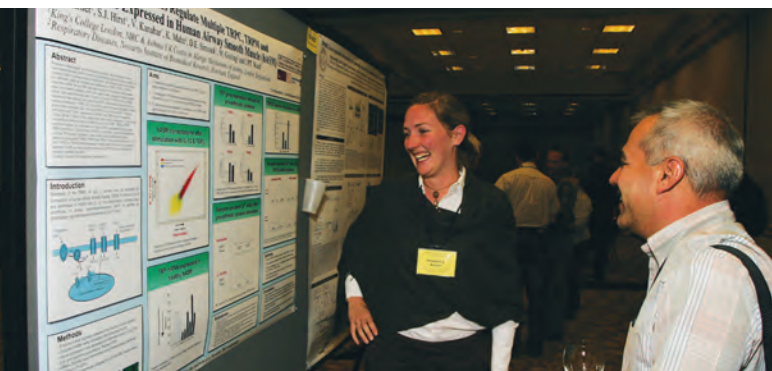


Keystone Symposia is pleased to present

Human Genomics and Personalized Medicine

Scientific Organizers: Kelly A. Frazer and Geoffrey S. Ginsburg

June 17–21, 2013 | Clarion Hotel Sign | Stockholm, Sweden



The last decade has seen considerable progress in our understanding of genomics, and the era of personalized medicine is just around the corner. Importantly, emerging data on the structure and function of the human genome are providing insights into the molecular basis of inherited disease and providing opportunities to improve human health through new approaches to diagnostics and therapy. These advances will impact all aspects of human health, ranging from cancer to other chronic diseases. Making genomic medicine a reality requires novel collaborations between basic scientists, translational scientist, regulatory bodies and health insurance bodies. The Keystone Symposia meeting on Human Genomics and Personalized Medicine is a timely opportunity to bring leading researchers together to discuss the critical issues facing this emerging field. The meeting will focus on various aspects of the field, including genomics and the transition to genomic medicine (clinical care based on genomic information), the analysis of complex data sets, the development of robust bio-repositories, public access to large data sets being generated from funds from NIH and other agencies, and key regulatory issues and public policy. Importantly, the meeting will help establish communication and interactions, enabling a faster implementation of genomic medicine, and will also benefit from its international participation by highlighting areas of research that are of global concern.

Session Topics:

- > Breakthroughs in Genomic and Personalized Medicine
- > Genomes and Biology
- > Cancer Genomics and Applications
- > Advances and Challenges in the Field
- > Pharmacogenomics
- > Personalized Genomes
- > Policy
- > Translating Biomarkers to Personalized Medicine

Abstract & Scholarship Deadline: February 20, 2013

Late-Breaking Abstract Deadline: March 19, 2013

Early Registration Deadline: April 16, 2013

Note: Scholarships are available to students and postdoctoral fellows and require a brief application and submission of an abstract. Short talk speakers will also be selected from abstracts. Early registration saves US\$150 on later fee. Information shown is subject to possible change.

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www.keystonesymposia.org/13E3

KEYSTONE SYMPOSIA

on Molecular and Cellular Biology

Human Genomics and Personalized Medicine (E3)

June 17-21, 2013 • Clarion Hotel Sign • Stockholm, Sweden

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Organized in collaboration with Knut and Alice Wallenberg Foundation and Science for Life Laboratory - Stockholm. Sponsored by AstraZeneca, Boehringer Ingelheim Pharmaceuticals, Inc., H3 Biomedicine Inc., Nestlé Institute of Health Sciences and Onyx Pharmaceuticals, Inc.

Discounted Abstract & Scholarship Deadline: February 20, 2013 / Late-Breaking Abstract Deadline: March 19, 2013 / Early Registration Deadline: April 16, 2013

MONDAY, JUNE 17

Arrival and Registration

Welcome and Keynote Address

***Geoffrey S. Ginsburg**, Duke University, USA
Welcome Remarks

John Bell, University of Oxford, UK
Bringing Genomics to the Bedside

Breakthroughs in Genomic and Personalized Medicine

***Kelly A. Frazer**, University of California, San Diego, USA

Peter Mueller, Mueller Health Foundation, USA

Kalydeco: Targeting the G551D Mutation in CF

Geoffrey S. Ginsburg, Duke University, USA

Novel Host-Based Approaches to the Diagnosis of Infectious Disease

Stephen F. Kingsmore, Rady Children's Institute for Genomic Medicine, USA

Pediatric Genomic Medicine

TUESDAY, JUNE 18

Genomes and Biology

***Thomas J. Hudson**, AbbVie, USA

Mathias Uhlen, KTH Royal Inst of Technology, Sweden

Defining the Human Tissue-Specific Proteome based on Transcriptomics and Antibody-Based Protein Profiling

