

AUGUST 20-21, 2014
GENETICS & GENOMICS

| Date | Time | Track | Presentation Title | Speaker |
|--------|---------------------------|--------------------|--|--|
| 20-Aug | 06:00 - 07:00 AM | Keynote | Keynote: Delivering on the promise of personalized medicine | Gordon B Mills, MD, PhD Department Chair, Department of Systems Biology, Division of Cancer Medicine, University of Texas MD Anderson Cancer Center |
| 20-Aug | 06:00 - 07:00 AM | Precision Medicine | The realization of the promise of personalized molecular medicine requires efficient development and implementation of novel targeted therapeutics | Gordon B Mills, MD, PhD Department Chair, Department of Systems Biology, Division of Cancer Medicine, University of Texas MD Anderson Cancer Center |
| 20-Aug | 07:00 - 07:30 AM | Human Genome | Human Genome Analysis | Mark B Gerstein, PhD Albert L. Williams Professor of Biomedical Informatics, Co-Director, Yale Computational biology and Bioinformatics Program, Yale University |
| 20-Aug | 07:15 - 07:45 AM | Cell Biology | Establishing cell-free biology for the production of therapeutics, materials, and chemicals | Michael C Jewett, PhD Assistant Professor of Chemical and Biological Engineering, Northwestern University |
| 20-Aug | 07:30 - 08:30 AM | Sequencing | Panel Discussion: Increasing productivity and reproducibility by automating DNA library preparation for Ion Torrent Sequencing | Joanna Hamilton, PhD, Lynne Apone, PhD, Zach Smith, MS Joanna Hamilton, PhD, Co-Director, Dartmouth Medical School and the Norris Cotton Cancer Center Lynne Apone, PhD, Application and Product Development Scientist, NEBNext group, New England Bi |
| 20-Aug | 08:00 - 08:30 AM | Sequencing | Exploring Complex Structural Genomic Variation using Next-Gen Sequencing | Ryan E. Mills, PhD Assistant Professor, Department of Computational Medicine & Bioinformatics, Assistant Professor, Department of Human Genetics, University of Michigan |
| 20-Aug | 08:00 - 08:30 AM | Human Genetics | High-resolution genomic analysis reveals genetic impacts of human papillomavirus in human cancers | David E Symer, MD, PhD Assistant Professor Department of Molecular Virology, Immunology and Medical Genetics, Assistant Professor, Division of Hematology, Department of Internal Medicine, Human Cancer Genetics Prog |

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| 20-Aug | 08:30 - 09:30 AM | Sequencing | Actionable mutation detection with multiplex pcr-based targeted enrichment approach for next generation sequencing (NGS) | Vikram Devgan, PhD, MBA Senior Director, Spatial Genomics Business Unit, NanoString Technologies |
| 20-Aug | 08:45 - 09:15 AM | Synthetic and Systems Biology | Digitizing Life Using Synthetic Genomics | John Glass, PhD Senior Scientist, Synthetic Biology Group, J. Craig Venter Institution |
| 20-Aug | 08:45 - 09:15 AM | Genetic Testing | Novel gene chip technologies and NGS sequencing for personalized medicine & diagnostic | Dani Bercovich, PhD Professor, Scientific Director, Head of MSc program in Biotechnology, Tel Hai College, GGA - Galil Genetic Analysis |
| 20-Aug | 10:30 - 11:30 AM | Sequencing | One Platform. Many Analyses | Sohela Shah, PhD Field Application Scientist, Ingenuity Systems, a Qiagen company, Neihaus research fellow, Memorial Sloan Kettering Cancer Center |
| 20-Aug | 10:45 - 11:15 AM | Cancer Genetics | OncoScan Assay for copy number from FFPE. Publications & cases on actionable CNV detection | Padma Sundar, MBA, MPH Director of OncoScan Product Marketing Strategy, Affymetrix |
| 20-Aug | 10:45 - 11:15 AM | Genetic and Genomic Medicine | The Impact of the \$1000 Genome on Medicine | Shawn Baker, PhD CEO, CSO and Co-Founder, AllSeq, Inc. |
| 20-Aug | 11:30 - 12:30 PM | Human Genetics | More Comprehensive Views of Human Genetic Variation | Jonas Korlach, PhD Chief Scientific Officer, Pacific Biosciences |
| 20-Aug | 11:45 - 12:15 PM | Genetic Testing | Ethical, Legal and Social Issues of Direct-to-Consumer Genetic Testing | Heidi C Howard, PhD Senior Researcher, Uppsala University, Centre for Research Ethics & Bioethics |
| 20-Aug | 11:45 - 12:15 PM | Genetic Counseling, FDA, Regulatory, Law | Genetic Counseling Post-SCOTUS Patent Decision: Fast Forward | Ellen T Matloff, MS, CGC Founder and CEO, Gene Counsel |

