

PERSONALIZED MEDICINE: *Impacting Healthcare*

A CONFERENCE HOSTED BY



CENTER FOR PERSONALIZED
GENETIC MEDICINE



HARVARD
BUSINESS
SCHOOL

NOVEMBER 17-18, 2010
JOSEPH B. MARTIN CONFERENCE CENTER
AT HARVARD MEDICAL SCHOOL, BOSTON



6TH ANNUAL CONFERENCE

CONFERENCE PROGRAM

www.personalizedmedicineconference.org

HIGHLIGHTS FROM PAST CONFERENCES



November 17, 2010

Dear Colleague,

Welcome to the 2010 Personalized Medicine Conference. We and the other members of the Conference Organizing Committee, whose names you will see on the last page of this program, are pleased to offer this sixth annual gathering co-hosted by Partners HealthCare, Harvard Medical School and Harvard Business School. We offer our profound thanks to the speakers, the panelists, the staff and our generous sponsors for their essential contributions.

This is a time of active and vigorous conversation at many different levels about the state and future of healthcare. Invariably, those conversations recognize the extraordinary advances in knowledge and technological resources that have taken place in recent years. They also recognize the enticing opportunities for medical practice to implement the principles of personalized medicine into routine practice. Many examples can be cited in which those opportunities have been realized and are being applied daily. At the same time, there are those who contend that personalized medicine is a concept whose aspiration may far exceed its ultimate reality.

In the context of those differing opinions the annual Personalized Medicine Conference seeks to engage a diverse audience of national and international thought leaders in discussions that will advance the understanding of and commitment to how the promise of personalized medicine is being and may be further fulfilled. As you will see from this year's program, we have sought to give attention both to accomplishments that have been made and to challenges to be overcome. We invite your active participation in these discussions.

We are pleased to have our ongoing collaboration with the Personalized Medicine Coalition whose help brings added value in organizing and presenting the meeting.

Sincerely,



Scott T. Weiss

Scott T. Weiss, M.D., M.S.

Scientific Director,
Partners HealthCare Center for
Personalized Genetic Medicine;
Professor of Medicine,
Harvard Medical School



Raju Kucherlapati

Raju Kucherlapati, Ph.D

Paul C. Cabot Professor of Genetics and
Professor of Medicine, Harvard Medical School;
Chair, Conference Organizing Committee

Thanks to Our Sponsors

This conference is organized by the Partners HealthCare Center for Personalized Genetic Medicine and Harvard Business School in collaboration with the Personalized Medicine Coalition. It is made possible by the generous support of our sponsors.

SIGNATURE

MCKESSON

Empowering Healthcare

PLATINUM



GOLD



SIEMENS

SILVER



BRONZE



CONTRIBUTING SPONSOR



Conference Program **Wednesday, November 17, 2010**

7:15 a.m.	Registration & Continental Breakfast	
8:15 a.m.	Welcome	Raju Kucherlapati, Ph.D. Paul C. Cabot Professor of Genetics, Professor of Medicine, Harvard Medical School
	Opening Remarks	Scott Weiss, M.D., M.S. Scientific Director, Partners HealthCare Center for Personalized Genetic Medicine, Associate Director, Channing Laboratory, Professor of Medicine, Harvard Medical School Elizabeth G. Nabel, M.D. President, Brigham and Women's Hospital/Faulkner Hospital
9:00 a.m.	Keynote: A Pharmaceutical Perspective	Mikael Dolsten, M.D., Ph.D. President, Worldwide Research & Development, Pfizer Introducer: Deborah Dunsire, M.D. President & CEO, Millennium: The Takeda Oncology Company
9:30 a.m.	Networking Break	
10:15 a.m.	Panel: The Cost and Value of Personalized Medicine in the Era of Reform	Moderator: Gregory J. Downing, D.O., Ph.D. Senior Advisor & Director, Personalized Health Care Initiative, U.S. Department of Health and Human Services Introducer: Felix Frueh, Ph.D. VP, Personalized Medicine Research & Development, Medco Health Solutions Jane Barlow, M.D., M.P.H., M.B.A. VP, Medical Strategy & Precision Health Solutions, Medco Health Solutions Sharon Levine, M.D. Associate Executive Director, Permanente Medical Group Arnold Milstein, M.D., M.P.H. Professor of Medicine, Stanford University School of Medicine, Medical Director, Pacific Business Group on Health David Parker, Ph.D. VP, Boston Healthcare
11:20 a.m.	Presentation of Personalized Medicine Coalition's Sixth Annual Award for Leadership in Personalized Medicine	William S. Dalton, Ph.D., M.D. President, CEO & Center Director, Moffitt Cancer Center Presentation: Edward Abrahams, Ph.D. President, Personalized Medicine Coalition
11:50 a.m.	Luncheon	
1:05 p.m.	Debate: Patenting Gene Tests: Judge Robert Sweet's Decision <i>Association for Molecular Pathology, et al. v. United States Patent and Trademark Office, et al.</i>	Moderator: Carolyn Johnson Science Writer, The Boston Globe Introducer: Kathy Giusti Founder & CEO, Multiple Myeloma Research Foundation Attorney for the Plaintiffs: Christopher A. Hansen, Esq. , Staff Attorney, ACLU Attorney for the Defendants: Jennifer Gordon, Ph.D., J.D. , Partner, Baker Botts LLP

Conference Program **Wednesday, November 17, 2010**

- 1:50 p.m. **Keynote: An International Perspective** **Charles Swanton, Ph.D.**
Head, Translational Cancer Therapeutics Laboratory, Cancer Research UK London Research Institute
- Introducer: **Nicholas Galakatos, Ph.D.**,
Managing Director, Clarus Ventures
- 2:20 p.m. **Panel: Implementation of Personalized Medicine in Diverse Sectors** Moderator: **M. Kathleen Behrens Wilsey, Ph.D.**
Founder, KEW Group
- Introducer: **Heidi L. Rehm, Ph.D., FACMG**
Laboratory Director, Laboratory for Molecular Medicine, Partners HealthCare Center for Personalized Genetic Medicine, Assistant Professor of Pathology, Harvard Medical School
- Mark S. Boguski, M.D., Ph.D.**
Associate Professor, Harvard Medical School,
Beth Israel Deaconess Medical Center
- Michael Bristow, M.D., Ph.D.**
Professor of Medicine, University of Colorado School of Medicine,
Denver, Chief Executive Officer & President, ARCA biopharma
- Bruce Johnson, M.D.**
Director, Lowe Center for Thoracic Oncology, Dana-Farber Cancer Institute, Professor of Medicine, Harvard Medical School
- Clay Marsh, M.D.**
Senior Associate Vice President for Health Sciences Research,
Vice Dean of Research, College of Medicine, Professor of Internal Medicine, Ohio State University
- 3:25 p.m. **Networking Break**
- 3:55 p.m. **Panel: Molecular Diagnostics: From Technologies to Treatments** Moderator: **Sue Siegel**
Partner, Mohr, Davidow Ventures
- Introducer: **Robert Tepper, M.D.**,
Partner, Third Rock Ventures
- William Hagstrom**
CEO, Crescendo Bioscience
- K. Peter Hirth, Ph.D.**
Founder & CEO, Plexxikon
- Ryan Phelan**
Founder & President, DNA Direct
- Mark Stevenson**
President & CEO, Life Technologies
- 5:00 p.m. **Keynote: An International Perspective** **Guilherme Suarez-Kurtz, M.D., Ph.D.**
Head of Pharmacology, Brazilian National Cancer Institute, Coordinator, Brazilian National Pharmacogenomics Network
- Introducer: **Lawrence J. Lesko, Ph.D., F.C.P.**
Director, Office of Clinical Pharmacology, Center for Drug Evaluation and Research, U.S. Food and Drug Administration
- 5:30-7:00 p.m. **Reception at Elements Café**

