

NORTH AMERICA USER GROUP MEETING

SEPTEMBER 25-26,
UNIVERSITY OF DELAWARE
CLAYTON CONFERENCE CENTER

Day 1

Wednesday, September 25



8:00 - 8:55

Registration and Continental Breakfast

9:00 - 9:10

Welcome to the University of Delaware!

Bruce Kingham, Director, Sequencing & Genotyping Center, University of Delaware

9:10 - 9:40

Sequencing Chemistry & Application Updates

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

9:40 - 10:05

Using Grizzly Bears to Unlock the Biomedical Promise of Hibernation

Shawn Trojahn, Ph.D. Student, Washington State University

10:05 - 10:25

Platinum Sponsor Presentation: Agilent

Getting a Read on One Little Worm with PacBio's Low DNA Input Workflow and the Agilent Femto Pulse System

Erin Bernberg, Ph.D., Senior Scientist, University of Delaware

10:25 - 11:05

Coffee Break

11:05 - 11:30

Improved Assembly of Segmental Duplications Using HiFi

Mitchell Vollger, Ph.D. Candidate, University of Washington

11:30 - 11:55

Unbiased Characterization of Metagenome Composition and Function Using HiFi Sequencing on the PacBio® Sequel® II System

Meredith Ashby, Sr. Staff Scientist, PacBio

11:55 - 1:05

Lunch

1:05 - 2:05

Breakout Rotation 1*

2:10 - 2:35

From Long Reads to Transcript Function: Bioinformatics Tools for Iso-Transcriptomics Analysis

Ana Conesa Cegarra, Ph.D., Professor of Bioinformatics, University of Florida

2:35 - 2:55

Platinum Sponsor Presentation: Covaris

High-Throughput Cell Lysis and Nucleic Acid Extraction Powered by AFA Technology

Eugenio Daviso, Ph.D., Director of Applications, Covaris

2:55 - 3:25

Break

3:25 - 4:25

Breakout Rotation 2*

4:30 - 4:55

Setting Expectations and Sifting Through the Stinkers: A Core Lab Perspective

Shana McDevitt, Director, Genome Sequencing Lab, University of California, Berkeley

4:55 - 5:00

Recap of Day 1 and Preview for Day 2

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

5:15 - 5:35

Depart for Winterthur Museum, Garden, & Library

Buses will load from the Clayton Conference Center starting at 5:15. Last bus will depart at 5:35. Locals may drive personal vehicles but are welcome to use the busses for convenience.

5:45 - 8:30

Reception at Winterthur Museum, Garden & Library

Join us for a casual evening exploring one of the DuPont family mansion grounds, nestled in the heart of Delaware's beautiful Brandywine Valley. We will tour part of the 60-acre garden then meet at the museum for a reception and access to exhibits, including Costuming The Crown featuring crowns, costumes and history from the award-winning Netflix series.

* Check the back of your name badge for your breakout schedule and room assignments. This year's breakout topics are:

1 **Wet Lab Updates: New Tools and Best Practices to Increase Success**

2 **Bioinformatic Updates: Going from Data to Discovery**

3 **Choose Your Own Adventure:**

Options to maximize your experience! Use this hour to choose one option, or float among all four:

- **Core Director Panel:** Moderated small group discussions with our Certified Service Providers will provide new perspectives and ideas, troubleshooting help, and networking opportunities
- **Clinical Research Spotlight:** Moderated small group discussions will offer ideas and networking for those interested in clinical research applications
- **Meet our CSO:** Casual small group discussions with Dr. Jonas Korfach on a drop-in basis
- **Workflow Partner Meetings:** Visit our sponsors who each provide an important component to the SMRT Sequencing workflow and collect limited edition trading cards at each table



NORTH AMERICA USER GROUP MEETING

SEPTEMBER 25-26,
UNIVERSITY OF DELAWARE
CLAYTON CONFERENCE CENTER

Day 2

Thursday, September 26



8:00 - 8:55

Registration and Continental Breakfast

9:00 - 9:05

Welcome Day 2

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

9:05 - 9:30

Sequel II: Enabling SMRT® Sequencing for All

Melissa L. Smith, Ph.D., Assistant Director of Technology Development, Icahn School of Medicine at Mount Sinai, Icahn Institute of Data Science and Genomic Technology

9:30 - 9:50

Platinum Sponsor Presentation: Sage Science

Targeted PacBio Sequencing using Sage HLS-CATCH

Ethan Ellis, Ph.D., Associate Researcher, Icahn Institute for Data Science and Genomic Technology, Icahn School of Medicine at Mount Sinai

10:00 - 11:00

Breakout Rotation 3*

11:00 - 11:30

Break

11:30 - 12:40

Lightning Talks: Fast-Paced Updates from our User Base

The Future of Iso-Seq on Sequel II

Nancy Francoeur, Ph.D., Technology Development, Department of Genetics and Genomic Sciences, Icahn School of Medicine and Mount Sinai

RADAR-seq: Utilizing PacBio SMRT Sequencing to Detect and Quantitate DNA Damage on a Genome-Wide Scale

Kelly Zatopek, Ph.D., Research Scientist, NEB

Delineation of Complex Genomic Alterations via Iso-Seq in a Comprehensive Genomic Profiling Protocol for Pediatric Cancer

Vince Magrini, Ph.D., Sr. Director, Institute of Genomic Medicine, Nationwide Children's Hospital

Modulation of Gut Microbiome in Mice with Differential Susceptibility to Colonic Ulceration

Masako Nakanishi, Ph.D., Assistant Professor, The University of Connecticut Health Center

Multiple Expressed Isoforms of TIN2 Stimulate Human Telomerase

Alexandra M. Pike, Ph.D., Postdoctoral Fellow, Massachusetts Institute of Technology

New Genotype to Phenotype Associations in Viral Metagenomes Enabled by SMRT Sequencing

Shawn Polson, Ph.D., Director, Bioinformatics Core Facility, University of Delaware

12:40 - 1:50

Lunch

1:50 - 2:15

Long-read RNA Sequencing in Neglected Human Parasites

Nic Wheeler, Ph.D., Postdoctoral Fellow, University of Wisconsin-Madison

2:15 - 2:40

Sequencing at Scale: How Pacific Biosciences Enables High Throughput Clinical Sequencing at LabCorp

Brian Krueger, Associate Vice President, Technical Director, Research and Development, LabCorp

2:40 - 3:00

No Assembly Required - Making the Most of Iso-Seq Data

Kristin Mars, Field Application Scientist, PacBio

3:00 - 3:15

Future Developments in SMRT Sequencing

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

3:15

Adjourn / Depart

Thanks to our Partners:

