

Genetics Virtual Week

Including Genomics, Molecular Diagnostics & Precision Medicine

APRIL 21-23, 2020



Date	Time	Track	Presentation Title	Speaker
21-Apr	12:00 - 12:05 AM	Genomics	Bionano Genome Imaging: unbiased, genome-wide structural variation detection in genetic disease and cancer, down to 1% allele fraction	Sven Bocklandt, PhD Sr. Director of Scientific Affairs & Marketing, Bionano Genomics
21-Apr	12:00 - 12:05 AM	Genomics	Contribution of transposons to structural variation and phenotypic diversity in tomato	Matthias Benoit, PhD Research Associate, Lippman Lab, Howard Hughes Medical Institute, Cold Spring Harbor Laboratory
21-Apr	12:00 - 12:05 AM	Genomics	Single cell gene expression: new insights through the lens of full length mRNA isoform resolution	Jason G. Underwood, PhD Principal Scientist
21-Apr	12:00 - 12:05 AM	Genomics	Single Cell Multi-omics: Solving the Jigsaw	Ivan K. Lukić, MD, PhD Senior Field Application Scientist, Partek
21-Apr	05:30 - 05:35 PM	Genomics	PRINCESS: A Framework for Comprehensive Detection and Haplotype Phasing of SNPs and Structural Variants	Medhat Mahmoud, PhD Baylor College of Medicine
21-Apr	06:00 - 07:00 AM	Molecular Diagnostics	Advantages of digital PCR and its applications - the power of partitioning	Daniel Heinz Löfgren, MSc. Market Development Manager PCR/dPCR EMEA
21-Apr	07:30 - 08:30 AM	Genomics	Novel CRISPR Knock-In Technology for the Robust Analysis of Cells and Tissue	Scott H. Soderling, PhD Founder and CSO, CasTag Biosciences Chair and Professor of Cell Biology, Duke University

21-Apr	10:30 - 11:30 AM	Genomics	Long HiFi Reads for High-Quality Genome Assemblies	Jonas Korlach, PhD Chief Scientific Officer, Pacific Biosciences
21-Apr	10:30 - 11:30 AM	Genomics	Optimizing human karyomapping to phase single lgene defects with improved DNA amplification	Samuel Rulli, PhD Senior Global Product Manager, RNA Profiling , QIAGEN
21-Apr	12:00 - 01:00 PM	Genomics	Expanding the Hi-C toolbox: New high-resolution approaches for diploid genome phasing, protein-directed chromatin architecture mapping and more	Iain Russell, PhD Associate Director of Marketing
21-Apr	12:00 - 01:00 PM	Genomics	SNVs to Large Structural Variation: Capturing nucleotide through inter-chromosomal variants through a powerful three-dimensional data type	Cory Padilla, PhD Head of Scientific Affairs, Dovetail Genomics
21-Apr	01:30 - 02:30 PM	Genomics	Spatially Resolved Molecular Investigation of Triple Negative Breast Cancer	Dina Finan, PhD Product Manager, 10x Genomics Stephen Williams, PhD Senior Computational Biologist, 10x Genomics
22-Apr	12:00 - 12:05 AM	Precision Medicine	Aggregating and Sharing Clinical Evidence to Improve the Diagnosis of Rare Diseases	Ben Liesfeld, PhD Co-Founder and Managing Director, Limbus Medical Technologies
22-Apr	12:00 - 12:05 AM	Precision Medicine	Clinical Applications of Estrogen Metabolism Genetic Testing: Improving Estrogen Health, Preventing Breast Cancer and Prescribing Estrogenic Medications with Precision	T.J. Hills Breast Cancer Prevention Advocate & Author
22-Apr	12:00 - 12:05 AM	Precision Medicine	Genomic Landscapes: Leveraging Genetic Evidence throughout the Pharma Pipeline	Mark Kiel, MD, PhD Co-Founder and Chief Science Officer, Genomenon
22-Apr	12:00 - 12:05 AM	Precision Medicine	Long-range technologies resolve complex genomic regions overlooked by short-read sequencing	Mark Ebbert, PhD Mayo Clinic
22-Apr	12:00 - 12:05 AM	Precision Medicine	Nanotherapeutics: An insight into healthcare and future multi-dimensional clinical applications	Pratibha Kakadia, PhD Research Affiliate, Integrative Behavioural Health Research Institute

22-Apr	12:00 - 12:05 AM	Precision Medicine	Population Health and Genetic Testing	Matthew J. Ferber, PhD, FACMG Associate professor and consultant in the Department of Laboratory Medicine and Pathology, Founder and director of the Clinical Genome Sequencing Laboratory at Mayo
22-Apr	12:00 - 12:05 AM	Molecular Diagnostics	Precision Infectious Disease Diagnostics Using Next- Generation Sequencing and AI	Dorottya Nagy-Szakai, MD PhD Chief Medical Officer, Biotia, Research Assistant Professor, Department Cell Biology/College of Medicine, SUNY Downstate Health Sciences University
22-Apr	12:00 - 12:05 AM	Precision Medicine	Priming the Precision Medicine Pipeline: New Models for Applied Genomics Education	Barbara Kraatz Fortini, PhD Program Director, MS in Human Genetics and Genomic Data Analytics, Assistant Professor of Genetics, School of Pharmacy and Health Sciences at the Keck Graduate Institute
22-Apr	12:00 - 12:05 AM	Precision Medicine	Rapid Diagnosis of Complex Rare Disease Cases Using Exome Sequencing	Louisa Ive, MSc HCPC Clinical Scientist, Congenica
22-Apr	12:00 - 12:05 AM	Precision Medicine	RNA-seq for the Detection of Gene Fusions in Tumors	Kevin Halling, MD, PhD Mayo Clinic
22-Apr	12:00 - 12:05 AM	Molecular Diagnostics	The Cardean Transistor Infrastructure: using cloud-analysis software and "lab on a chip" technology to develop handheld readers for rapid virus detection	Brett Goldsmith, PhD Co-Founder and CTO, Cardea Bio
22-Apr	06:00 - 07:00 AM	Genomics	Improved Genome Editing Using Single-Stranded DNA	Ye Chen, PhD Associate Director of Research and Development for GENEWIZ
22-Apr	09:00 - 10:00 AM	Genomics	From Data to Biological Insight using QIAGEN OmicSoft and IPA: Single Cell Sequencing of Normal Human Liver	Jean-Noel Billaud, PhD Senior Principal Scientist, QIAGEN Digital Insights
23-Apr	06:00 - 07:00 AM	Precision Medicine	Latest Applications of PacBio Sequencing for Clinical Research	Jonas Korlach, PhD Chief Scientific Officer, Pacific Biosciences
23-Apr	07:30 - 08:30 AM	Precision Medicine	Keynote Presentation: The Massively Parallel Sequencing (MPS) Revolution	David Smith, PhD Professor and Consultant, Department of Laboratory Medicine and Pathology, Mayo Clinic

23-Apr	09:00 - 10:00 AM	Precision Medicine	Keynote Presentation: Individualized Health	Michael Snyder, PhD Stanford Ascherman Professor, Chair of Genetics Director of the Center of Genomics and Personalized Medicine
23-Apr	10:30 - 11:30 AM	Precision Medicine	Keynote Presentation: Systematic identification of therapeutic strategies that leverage tumor evolution	Kris C. Wood, PhD Associate Professor, Department of Pharmacology and Cancer Biology, Duke University