Kelly A. Frazer, University of California, San Diego, USA

Genomic Approaches to Understanding Cancer Progression

Martin J. Blaser, New York University School of Medicine, USA

Perturbing the Early Life Microbiome and its Consequences

Andrew P. Feinberg, Johns Hopkins University School of Medicine, USA

The Epigenetic Basis of Common Human Disease

Lili Milani, University of Tartu, Estonia

Short Talk: Genome-Wide DNA Methylation and Gene Expression Changes in Whole Blood, CD4+ and CD8+ T-Cells during Healthy Aging

Poster Session 1

Cancer Genomics and Applications

***Andrew P. Feinberg**, Johns Hopkins University School of Medicine, USA

Paul S. Mischel, University of California, San Diego, USA

The Cancer Genome Atlas and the Future of Cancer Diagnosis and Treatment

Thomas J. Hudson, AbbVie, USA

Linking Cancer Treatment Decisions with Large-Scale Mutation Surveys

Jessica Nordlund, Uppsala University, Sweden

Short Talk: The DNA Methylation Landscape of Pediatric Acute Lymphoblastic Leukemia

Steven Shak, Genomic Health Inc., USA

Translating Genomics into Clinical Practice: Lessons from Oncotype DX

Hiroyuki Mano, University of Tokyo, Japan

Targeting Essential Growth Drivers in Human Cancer

WEDNESDAY, JUNE 19

Advances and Challenges in the Field

***Kelly A. Frazer**, University of California, San Diego, USA

Janet Woodcock, US Food and Drug Administration, USA
A Regulatory Pathway to Personalized Medicine

Dan M. Roden, Vanderbilt University Medical Center, USA

Integration and Implementation of Genetic Information into Health Systems

Jill P. Mesirov, Broad Institute, USA

Computational Approaches for Genomic Medicine

Howard J. Jacob, HudsonAlpha Institute for Biotechnology, USA

Advances in Clinical Sequencing

X. Sunney Xie, Peking University, China

Short Talk: Single-Cell Genomics: Life at the Single Molecule Level

Pharmacogenomics

***Dan M. Roden**, Vanderbilt University Medical Center, USA

Alan R. Shuldiner, Regeneron Pharmaceuticals, Inc, USA
Genomic Management of Anti-Platelet Therapeutics

Y.T. Chen, Duke University, USA

*Realizing the Promise of Personalized Medicine: HLA-B*1502 Screen in Preventing Carbamazepine-Induced Toxic Effects*

Keith J. Johnson, Novartis Institutes for BioMedical Research, Inc., USA

Pharmacogenetic Applications to Enable Drug Development for General Medicine Indications

Federico Innocenti, University of North Carolina at Chapel Hill, USA
Pharmacogenetics of Cancer Therapeutics: Focus on the Germline Genome

Shannon Gibson, University of Toronto, Canada

Short Talk: Ethical, Legal and Social Issues in Pharmacogenomics: A Qualitative Study of the Perspectives of Canadian Stakeholders

Personalized Genomes

***Howard J. Jacob**, HudsonAlpha Institute for Biotechnology, USA

Michael P. Snyder, Stanford University School of Medicine, USA
Adventures in Personal Genomics: iPOP of Healthy and Disease States

William A. Gahl, NHGRI, National Institutes of Health, USA
Whole Exome Sequencing for Undiagnosed Diseases

Alan H. Bryce, Mayo Clinic, USA

Short Talk: A Pilot Study of Whole Genome, Whole Exome and RNA Sequencing with CLIA Validation to Identify Potential Therapeutic Targets in Advanced Cancer Patients

George M. Church, Harvard Medical School, USA

The Personal Genome Project and the Future of Medicine

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Poster Session 2

THURSDAY, JUNE 20

Policy

***Janet Woodcock**, US Food and Drug Administration, USA

Susanne B. Haga, Duke University, USA

Introducing Genomics in the Clinic: Development of New Delivery Systems

Laura Lyman Rodriguez, NHGRI, National Institutes of Health, USA

Bringing Genomics into Medicine: Advancing the Policy Agenda

Andelka M. Phillips, University of Oxford, UK

Short Talk: We Agree to Sequence your Genomic Data, and you Agree to X, Y, Z...

Katherine Payne, University of Manchester, UK

Quantifying the Economic Value of Personalized Medicine

Jane Kaye, University of Oxford, UK

Privacy, Data-Sharing Frameworks, Global Governance and Translational Research

Translating Biomarkers to Personalized Medicine

***Geoffrey S. Ginsburg**, Duke University, USA

Michelle Penny, Biogen, USA

Integration of Genomic Technologies into Drug Discovery and Development

Johan Lundin, University of Helsinki, Finland

Developing Diagnostics from Biomarkers

Thomas Metcalfe, Oncotest GmbH - Institute for Experimental Oncology, Germany

Co-Development of Therapeutics and Companion Diagnostics

FRIDAY, JUNE 21

Departure