Conference Program Thursday, November 18, 2010

7:15 a.m.	Registration & Continental Breakfast	
8:15 a.m.	Perspectives from The U.S. Department of Health and Human Services	Anna Barker, Ph.D. Former Deputy Director, National Cancer Institute; Deputy Director for Strategic Scientific Initiatives; Private Consultant Lawrence J. Lesko, Ph.D., F.C.P. Director, Office of Clinical Pharmacology, Center for Drug Evaluation and Research, U.S. Food and Drug Administration Introducer: Kristin Ciriello Pothier Vice President, Health Advances
8:55 a.m.	Panel: Information Technology Solutions	Moderator: Neil de Crescenzo Senior Vice President and General Manager for Health Sciences, Oracle Corp. Introducer: Richard A. Mandahl Vice President, Business Development, UNICConnect David Hickey Executive Vice President, Central Laboratory, Global Research & Development, Siemens Healthcare Diagnostics Joseph M. Jasinski, Ph.D. IBM Distinguished Engineer, Global Industry Executive, Smarter Healthcare and Life Sciences, IBM Research Emad Rizk, M.D. President, McKesson Health Solutions
10:00 a.m.	Keynote: A Perspective from an Academic Medical Center	William Chin, M.D. Executive Dean for Research, Harvard Medical School Introducer: Per G. H. Lofberg Executive Vice President, CVS Caremark, President, Caremark Pharmacy Services
10:30 a.m.	Networking Break	
10:55 a.m.	Radio Broadcast: On Point with Tom Ashbrook (off-site)	Facilitator: Edward Abrahams, Ph.D. President, Personalized Medicine Coalition Host: Tom Ashbrook Host & Managing Editor, On Point, WBUR, National Public Radio Guest: Margaret A. Hamburg, M.D. Commissioner of Food and Drugs, U.S. Food and Drug Administration (invited)
12:00 p.m.	Bag Lunch	

Conference Program Thursday, November 18, 2010

12:30 p.m.	Keynote: FDA Perspective on Personalized Medicine	Margaret A. Hamburg, M.D. Commissioner of Food and Drugs, U.S. Food and Drug Administration (invited)
1:00 p.m.	National Legislative Efforts	Sheila Walcoff Partner, McDermott Will & Emery Risa Stack, Ph.D. Partner, Kleiner Perkins Caufield & Byers Introducer: Gerald McDougall Partner, PricewaterhouseCoopers
1:30 p.m.	Briefings: Investments in Personalized Medicine	Christopher-Paul Milne, D.V.M., M.P.H., J.D. Associate Director, Tufts Center for the Study of Drug Development, Tufts University Sara Radcliffe Executive Vice President for Health, Biotechnology Industry Organization (BIO) Introducer: Jeffrey Elton, Ph.D. Chief Executive Officer, KEW Group
2:15 p.m.	Interactive Case Studies on Business Strategies for Personalized Medicine	Moderators: Richard Hamermesh, D.B.A. MBA Class of 1961 Professor of Management Practice, Harvard Business School Mara Aspinall President & Chief Executive Officer, On-Q-ity
	Case 1: Plavix: Drugs in the Age of Personalized Medicine	
	Case 2: Genomic Databases	Introducer: Gwill York Founder and Managing Director, Lighthouse Capital Partners
3:45 p.m.	Closing Remarks	Raju Kucherlapati, Ph.D. Paul C. Cabot Professor of Genetics, Professor of Medicine, Harvard Medical School

Conference Speakers



Edward Abrahams, Ph.D.

Edward Abrahams is president of the Personalized Medicine Coalition (PMC). Representing a broad spectrum of academic, industrial, patient, provider and payer communities, PMC seeks to advance the understanding and adoption of personalized medicine concepts and products for the benefit of patients. It has grown from its original 18 founding members in November 2004 to over 175 today.

Previously Dr. Abrahams was Executive Director of the Pennsylvania Biotechnology Association, where he spearheaded the successful effort that led to the Commonwealth of Pennsylvania's investment of \$200 million to commercialize biotechnology in the state. Earlier he had been Assistant Vice President for Federal Relations at the University of Pennsylvania and held a senior administrative position at Brown University.

Dr. Abrahams worked for seven years for the U.S. Congress, including as a legislative assistant to Senator Lloyd Bentsen, an economist for the Joint Economic Committee under the chairmanship of Representative Lee Hamilton, and as a AAAS Congressional Fellow for the House Committee on the Interior.

The author of numerous essays, Dr. Abrahams serves as senior editor of *Personalized Medicine* and has also taught history and public policy at Brown University and the University of Pennsylvania.



Mara Aspinall

Mara Aspinall is president and chief executive officer of On-Q-ity, an innovative personalized medicine oncology biology company focused on informing and transforming cancer life cycle management through diagnostics. The company is developing diagnostics to identify the unique characteristics of an individual's cancer, predicting the response to therapy and monitoring the efficacy of treatment in multiple cancer types. On-Q-ity leverages two core technologies: Microfluidic chip technology to capture, enumerate, and characterize circulating tumor cells (CTC) from patient blood and DNA repair pathway biomarkers to predict treatment response.

Mara was previously president of Genzyme Genetics, a leading provider of testing in the oncology and reproductive markets. Under Mara's leadership, Genzyme Genetics set the standard for quality genetics testing in the industry,

while profitably growing at an unprecedented pace. She transformed the business, expanding its scope and reach to become one of the nation's largest diagnostic laboratories. Before that, Mara served as president of Genzyme Pharmaceuticals.

