

AUGUST 20-21, 2014  
GENETICS & GENOMICS

| Date   | Time                      | Track              | Presentation Title   | Speaker  |
|--------|---------------------------|--------------------|--|--|
| 20-Aug | 06:00<br>-<br>07:00<br>AM | Keynote            | Keynote: Delivering on the promise of personalized medicine  | Gordon B Mills, MD, PhD<br>Department Chair, Department of Systems Biology, Division of Cancer Medicine, University of Texas MD Anderson Cancer Center   |
| 20-Aug | 06:00<br>-<br>07:00<br>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<br>Department Chair, Department of Systems Biology, Division of Cancer Medicine, University of Texas MD Anderson Cancer Center   |
| 20-Aug | 07:00<br>-<br>07:30<br>AM | Human Genome       | Human Genome Analysis  | Mark B Gerstein, PhD<br>Albert L. Williams Professor of Biomedical Informatics, Co-Director, Yale Computational biology and Bioinformatics Program, Yale University  |
| 20-Aug | 07:15<br>-<br>07:45<br>AM | Cell Biology       | Establishing cell-free biology for the production of therapeutics, materials, and chemicals  | Michael C Jewett, PhD<br>Assistant Professor of Chemical and Biological Engineering, Northwestern University   |
| 20-Aug | 07:30<br>-<br>08:30<br>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<br>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<br>-<br>08:30<br>AM | Sequencing         | Exploring Complex Structural Genomic Variation using Next-Gen Sequencing   | Ryan E. Mills, PhD<br>Assistant Professor, Department of Computational Medicine & Bioinformatics, Assistant Professor, Department of Human Genetics, University of Michigan  |
| 20-Aug | 08:00<br>-<br>08:30<br>AM | Human Genetics     | High-resolution genomic analysis reveals genetic impacts of human papillomavirus in human cancers  | David E Symer, MD, PhD<br>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<br>-<br>09:30<br>AM | Sequencing                               | Actionable mutation detection with multiplex pcr-based targeted enrichment approach for next generation sequencing (NGS) | Vikram Devgan, PhD, MBA<br>Senior Director, Spatial Genomics Business Unit, NanoString Technologies   |
| 20-Aug | 08:45<br>-<br>09:15<br>AM | Synthetic and Systems Biology            | Digitizing Life Using Synthetic Genomics   | John Glass, PhD<br>Senior Scientist, Synthetic Biology Group, J. Craig Venter Institution   |
| 20-Aug | 08:45<br>-<br>09:15<br>AM | Genetic Testing                          | Novel gene chip technologies and NGS sequencing for personalized medicine & diagnostic                                   | Dani Bercovich, PhD<br>Professor, Scientific Director, Head of MSc program in Biotechnology, Tel Hai College, GGA - Galil Genetic Analysis            |
| 20-Aug | 10:30<br>-<br>11:30<br>AM | Sequencing                               | One Platform. Many Analyses  | Sohela Shah, PhD<br>Field Application Scientist, Ingenuity Systems, a Qiagen company, Neihaus research fellow, Memorial Sloan Kettering Cancer Center |
| 20-Aug | 10:45<br>-<br>11:15<br>AM | Cancer Genetics                          | OncoScan Assay for copy number from FFPE. Publications & cases on actionable CNV detection                               | Padma Sundar, MBA, MPH<br>Director of OncoScan Product Marketing Strategy, Affymetrix   |
| 20-Aug | 10:45<br>-<br>11:15<br>AM | Genetic and Genomic Medicine             | The Impact of the \$1000 Genome on Medicine  | Shawn Baker, PhD<br>CEO, CSO and Co-Founder, AllSeq, Inc.   |
| 20-Aug | 11:30<br>-<br>12:30<br>PM | Human Genetics                           | More Comprehensive Views of Human Genetic Variation  | Jonas Korlach, PhD<br>Chief Scientific Officer, Pacific Biosciences   |
| 20-Aug | 11:45<br>-<br>12:15<br>PM | Genetic Testing                          | Ethical, Legal and Social Issues of Direct-to-Consumer Genetic Testing   | Heidi C Howard, PhD<br>Senior Researcher, Uppsala University, Centre for Research Ethics & Bioethics  |
| 20-Aug | 11:45<br>-<br>12:15<br>PM | Genetic Counseling, FDA, Regulatory, Law | Genetic Counseling Post-SCOTUS Patent Decision: Fast Forward   | Ellen T Matloff, MS, CGC<br>Founder and CEO, Gene Counsel   |

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

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

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