

## NIST GENOME EDITING WORKSHOP

MAY 3, 2019

NIST, 100 BUREAU DRIVE, GAITHERSBURG, MD 20899  
BLDG. 101, GREEN AUDITORIUM

8:00 am	<b>Check-in at registration desk</b>
8:30 am	<b>Opening Remarks</b> Eric Lin, Ph.D., Director, Material Measurement Laboratory, NIST
8:40 am	<b>Introduction to NIST Genome Editing Consortium</b> Samantha Maragh, Ph.D., Leader, NIST Genome Editing Program
8:50 am	<b>NIH Somatic Cell Genome Editing Program</b> Mary Perry, Ph.D., Program Leader, NIH Office of Strategic Coordination
9:10 am	<b>DARPA Safe Genes and PREPARE Programs</b> Renee Wegrzyn, Ph.D., Program Manager, DARPA Biological Technologies Office
9:30 am	<b>Genome in a Bottle: So you've sequenced a genome – how well did you do?</b> Justin Zook, Ph.D., Leader NIST Genome in a Bottle Consortium
9:50 am	<b>NIST Automation Suite and Experimental Design</b> John Elliott, Ph.D., Leader NIST Cell Systems Science Group
10:10 am	<b>BREAK</b>
10:20 am	<b>Large-scale CHANGE-seq Genome-wide Profiling of CRISPR-Cas9 Reveals Effects of Sequence, Epigenetic Factors, and Human Genetic Variation on Activity</b> Shengdar Tsai, Ph.D., Assistant Member, Dept. of Hematology St. Jude Children's Hospital
10:45 am	<b>Challenges in Characterization of Genome Editing</b> Chris Fuller, Ph.D., VP Informatics, Caribou Biosciences, Inc.
11:10 am	<b>Panel Discussion</b> Mary Perry, Ph.D., Program Leader, NIH Renee Wegrzyn, Ph.D., Program Manager, DARPA Biological Technologies Office Justin Zook, Ph.D., Leader NIST Genome in a Bottle Consortium John Elliott, Ph.D., Leader NIST Cell Systems Science Group Shengdar Tsai, Ph.D., Assistant Member, Dept. of Hematology St. Jude Children's Hospital Chris Fuller, Ph.D., VP Informatics, Caribou Biosciences, Inc. Anna Kwilas, Ph.D., Biologist, FDA Center for Biologics Evaluation and Research (CBER)

<b>NIST Genome Editing Consortium Updates</b>	
11:30 am	<b>Working Group 1: Specificity</b>
	<b>Samantha Maragh, Ph.D.</b> , Leader, NIST Genome Editing Program
11:45 am	<b>Working Group 2: Data &amp; Metadata</b>
	<b>Luca Pinello, Ph.D.</b> , Investigator, MGH/Harvard Medical School
12:00 pm	<b>Working Group 3: Lexicon</b>
	<b>Brett Robb, Ph.D.</b> , Scientific Director, RNA & Genome Editing, New England Biolabs
12:10 pm	<b>NIST Genome Editing Consortium Q &amp; A</b>
<b>12:20 pm</b>	<b>LUNCH BREAK</b> (lunch for purchase at NIST cafeteria)
<b>Technology Talks</b>	
1:10 pm	<b>Using PacBio's Long, Accurate HiFi Reads in the Genome Editing Pipeline</b>
	<b>Andy Larrea, Ph.D.</b> , Sr. Manager Field Business Development, Pacific Biosciences
1:30 pm	<b>Multiplexed target enrichment and high-resolution NGS analysis of on- and off-target CRISPR-Cas9 editing events via rhAmpSeq™ technology</b>
	<b>Garrett Rettig, Ph.D.</b> , Director of Molecular Genetics Product Development, IDT
1:50 pm	<b>Safety considerations for delivering medicines by therapeutic genome editing</b>
	<b>Roberto Nitsch, Ph.D.</b> , Associate Director, Drug Safety and Metabolism, AstraZeneca
2:10 pm	<b>Single cell assessment of multiplexed DNA variation using the Tapestry platform</b>
	<b>Keith Jones, Ph.D.</b> , Senior Vice President of Product Development, Mission Bio <b>Laurakay Bruhn, Ph.D.</b> , Section Manager, Biological Chemistry, Agilent
2:40 pm	<b>Closing Remarks</b>
<b>2:45 pm</b>	<b>Adjourn</b>
3:00 pm	Shuttle departure from NIST to Hilton Gaithersburg

3:00 – 4:30 pm **Closed NIST Genome Editing Consortium Meeting (Portrait Room)**

5:00 pm Shuttle departure from NIST to Hilton Gaithersburg