Mara is a Board member of the Personalized Medicine Coalition and a founding director of EPAMED, the European Personalized Medicine organization. Mara holds an appointment as lecturer in health care policy at Harvard Medical School and has taught a seminar on *The Business of Drugs and Diagnostics*. She has been an active member of the Federal Secretary of Health and Human Services' Advisory Committee on Genetics, Health and Society. Mara co-authored, "Realizing the Promise of Personalized Medicine" in the *Harvard Business Review* and, most recently, was named one of the 2010 "100 Most Inspiring People in Life Sciences" by *PharmaVOICE Magazine*.

Mara started her business career at Bain & Company, an international strategic consulting firm. Her MBA is from Harvard Business School and her BA from Tufts University.



Anna Barker, Ph.D.

Anna Barker served as the Deputy Director of the National Cancer Institute (NCI) and as the Deputy Director for Strategic Scientific Initiatives for the past eight years – retiring at the end of August, 2010. In this role she developed and implemented multi/trans-disciplinary programs in strategic areas of cancer research and advanced technologies including: the Nanotechnology Alliance for Cancer; The Cancer Genome Atlas (TCGA) – in collaboration with the National Human Genome Research Institute; and the Clinical Proteomics Technologies Initiative for Cancer. Recently she led the development of a new initiative to develop a network of trans-disciplinary centers focused on the elucidation of the "physics" of cancer at all scales through the establishment of Physical Sciences-Oncology Centers (PS-OCs). All of these programs emphasize innovation, trans-disciplinary teams and convergence of scientific disciplines to enable progress against cancer. They also stress the synergy of large scale and individual initiated research, precompetitive research and public databases and translation of discoveries into new targeted interventions to detect prevent and treat cancer more effectively.

Dr. Barker has also led and collaborated on NCI's effort to develop contemporary resources for cancer research in the areas of biospecimens and bioinformatics (the Cancer

Human Biobank (caHUB) and the Cancer Bioinformatics Grid (caBIG, respectively) to support molecularly based personalized medicine. She served as the founding co-chair of the NCI-FDA Interagency Task Force; founding co-chair of the Cancer Steering Committee of the FNIH Biomarker Consortium; and oversaw the NCI's international cancer research programs, including pilot programs in Latin America and China. Dr. Barker has a long history in research and the leadership and management of research and development in the academic, non-profit and private sectors. She served as a senior scientist and subsequently as a senior executive at Battelle Memorial Institute for 18 years; and co-founded and served as the CEO of a public biotechnology drug development company. She has received a number of awards for her work in support of cancer research, cancer patients, professional and advocacy organizations and the ongoing national effort to prevent and cure cancer. Most recently she received the 2009 AACR Margaret Foti Award for Leadership and Extraordinary Achievements in Cancer Research, AACR 100th Anniversary Meeting; and In 2009 Dr. Barker was named to the list of "The 100 People Changing America" by Rolling Stone Magazine.

Her research interests include experimental therapeutics, tumor immunology, and free-radical biochemistry in cancer etiology and treatment. Dr. Barker completed her M.A. and Ph.D. at the Ohio State University, where she trained in immunology and microbiology.



Jane Barlow, M.D., M.P.H., M.B.A.

Jane Barlow serves as Vice President, Medical Strategy and Precision Health Solutions for Medco Health Solutions, Inc. Dr. Barlow is responsible for strategy, design and delivery of Medco's personalized medicine products and services targeted at improving therapy management and treatment outcomes through focused genetic and molecular testing. As medical director for Medco's employer clients, she engages in strategic discussions leveraging Medco's clinical expertise to aid clients with planning, program design and outcomes measures across the full spectrum of health benefits. She is also provides comprehensive leadership and oversight of Medco's accreditation activities and annual Drug Trend Report.

Dr. Barlow's prior experience includes expertise in employer benefits, employee well-being, and occupational and environmental health and safety. Her diverse background includes positions with the U.S. military, federal gov-

ernment, industry, private practice and consulting.

Dr. Barlow attended medical school at Creighton University and completed her residency training in occupational medicine at Johns Hopkins University. She holds masters' degrees in business administration and public health and is a Certified Physician Executive. Dr. Barlow is board-certified in occupational medicine and holds the rank of fellow in both the American College of Occupational and Environmental Medicine and the American College of Preventive Medicine.

Mark Boguski, M.D., Ph.D.

Mark Boguski is a well-known leader in informatics and genomics research. He has written and lectured extensively on bioinformatics and genomics, and developed the first publicly available database system for expression array data. Dr. Boguski leads bioinformatics specialists and experimental biologists in developing the interface between computational biology and functional genomics to gain new insights into systems biology. An original member of the U.S. National Center for Biotechnology Information (NCBI), Dr. Boguski has been involved with the development of a number of high-impact, enabling information resources. These include: dbEST, a critical resource for gene discovery and in silico SNP mining; applications of UniGene for creation of the first large-scale maps of the human genome and the design of gene chips from expression profiling; and ArrayDB for management and analysis of expression data. He has also made significant contributions to comparative genomics and pharmacogenomics.

Dr. Boguski is the author or co-author of over 100 articles and is the recipient of the Regents' Award from the National Library of Medicine and the NIH Director's Award. He is an organizer of the Cold Spring Harbor Symposium on Genome Sequencing and Biology and has served on grant review and advisory panels for a number of government and private funding agencies and as a consultant to industry. He is an adjunct Professor in the Department of Molecular Biology and Genetics at the Johns Hopkins University School of Medicine, a former Editor of Genome Research and serves on the Board of Reviewing Editors for Science magazine. Dr. Boguski is a member of the Scientific Advisory Board of the Merck Genome Research Institute, a member of the Genetics Advisory Group for the Wellcome Trust and an advisor to the Howard Hughes Medical Institute. He received his M.D. and Ph.D. degrees from the Medical Scientist Training Program at the Washington University School of Medicine in St. Louis and pursued specialty training in pathology.

continued

Conference Speakers *continued*



Michael Bristow, M.D., Ph.D.,

Michael R. Bristow is currently Professor of Medicine (Cardiology) and Co-Director of the University of Colorado Cardiovascular Institute at the University of Colorado, School of Medicine in Denver. He headed the Cardiology Division there from 1991 to 2004.

Dr. Bristow received his MD in 1970 from the University of Illinois in Chicago, where he also earned a PhD in pharmacology the following year. After completing an NIH post-doctoral fellowship in pharmacology at the University of Illinois, he received his medical training at Stanford University, including an internship in internal medicine, a research fellowship in medicine/oncology, and a residency in medicine. He remained at Stanford to complete a fellowship in cardiology, where he joined the Cardiology faculty in 1979. He moved to the University of Utah in 1984, where he co-founded the first multi-hospital heart transplant program in the U.S. Dr. Bristow is board certified in internal medicine and in the subspecialty of cardiovascular diseases.

