



MEETING AGENDA

Fulfilling the Promise of Nanopore Sequencing in Education

September 21-24, 2024

The Banbury Center, Lloyd Harbor, New York

This meeting was organized by

Anna Feitzinger, Cold Spring Harbor Laboratory DNA Learning Center

Dave Micklos, Cold Spring Harbor Laboratory DNA Learning Center

Jonathan Pugh, Oxford Nanopore Technologies

Jason Williams, Cold Spring Harbor Laboratory DNA Learning Center

This meeting was supported by grants from the National Science Foundation: Improving Undergraduate STEM Education (#1821657), and Advanced Technological Education (#1901984). Additional travel support was provided by Oxford Nanopore Technologies.

SATURDAY, SEPTEMBER 21, 2024

Afternoon Arrivals and check-in at Robertson House

6:00 pm Reception and dinner

SUNDAY, SEPTEMBER 22, 2024

7:45 am Breakfast

9:00 am **Welcome**

Rebecca Leshan, Banbury Center

Dave Micklos, Cold Spring Harbor Laboratory DNA Learning Center

9:15 am **KEYNOTE ADDRESS**

Spike Willcocks, Oxford Nanopore Technologies

9:55 am **SESSION 1: Promise in the Classroom: What kind of student projects can be done with nanopore sequencing?**

Karen Barnard-Kubow and Ray Enke, James Madison University

Stephen Koury, Jacobs School of Medicine and Biomed. Sciences, University at Buffalo



DNA LEARNING CENTER

Stokes Baker, University of Detroit Mercy
Jennifer Katcher, Pima Community College

Plenary Discussion

12:20 pm Luncheon

2:00 pm **SESSION 2: Promise in the Workforce: What are applications of nanopore sequencing in health and the environment?**

Jessica Chen, U.S. Centers for Disease Control & Prevention
Hayley DeHart, Johns Hopkins Applied Physics Laboratory
Susanna Theroux, Southern California Coastal Water Research Project

Plenary Discussion

4:10 pm **SESSION 3: Promise to Communities: What are the cultural and ethical impacts of nanopore sequencing?**

José Agosto-Rivera, University of Puerto Rico - Río Piedras
Yvonne Chan, 'Iolani School
Jason Williams, Cold Spring Harbor Laboratory DNA Learning Center

Plenary Discussion

5:35 pm Day One Wrap-up

6:00 pm Reception and dinner

MONDAY, SEPTEMBER 23, 2024

7:15 am Breakfast

8:30 am Day Two Introduction

8:45 am **SESSION 4: Scaling-up and Realizing the Promise of Nanopore Sequencing in Education**

Jonathan Pugh, Oxford Nanopore Technologies
Nirav Merchant, University of Arizona; CyVerse
Jon Hale, Beaulieu Convent School
Sarah Miller, University of Wisconsin – Madison
Daniel Russell, University of Pittsburgh
Laura Reed, Genomics Education Partnership

Plenary Discussion

12:00 pm Luncheon



1:45 pm SESSION 5: What Can Companies and Informatics Do?

Lisa Darmo, Carolina Biological Supply Company
Sebastian Kraves, miniPCR bio
Anna Feitzinger and Dave Micklos, Cold Spring Harbor Laboratory DNA Learning Ctr.
Plenary Discussion

3:15 pm SESSION 6: Panel Discussion – What Can Foundations and Governments Do to Help?

Pushpa Ramakrishna, Howard Hughes Medical Institute (HHMI)
Alice Matimba, Wellcome Connecting Science
Ellen Carpenter, National Science Foundation (NSF)
Robert Rivers, National Human Genome Research Institute, NIH
Plenary Discussion

4:30 pm Day Two Wrap-up

4:35 pm Tour of CSHL and DNALC

6:00 pm Reception and dinner

TUESDAY, SEPTEMBER 24, 2024

7:15 am Breakfast

8:30 am Day Three Introduction

8:45 am SESSION 8: Breakout Groups
Breakout Group Discussions

10:30 am SESSION 9: Breakout Reporting, Summarizing, Next Steps
Breakout Groups Reporting; Plenary Discussion; Next Steps, Responsibilities, Timelines

12:30 pm Luncheon; Participant Departures



PARTICIPANTS

José Agosto-Rivera, University of Puerto Rico - Río Piedras

Stokes Baker, University of Detroit Mercy

Karen Barnard-Kubow, James Madison University

Ellen Carpenter, National Science Foundation (NSF)

Yvonne Chan, 'Iolani School

Jessica Chen, U.S. Centers for Disease Control & Prevention (CDC)

Lisa Darmo, Carolina Biological Supply Company

Hayley DeHart, Johns Hopkins Applied Physics Laboratory

Ray Enke, James Madison University

Anna Feitzinger, Cold Spring Harbor Laboratory DNA Learning Center

Jon Hale, Beaulieu Convent School

Jennifer Katcher, Pima Community College

Stephen Koury, Jacobs School of Medicine and Biomedical Sciences, University at Buffalo

Sebastian Kraves, miniPCR bio

Alice Matimba, Wellcome Connecting Science

Nirav Merchant, University of Arizona; CyVerse

Dave Micklos, Cold Spring Harbor Laboratory DNA Learning Center

Sarah Miller, University of Wisconsin - Madison

Jeffry Petracca, Cold Spring Harbor Laboratory DNA Learning Center

Jonathan Pugh, Oxford Nanopore Technologies

Pushpa Ramakrishna, Howard Hughes Medical Institute (HHMI)

Laura Reed, Genomics Education Partnership, University of Alabama

Robert Rivers, National Human Genome Research Institute, NIH

Daniel Russell, University of Pittsburgh

Susanna Theroux, Southern California Coastal Water Research Project

Spike Willcocks, Oxford Nanopore Technologies

Jason Williams, Cold Spring Harbor Laboratory DNA Learning Center