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| 20-Aug | 12:30 - 01:30 PM | Bioinformatics and Quantitative Genomics | Integrative Systems Approaches to Network Modeling of Biological Processes | John Quackenbush, PhD Professor of Computational Biology and Bioinformatics, Chair of the Department of Biostatistics, Harvard University, Dana-Farber Cancer Institute |
| 20-Aug | 02:15 - 02:45 PM | Gene Expression | Identifying transcriptional regulators of human embryonic development via expression variability | Jessica C. Mar, PhD Assistant Professor, Department of Systems & Computational Biology, Assistant Professor, Department of Epidemiology & Population Health, Albert Einstein College of Medicine |
| 21-Aug | 06:00 - 06:30 AM | Gene Expression | Landscape and variation of RNA secondary structures in the human transcriptome | Yue Wan, PhD GIS fellow, Genome Institute of Singapore, A*STAR, Genome Institute of Singapore |
| 21-Aug | 06:45 - 07:15 AM | Bioinformatics and Quantitative Genomics | Development and Applications of CRISPR-Cas9 for Genome Editing | Feng Zhang, PhD Core Faculty Member, The Broad Institute of MIT/Harvard, Investigator, McGovern Institute for Brain Research, W.M. Keck Career Development Professor of Biomedical Engineering Assistant Profes |
| 21-Aug | 06:45 - 07:15 AM | Sequencing | Practical Considerations for the Clinical Interpretation of Germline Sequence Variants in the Era of NGS | Heather McLaughlin, PhD, MB(ASCP)CM Clinical Molecular Genetics Fellow, Partners HealthCare Personalized Medicine |
| 21-Aug | 07:30 - 08:30 AM | Keynote | Keynote: Clinical Validity and Utility in Whole Exome/Genome Sequencing | Robert Nussbaum, MD Clinical Professor, UCSF School of Medicine; Chief Medical Officer, Invitae Corp |
| 21-Aug | 08:45 - 09:15 AM | Clinical Genomics | Beyond Genomics: Preparing for the Avalanche of Post-Genomic Clinical Findings | Jimmy Lin, MD, PhD, MHS Founder & President, Rare Genomics Institute, School Faculty Member, Washington University in St. Louis |
| 21-Aug | 08:45 - 09:15 AM | Gene Therapy | From Genetics to Genetic Medicine: Gene Therapy for vision restoration as a case study | Luk H Vandenberghe, PhD Assistant Professor, Harvard Medical School, Assistant Scientist, Schepens Eye Research Institute, Massachusetts Eye and Ear |
| 21-Aug | 08:45 - 09:15 AM | Sequencing | Genome and exome sequencing in a clinical laboratory | Matthew Lebo, PhD, FACMG Instructor of Pathology, BWH and Harvard Medical School, Assistant Laboratory Director and Senior IS Domain Specialist Laboratory for Molecular Medicine, Partners HealthCare Center for Perso |

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| 21-Aug | 09:30 - 10:30 AM | Sequencing | Studying the Transcriptome with Next-Generation Sequencing | Gary Schroth, PhD Vice President and Distinguished Scientist Illumina |
| 21-Aug | 09:45 - 10:15 AM | Complex Diseases | Pathway based analyses for genetic susceptibility to cancer and autoimmune disease | Christopher I Amos, PhD Associate Director for Population Sciences, Professor of Community and Family Medicine at the Geisel School of Medicine, Norris Cotton Cancer Center, Dartmouth College |
| 21-Aug | 09:45 - 10:15 AM | Sequencing | Shotgun sequencing enables non-invasive monitoring of infection and rejection in transplantation | Iwijn De Vlamincck, PhD Postdoctoral researcher, HHMI research associate, Departments of Bioengineering and Applied Physics, Stanford University |
| 21-Aug | 10:45 - 11:15 AM | Genetic Counseling, FDA, Regulatory, Law | The Role of Genetic Counselors in the Implementation of Personalized Genomic Medicine | Colleen Campbell, PhD Assistant Director, University of Iowa - Iowa Institute for Human Genetics |
| 21-Aug | 11:15 - 12:15 PM | Keynote | Keynote: Integration of Genetics and Genomics into Medical Practice: Educational Challenges | Bruce R. Korf, MD, PhD Professor and Chair, Department of Genetics, Director, Heflin Center for Genomic Sciences, UAB |
| 21-Aug | 11:30 - 12:15 PM | Genetic Testing | Automation of High Throughput Agarose Gel Electrophoresis with the NIMBUS Select Featuring Ranger Technology | Matthew Nesbitt, MSc President, Coastal Genomics |
| 21-Aug | 11:30 - 12:30 PM | Complex Diseases | Understanding the Genetics of Common Disease: Using Big Data approaches to see the emergent whole | Kenneth Buetow, PhD, FACMI Director of Computational Sciences and Informatics program for Complex Adaptive Systems and Professor in the School of Life Sciences, Arizona State University |
| 21-Aug | 12:15 - 01:15 PM | Sequencing | A Next-Gen Sequencing Software Workflow for Gene Panel Validation Control | Matthew Keyser, MS Senior Manager, NGS Applications, DNASTAR |
| 21-Aug | 12:45 - 01:15 PM | Sequencing | Predictive and not: understanding the mixed messages of our DNA | Cecile Janssens, PhD Research Professor of Epidemiology, Emory University |

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| 21-Aug | 02:30 - 03:00 PM | Bioinformatics and Quantitative Genomics | Integrating patient specific information in rare disorder analysis | Asif Javed, PhD Research Associate, Genome Institute of Singapore (GIS), A*STAR |
| 21-Aug | 03:00 - 04:00 PM | Gene Expression | Unexpected Findings from Analysis of Complex Mammalian Transcriptomes | Piero Carninci, PhD Director, Division of Genomic Technologies, RIKEN Center for Life Science Technologies |