Dr. Bristow has authored more than 350 peer-reviewed papers and book chapters on heart failure and other cardiovascular diseases. He was instrumental in elucidating key molecular mechanisms underlying heart failure and the use of β -blockers for its treatment, and in developing the first pharmacogenetically targeted cardiovascular drug (bucindolol, Gencaro™), currently under consideration for FDA approval. He was the lead investigator for the Comparison of Medical Therapy, Pacing, and Defibrillation in Chronic Heart Failure (COMPANION) trial, and he was involved in the leadership of many other heart failure trials, including the Beta-Blocker Evaluation of Survival Trial (BEST) and the U.S. Carvedilol Trials. He has received many academic and industry honors, including the Therapeutic Frontiers Award, presented by the American College of Clinical Pharmacy, for development of β -blockade as a treatment for chronic heart failure, and in 2008 the Pharmaceutical Research and Manufacturers of America Clinical Trial Exceptional Service Award for the development of carvedilol for heart failure. In 2008 he was given the Lifetime Achievement Award by the Heart Failure Society of America. In 1999 he was ranked by Science Watch as first among heart failure investigators in impact of cardiovascular publications between 1993 and 1997, and he is an original member (2002) of the Institute of Scientific Information's Highly Cited Researchers.

He is a fellow of the American College of Cardiology, a founding member of the Heart Failure Society of America,

and a member of many other professional societies. He currently serves on the editorial boards of The Journal of the American College of Cardiology, Congestive Heart Failure, The International Journal of Cardiology and Clinical and Translational Science among other journals.

Dr. Bristow is the chairman and chief science and medical officer of ARCA Biopharma, a company he founded in 2002 with the mission of developing genetically targeted therapies for heart failure and other cardiovascular diseases. In 2007, he co-founded Miragen Therapeutics, Inc., a company dedicated to utilizing the biologic properties of microRNA in developing therapies for cardiovascular diseases. He was also the principal founder and former chief science and medical officer of Myogen, Inc., a biopharmaceutical company that was acquired by Gilead Sciences, Inc., in 2006. These companies, all founded on university-licensed intellectual property generated by him and his collaborators, have been responsible for creating hundreds of jobs in Colorado and in the case of Myogen being named business of the year in its home office location (Westminster, CO). Companies founded by Dr. Bristow have been responsible for developing one FDA and EMEA approved drug (Ambrisentan, Letairis™ for pulmonary arterial hypertension), one submitted NDA (bucindolol) and one cardiovascular drug in late-stage development (darusentan, for resistant hypertension), and have returned over 2B USD to investors. In 2008, he was given the Lifetime Achievement Award by the Heart Failure Society of America, and also named "Scientist of the Year" by the Colorado Chapter of the ARCS.



William W. Chin, M.D.

William Chin is the Executive Dean for Research at Harvard Medical School (HMS). In this role, Dr. Chin spearheads efforts to design and implement the vision for research at HMS, with special emphasis on interdisciplinary and translational research that crosses departmental

and institutional boundaries. Chin is a Harvard-trained endocrinologist and longstanding faculty member. He was Professor of Medicine, HMS; Chief, Division of Genetics and Senior Physician, Brigham & Women's Hospital; and Investigator, Howard Hughes Medical Institute. His impressive career is exemplified in part by his extensive bibliography of nearly 300 papers, chapters and books, most of which were generated during his 25 years at HMS. As a pioneering molecular endocrinologist at HMS, Dr. Chin

embraced the early use of emerging DNA technology to make important discoveries regarding the structure, function and regulation of hormone genes. His investigations often demonstrated a translational research theme, connecting basic laboratory discoveries to their physiologic relevance in animal models and humans. He has been honored with numerous awards for research, mentorship and leadership. Prior to HMS, Dr. Chin was at Eli Lilly and Company, where he had worked for the last decade, most recently as senior vice president for Discovery Research and Clinical Investigation.



William Dalton, Ph.D., M.D.

William (Bill) S. Dalton is President, Chief Executive Officer and Center Director of Moffitt Cancer Center and Research Institute, an NCI-Designated Comprehensive Cancer Center, and serves as Board Chairman of M2Gen, a national biotechnology subsidiary of

Moffitt Cancer Center. A nationally renowned cancer researcher, physician and health policy expert, Dr. Dalton has dedicated his career to the study and development of the most effective approaches to cancer research and care.

Dr. Dalton currently serves as the President-Elect of the Association of American Cancer Institutes and is Chair of the Science Policy & Legislative Affairs Committee of the American Association for Cancer Research. Dr. Dalton served on the National Cancer Institute Board of Scientific Advisors as well as multiple scientific advisory boards at cancer centers and research foundations across the U.S.

In addition to his basic and translational research interests in molecular mechanisms of drug resistance and new drug discovery, in which he has been funded continuously by the NIH/NCI for over 25 years and holds several patents, Dr. Dalton is also interested in the development of personalized cancer care and patient-centered outcomes research. Moffitt's Total Cancer Care™ is an approach to enhancing access to evidence-based, personalized cancer treatments and information/decision tools for patients and clinicians. Total Cancer Care is one of the largest cancer tumor biorepositories and data warehouses in the U.S. dedicated for use in development of personalized medicine.

Dr. Dalton has authored or co-authored numerous articles in journals such as *Cancer Research*, *Blood*, *Immunity*, and the *Journal of Biochemistry*. He serves, or has served, on the editorial boards of *Clinical Cancer Research*, *Molecular Cancer Therapeutics*, *Archives of Internal Medicine*,

Leukemia, *Cancer Research*, and *Investigational New Drugs*.

Dr. Dalton received his Ph.D. in toxicology and medical life sciences and his M.D. degree from Indiana University. He completed his internship in Internal Medicine at Indiana University, his residency in Medicine at the University of Arizona in Tucson and his fellowships in Oncology and Clinical Pharmacology at the University of Arizona. He is board certified in Internal Medicine and Medical Oncology and is an expert in Multiple Myeloma. Prior to accepting the position as CEO/Center Director at Moffitt, Dr. Dalton was the Dean of the College of Medicine at the University of Arizona.

Neil de Crescenzo

Neil de Crescenzo is Senior Vice President and General Manager for Health Sciences at Oracle Corporation. He is responsible for managing Oracle's solution groups, strategic planning, product development, sales, service and support for the industry solutions sold into the healthcare and life sciences markets worldwide. He brings over 20 years of operational and IT leadership across healthcare and life sciences to his work with customers and partners worldwide. Oracle is the world's leading supplier of enterprise software, with over \$25B in revenues and over 100,000 employees.

