Applications

Dave Corney, Ph.D., Senior Scientist, Next-Generation Sequencing, GENEWIZ

Speaker Panel Q&A

12:55 - 1:55 p.m.

Lunch

1:55 - 2:20 p.m.

TrioBinning: Trio-Based Assembly

Sergey Koren, Ph.D., Staff Scientist, Genome Informatics Section, National Human Genome Research Institute (NHGRI), National Institutes of Health (NIH)

2:20 - 2:45 p.m.

Application of Genome Assembly in Bovinae Species

Timothy Smith, Ph.D., Molecular Geneticist, USMARC, USDA-ARS

2:45 - 3:00 p.m.

Future Developments in SMRT Sequencing

Jonas Korfach, Ph.D., Chief Scientific Officer, PacBio

3:00 p.m.

Depart for flights / hotels

**Thanks to our
Partners:**