Prior to joining Oracle, Mr. de Crescenzo held a number of leadership positions at IBM Corporation for a decade, working with healthcare and life sciences clients worldwide. Prior to entering the information technology industry, he held leadership positions in healthcare operations at medical centers and a major health insurer.

Mr. de Crescenzo has been a keynote speaker at numerous industry conferences worldwide and is quoted frequently on industry issues. In 2005, he was named one of the Top 25 Most Influential Consultants by *Consulting Magazine*. Mr. de Crescenzo has a B.A. in Political Science from Yale University and an MBA in High Technology from Northeastern University.



Mikael Dolsten, M.D., Ph.D.

Mikael Dolsten was appointed President of Worldwide Research & Development (WRD) in May, 2010. In this role, he has responsibility for all research at Pfizer, as well as development of all compounds through proof of concept (POC). A physician with more than 20 years experience in the pharmaceutical industry, Mikael oversees thousands

continued

Conference Speakers *continued*

of world-class scientists and researchers progressing a portfolio of high-impact medicines and vaccines to transform patients' lives.

Pfizer scientists across WRD apply industry-leading scientific and technology expertise across a range of small molecule and biologic platforms and modalities. In a global network of research laboratories and clinical study sites, Pfizer R&D professionals and business unit colleagues focus on translating deep science into safe and effective drugs to prevent, treat and cure disease.

Mikael oversees all Pfizer research units and biotech units in PharmaTherapeutics and BioTherapeutics: Antibacterials; Allergy & Respiratory; Cardiovascular; Metabolic & Endocrine Diseases; Neuroscience; Oncology; Pain; Regenerative Medicine; Indications Discovery; Inflammation & Immunology; Tissue Repair; BioCorrection; Orphan & Genetic Diseases; New Opportunities; Therapeutic Innovation Laboratories; Vaccine R&D; CovX; Rinat; Oligonucleotide Therapeutics; and the Center for Integrative Biology & Biotherapeutics.

WRD also includes these global science-based groups: Medicinal Chemistry; Drug Safety R&D; Pharmaceutical Sciences; Pharmacokinetics, Dynamics & Metabolism; Comparative Medicine; Clinical Research; Clinical Programs; Development Operations; Development & Strategic Operations; External R&D Innovation; Research Centers of Emphasis; and Asia R&D. Previously, Mikael was President of BioTherapeutics R&D, responsible for driving Pfizer leadership, expertise, and innovation in biologic medicines and vaccines. Prior to joining Pfizer in 2009, Mikael was Senior Vice President, Wyeth Inc. and President of Wyeth Research where he led scientists across the U.S., Europe and Asia in the research and development of small molecules, vaccines and protein-based medicines in Inflammation, Women Health's, Neuroscience, Oncology, Infectious diseases (vaccines, antibiotics), Hemophilia, GI and Musculoskeletal diseases.

Before joining Wyeth, Mikael served as Executive Vice President within Pharmaceutical Research & Development/Medicine at Boehringer Ingelheim. He led pharmaceutical research in the U.S., Canada, Germany, Italy, Austria and Japan – with programs in respiratory, inflammation/immunology, oncology, virology, cardiovascular, metabolism and CNS. He was a member of the BI corporate management team responsible for all worldwide development projects and licensing opportunities. Mikael's earlier career included research leader positions with AstraZeneca, Pharmacia and Upjohn.

Mikael earned his Ph.D. in tumor immunology and M.D.

from the University of Lund in Sweden. He also studied virology and cell biology at the Weizmann Institute in Israel and has been appointed as Adjunct Professor in Immunology at the Medical Faculty in Lund.

In July 2010, Mikael was elected a fellow of the New York Academy of Medicine. He is an appointed Governor of the New York Academy of Sciences. A member of the Science and Regulatory Executive Committee of The Pharmaceutical Research and Manufacturers of America (PhRMA), Mikael also serves on the PhRMA Foundation Board of Directors.

Mikael has published several patents and about 150 articles in international journals with particular contributions in areas such as molecular cell biology, immunology and oncology.



Gregory J. Downing, D.O., Ph.D.

Gregory Downing was appointed in March 2006 as Program Director for the Department of Health and Human Services (HHS) initiative on Personalized Health Care. In this role, he coordinates trans-HHS agency programs for the analysis, planning and implementation of policies and systems to facilitate integration of technologies to advance the quality of health care.

Prior to coming to HHS, Dr. Downing served at the National Institutes of Health since 1993 in research, policy, and program management roles. Dr. Downing earned his medical degree from Michigan State University and his Ph.D. in pharmacology from the University of Kansas. He completed his residency in pediatrics and fellowship in neonatology before joining the faculty of the University of Missouri-Kansas City in the Department of Neonatology at The Children's Mercy Hospital. Dr. Downing is certified by the American Board of Pediatrics in pediatrics and neonatology — perinatal medicine.



Jennifer Gordon, Ph.D., J.D.

Jennifer Gordon is a partner in the New York office of Baker Botts, LLP and head of the firm's Life Sciences Intellectual Property practice. She has extensive experience in the area of biotechnology and pharmaceutical patent law. Her present practice is largely in the area of

patent litigation with ongoing involvement in various prosecution matters (including reexaminations) before the United States Patent and Trademark Office), client counseling (including validity, infringement, patentability and free-

dom-to-operate opinions), and appeals before the Court of Appeals for the Federal Circuit. Her patent cases have spanned various aspects of biotechnology such as nucleic acid amplification technologies, recombinant DNA technologies, enzymology, virology, medical diagnostics and pharmaceuticals.

Dr. Gordon is a graduate of the Massachusetts Institute of Technology, where she was awarded an S.B. degree in Life Sciences in 1975 and a Ph.D. degree in Biochemical Engineering in 1981. She attended Fordham University School of Law where she graduated with a J.D. degree, cum laude, in 1985. She is a native, and current resident, of Brooklyn, New York.



William Hagstrom

William Hagstrom has served as the Chief Executive Officer of Crescendo Bioscience since early 2007. Mr. Hagstrom has over 25 years of experience in the healthcare industry including diagnostics, devices and therapeutics.

Prior to Crescendo Bioscience, William

was President of Alpha BioPartners a strategic consulting firm concentrated on assessing promising technologies and launching new life sciences companies. Previously, Mr. Hagstrom served as President and Chief Executive Officer of UroCor, a specialty diagnostics company focused on urological cancers and complex diseases. In this role, he built the Company from start-up through market launch, product expansion and penetration of over 35% of the U.S. Urology market. UroCor's growth placed the Company on the Inc 500 list of fastest growing private companies in 1992, 1993, 1994 and 1995. In 1996 UroCor successfully completed its Initial Public Offering. Prior to joining UroCor, he spent 10 years with large multi-national healthcare companies including Baxter Travenol, American Hospital Supply and Becton Dickinson. Within these companies, Mr. Hagstrom held a broad range of positions in general management, senior marketing and sales along with product planning and business development.

Margaret A. Hamburg, M.D.

Margaret A. Hamburg was confirmed on May 18, 2009 by a unanimous Senate voice vote to become the 21st Commissioner of Food and Drugs. The second woman to be nominated for that position, Dr. Hamburg is exceptionally qualified for her new job by her training and experience as an M.D., scientist and public health executive.

Dr. Hamburg graduated from Harvard Medical School, and completed her residency in internal medicine at what is now New York Presbyterian Hospital-Weill Cornell Medical Center, one of the top-ten hospitals in the nation. She conducted research on neuroscience at Rockefeller University in New York, studied neuropharmacology at the National Institute of Mental Health on the National Institutes of Health campus in Bethesda, Md., and later focused on AIDS research as Assistant Director of the National Institute of Allergy and Infectious Diseases.

In 1990, Dr. Hamburg joined the New York City Department of Health and Mental Hygiene as Deputy Health Commissioner, and within a year was promoted to Commissioner, a position she held until 1997. During her tenure she was widely praised for her initiatives, decisive leadership, and significant public health measures she carried out despite severe budget constraints and while holding academic positions at Columbia University School of Public Health and Cornell University Medical College.

Dr. Hamburg's accomplishments as New York's top public health official included improved services for women and children, needle-exchange programs to reduce the spread of HIV (the AIDS virus), and the initiation the first public health bio-terrorism defense program in the nation. Her most celebrated achievement, however, was curbing the spread of tuberculosis. In the 1990s, TB resurged as a major public health threat, largely because many patients did not complete the full course of the treatment and the disease became resistant to standard drugs. Dr. Hamburg confronted the problem by sending health care workers to patients' homes and taking other steps to make sure they completed the drug regimen. Thanks to this program, in a five-year span, the TB rate in New York City fell by 46% overall, and 86% for the most drug-resistant strains. Dr. Hamburg's innovative approach has become a model for health departments world-wide.

In 1994, Dr. Hamburg was elected to the membership in the Institute of Medicine, one of the youngest persons to be so honored. Three years later, at the request of President Clinton, she accepted the position of Assistant Secretary for Policy and Evaluation in the U.S. Department of Health and Human Services (HHS).

In 2001, Dr. Hamburg became Vice President for Biological Programs at the Nuclear Threat Initiative, a foundation dedicated to reducing the threat to public safety from nuclear, chemical, and biological weapons. In that position, she has advocated broad reforms in public health infrastructure and policy, from local health departments to

continued

Conference Speakers *continued*

the national agency, in order to meet the dangers of modern bioterrorism as well as the threats of naturally occurring infectious diseases such as pandemic flu. Since 2005, Dr. Hamburg has served as the Initiative's Senior Scientist. President Barack Obama nominated her for the FDA Commissioner on March 25, 2009.

Upon Dr. Hamburg's confirmation by the U.S. Senate, HHS Secretary Kathleen Sebelius has praised her as "an inspiring public health leader with broad experience in infectious disease, bioterrorism, and health policy," and added that "Personally, I have been impressed by the calm and confidence Dr. Hamburg has shown in the face of a wide variety of challenges."



Richard Hamermesh, D.B.A.

Richard Hamermesh is the MBA Class of 1961 Professor of Management Practice at the Harvard Business School where he teaches in the MBA Program and is the Faculty Chair of the HBS Healthcare Initiative. Richard created and teaches the second-year MBA elective,

Entrepreneurship and Venture Capital in Healthcare. Previously, he was the Course Head for the required first year course entitled The Entrepreneurial Manager. In addition Richard participates in several HBS Executive Education programs.

From 1987 to 2001, Richard was a co-founder and a Managing Partner of The Center for Executive Development, an executive education and development consulting firm. Prior to this, from 1976 to 1987, he was a member of the faculty of the Harvard Business School.

Richard is also an active investor and entrepreneur, having participated as a principal, director, and investor in the founding and early stages of over 20 organizations. These have included start-ups, leveraged buy-outs, industry roll-ups, and non-profit foundations. He was the founding president of the Newton (MA) Schools Foundation and served on the editorial board of the Harvard Business Review. He is currently on the Boards of one public and two private corporations, as well as two non-profit Boards. From 1991 to 1996, he was the founding Chairman of Synthes Spine, Inc.

Richard is the author or co-author of five books, including *New Business Ventures* and *the Entrepreneur*. His best-known book, *Fad-Free Management*, was published in 1996. He has published numerous articles and more than 100 case studies. His most recent article, "Realizing the Potential of Personalized Medicine," appeared in the

Harvard Business Review (October 2007). Richard received his AB from the University of California, and his MBA and DBA from HBS. He is married, has two children, and his hobbies include tennis, skiing, and yoga.



Christopher Hansen, Esq.

Chris Hansen joined the ACLU in 1973. He spent 10 years at the NYCLU specializing in complex litigation seeking reform of the mental retardation and mental health systems. He then spent 10 years as the Associate Director of the Children's Rights Project of the ACLU

specializing in complex litigation seeking reform of child welfare systems and in school desegregation. Since the mid-1990's, Mr. Hansen has been a staff attorney at the ACLU and worked on a wide variety of cases. He led the ACLU's decades-long, successful battle to ensure that speech on the Internet receive the highest First Amendment protection. Most recently, he led the ACLU's effort to invalidate patents granted on human genes. Mr. Hansen has argued cases in the US Supreme Court, and many of the federal courts of appeals, federal district courts, and state trial and appellate courts.



David Hickey

Dave Hickey was appointed Executive Vice President, Central Laboratory, Global Research & Development of Siemens Healthcare Diagnostics in February 2009. Dave also served as Senior Vice President, Central Laboratory, Strategy and Business Development and prior to

that he served as Senior Vice President Strategic Marketing and Planning since January, 2007, and prior to that Vice President, Immunology and Molecular for Bayer Diagnostics. Dave is now responsible for the central laboratory business, global research & development, program management and medical, clinical and statistical affairs including plans for the integration of the in vivo and in vitro diagnostic solutions. Mr. Hickey joined Bayer Diagnostics in 1992 as Product Manager, Clinical Chemistry. In 1996, he was appointed to Marketing Manager, Immunoassay and Clinical Chemistry.

Mr. Hickey became Head of Sales and Marketing for Bayer's Near Patient Testing and Diabetes Care Divisions in the U.K. in 2000. When he was promoted to Vice President, Immunology and Molecular for Bayer Diagnostics in 2004,

he assumed responsibility for the global strategic marketing of the immunology and molecular assays and instruments, including new product launch operations.

Prior to joining Bayer Diagnostics, Mr. Hickey served as a field product specialist for laboratory analyzers for American Monitor, Inc. He also provided sales and territory management for British Drug Houses (BDH), and was a clinical biochemist at a district general hospital in the UK, working in Chemical Pathology.

Mr. Hickey holds a B.S. in Clinical Biochemistry from University of Manchester.



K. Peter Hirth, Ph.D.

K. Peter Hirth co-founded Plexxikon in December 2000, and has 25 years of biotechnology and pharmaceutical discovery and development experience. Previously, he was president of Sugem, Inc. until the sale of the company to Pharmacia Corporation in 1999. At

Sugem, he helped build the company from its inception and advanced several kinase inhibitors through clinical trials for the treatment of oncology. This includes the drug Sutent, now owned by Pfizer through its acquisition of Pharmacia. Prior to Sugem, Dr. Hirth was a vice president in research with Boehringer Mannheim where, among other responsibilities, he successfully led the company's erythropoietin program. Previously, he also was a research scientist with the Max Planck Institute, following the completion of his post doctoral work at the University of California, San Diego. Dr. Hirth received his Ph.D. in molecular genetics from Heidelberg University, Germany.



Joseph M. Jasinski, Ph.D.

Joseph M. Jasinski is an IBM Distinguished Engineer and the Global Industry Executive for Smarter Healthcare and Life Sciences at IBM Research. In this role he is responsible for developing strategies and coordinating research efforts across IBM's Research Division in

areas ranging from the use of information technology in payer/provider healthcare to computational studies in molecular biology.

Dr. Jasinski is a Fellow of the American Physical Society and the American Association for the Advancement of Science. He has authored or co-authored over 50 scientific papers and holds two patents.



Bruce Johnson, M.D.

Bruce E. Johnson received his MD from the University of Minnesota in 1979 and his postgraduate training at the University of Chicago and the National Cancer Institute. After serving at NCI, where he most recently headed the Lung Cancer Biology Section, he joined DFCI in

1999. He currently directs the Dana-Farber/Partners CancerCare Thoracic Oncology Program, a cooperative effort that includes DFCI, Brigham and Women's Hospital, and Massachusetts General Hospital.

Carolyn Johnson

Carolyn Johnson joined the Boston Globe's Health and Science department as its science writer in July 2008. Before that she covered telecom and tech culture for the business section. Carolyn was a physics and English major at Amherst and she has a master's degree in science writing from MIT.



Raju Kucherlapati, Ph.D.

Raju Kucherlapati is the Paul C. Cabot Professor in the Harvard Medical School Department of Genetics. He is also a professor in the Department of Medicine at Brigham and Women's Hospital. Dr. Kucherlapati was the first Scientific Director of the Harvard Medical School-

Partners Healthcare Center for Genetics and Genomics. His research focuses on gene mapping, gene modification, and cloning disease genes. During 1989-2001, Dr. Kucherlapati was the Lola and Saul Kramer Professor of Molecular Genetics and Chairman of the Department of Molecular Genetics at the Albert Einstein College of Medicine in New York. He was previously a professor in the Department of Genetics at the University of Illinois, College of Medicine. He began his research as an assistant professor in the Department of Biochemical Sciences at Princeton University.

He has chaired numerous NIH committees and served on the National Advisory Council for Human Genome Research and the NCI Mouse Models for Human Cancer Consortium. He is also a member of the Cancer Genome Atlas project of the National Institutes of Health. He is a member of the Institute of Medicine of the National Academy of Sciences and a fellow of the American Association for the Advancement of Science. He is a member of Presidential Commission for the Study of Bioethical Issues.

continued

Conference Speakers *continued*

Dr. Kucherlapati received his B.S. and M.S. in Biology from universities in India, and he received his Ph.D. from the University of Illinois at Urbana, as well as conducting post-doctoral work at Yale University.



Lawrence J. Lesko, Ph.D., F.C.P.

Lawrence J. Lesko is the Director of the Office of Clinical Pharmacology (OCP) in the Center for Drug Evaluation and Research at the Food and Drug Administration (FDA) having served in this capacity since 1995. The main areas of responsibility of OCP are bioavailability and bioequivalence of drug delivery systems, systemic pharmacokinetics (PK) and pharmacodynamics (PD), pharmacogenomics and individualization of drug therapy. OCP also conducts analysis of dose-response and PK-PD data for the purpose of optimizing dose selection and making dose adjustments in the cases of drug-drug interactions and special populations (e.g., pediatrics). Members of OCP also utilize quantitative methods and drug-disease state-placebo models to prospectively evaluate options for designing randomized clinical trials through simulation. OCP reviewers use genomic and non-genomic biomarkers to assist in benefit/risk assessments and to guide individualization of drug therapy in both new and previously approved drug labels. Dr. Lesko is Chair of the FDA Pharmacogenomics Working Group and the Clinical Pharmacology Section of the Medical Policy Coordinating Committee in CDER, both of which are responsible for the development of guidances for industry and enabling of innovative technologies for drug development. Dr. Lesko has served as the President of the American College of Clinical Pharmacology (ACCP) from 2004-2006. He has received the ASCPT Rawls-Palmer Progress in Medicine Award in March 2007, was honored with the University of North Carolina (UNC) Institute for Pharmacogenomics and Individualized Therapy Award for Clinical Service in May 2007, and was awarded the Nathaniel T Kwit Memorial Distinguished Service Award from ACCP in September 2007. He has been appointed as an Adjunct Professor in the Colleges of Pharmacy at the University of Florida, at the University of North Carolina, Ohio State University, and at the University of Southern California. Dr. Lesko is an elected American Association of Pharmaceutical Scientist (AAPS) Fellow; he is also a Fellow in the ACCP and was elected as a Fellow in the Japanese Society for the Study of Xenobiotics (JSSX) in 2009. He is Board Certified in Clinical Pharmacology by the American Board of Clinical Pharmacology. He has authored over 165

peer-reviewed manuscripts and is a frequent invited speaker nationally and internationally. His hobbies include motorcycles, scuba diving and underwater photography. He is a Divemaster certified by the Professional Association of Diving Instructors.



Sharon Levine, M.D.

Sharon Levine, Associate Executive Director for The Permanente Medical Group of Northern California since 1991 has responsibility for clinical education, management training and leadership development for the group's physicians; government and community relations, health policy and external affairs; and pharmacy policy and drug use management. A board certified pediatrician, Dr. Levine has held multiple leadership roles within The Permanente Medical Group, as well as academic appointments at Tufts University School of Medicine and Georgetown University School of Medicine, and spent two years as a Clinical Associate at the National Institutes of Health, Institute of Child Health and Human Development.

Dr. Levine serves on the Boards of Directors of the Integrated Healthcare Association, the Public Health Institute of California, the California Association of Physician Groups (CAPG), The Reagan Udall Foundation, the Medical Board of California and is a member of the Committee on Evidence-Based Benefit Design of the National Business Group on Health. In September 2010 she was appointed to the Board of Governors of the newly created Patient Centered Outcomes Research Institute.

A native of Boston, Dr. Levine received her undergraduate degree from Radcliffe College at Harvard University, and her MD degree from Tufts University School of Medicine. Dr. Levine is married and lives in Palo Alto, California.



Clay Marsh, M.D.

Senior Associate Vice President, Health Sciences Research; Vice Dean of Research for the College of Medicine; Executive Director, Center for Personalized Health; Director, Center for Critical Care and Respiratory Medicine; Professor of Internal Medicine. He is an NIH-funded investigator and his laboratory focuses on translational research in the area of macrophage biology and understanding molecular mechanisms underlying human health and wellness.

Dr Marsh leads the efforts in Personalized Health Care at the Ohio State University, where he and senior leadership lead the effort in transforming health care delivery by creating pilot programs in wellness and chronic disease testing disruptive solutions that will result in lower cost and higher quality/outcomes. OSU is a partner in the Coriell Institute's Personalized Medicine Collaborative and has recently entered a partnership with the Seattle-based Institute for Systems Biology to form the P4 Medicine Institute.



Christopher-Paul Milne, D.V.M., M.P.H., J.D.

Christopher-Paul Milne joined the Tufts Center for the Study of Drug Development (Tufts CSDD) in 1998 as a Senior Research Fellow in order to address legal and regulatory issues. His current research interests include: chal-

lenges to the R&D of new drugs; innovation capacity in the developing world; incentive programs for pediatric studies, orphan products, and neglected diseases; assessing the impact of regulatory policy; and, tracking progress of new safety and science initiatives. He is currently a member of the Editorial Board of the Food & Drug Law Journal and the Executive Program Committee for the Drug Information Association 2010 Annual Meeting, as well as an Honorary Fellow at the University of Edinburgh.



Arnold Milstein, M.D., M.P.H.

Arnold Milstein is a Professor of Medicine at Stanford and directs the Stanford Clinical Excellence Research Center. The Center is a collaboration of the Schools of Medicine, Engineering and Business to design and test new health care delivery models that both lower per

capita health care spending and improve clinical outcomes.

His career and ongoing research is focused on acceleration of clinical service innovations that improve the societal value of health care.

He serves as the Medical Director of the Pacific Business Group on Health (PBGH), the largest regional health care improvement coalition in the U.S. He also guides employer-sponsored clinically-based innovation development for Mercer Health and Benefits and chairs the Steering Committee that directs the largest U.S. physician pay-for-performance program, operated by the Integrated Healthcare Association. Previously he co-founded the Leapfrog Group and Consumer-Purchaser Disclosure

Project, and served as a Congressionally-appointed MedPAC Commissioner.

Citing his nationally distinguished innovation in health care cost reduction and quality gains, he was selected for the highest annual award of the National Business Group on Health (NBGH) and of the American College of Medical Quality. Elected to the Institute of Medicine (IOM) of the National Academy of Sciences, he chaired the planning committee of its examination of best methods to lower per capita health care spending and improve clinical outcomes.

He was educated at Harvard (BA Economics), Tufts (MD) and (UC Berkeley MPH Health Services Evaluation and Planning).



Elizabeth Nabel, M.D.

Elizabeth G. Nabel, MD, is the president of the Brigham and Women's/Faulkner Hospitals, a position she assumed on Jan. 4, 2010. Prior to her position at BWH, Dr Nabel served as the director of the National Heart, Lung, and Blood Institute at the National Institutes of Health. In

this capacity, Dr. Nabel oversaw an extensive national research portfolio with an annual budget of approximately \$3.0 billion to prevent, diagnose, and treat heart, lung, and blood diseases. A native of St. Paul, Minnesota, she attended Weill Cornell Medical College and conducted her internal medicine and cardiovascular training at Brigham and Women's Hospital, Harvard Medical School, followed by faculty positions at the University of Michigan Medical School where she directed the Division of Cardiology and the Cardiovascular Research Center.

As a physician-scientist, Dr. Nabel has made substantial contributions to our understanding of molecular genetics of cardiovascular diseases. She has delineated the mechanisms by which cell cycle and growth factor proteins regulate the proliferation of vascular cells in blood vessels, a process important for the development of atherosclerosis and other cardiovascular diseases. Her current work has focused on the rare premature aging disorder, Hutchinson-Gilford Progeria Syndrome, where she has characterized the smooth muscle cell defect leading to premature heart attack and stroke in children in their early teens.

Among her leadership efforts as NHLBI director, Dr. Nabel launched new scientific programs in genetics and genomics, stem and progenitor cell biology, translational research, global health, and support for young investigators.

Her awards include the Willem Einthoven Award; the Amgen-Scientific Achievement Award; the American Heart

continued

Conference Speakers *continued*

Association Distinguished Achievement Awards; the Eugene Braunwald Academic Mentorship Award; the Distinguished Alumni Award from Weill Cornell Medical College; the Lewis Katz Research Prize in Cardiovascular Research and four honorary doctorates. Dr. Nabel received the 2006 Leadership in Personalized Medicine Award from the Personalized Medicine Coalition. She is a member of the American Academy of the Arts and Sciences, the Institute of Medicine (Council) of the National Academy of Sciences, the Association of American Physicians (Council), and a fellow of the American Association for the Advancement of Science. Dr. Nabel has served on the Board of Reviewing Editors for Science and currently is on the Editorial Board of the New England Journal of Medicine and Science Translational Medicine. She is a partner on 17 patents and the author of more than 250 scientific publications.

Dr. Nabel's pledge is to strengthen the mission of the Brigham and Women's/Faulkner Hospitals and their connections to the people and the communities that they serve, whether they live across street or around the world.



David Parker, Ph.D.

David Parker has spent the past 25 years in the healthcare industry, including 14 years of strategy consulting experience centered on the intersection of reimbursement, health economics, clinical science, and marketing strategy. He currently leads the Washington office of Boston Healthcare Associates and provides strategic advisory services to the firm's biopharma, device, and diagnostics clients. His consulting encompasses all aspects of reimbursement and market strategy development with a particular focus on medical devices, molecular diagnostics, and personalized medicine. Preceding his appointment at Boston Healthcare, he was a senior consulting executive at Covance Market Access Services, where as a Vice President he led the Economic Strategies and Devices/Diagnostics practices. His work has resulted in numerous successful product launches, expanded market access, and favorable coverage and payment decisions by public and private payers alike.

Prior to Covance, Dr. Parker was president of a biomedical consulting firm. His consulting career was preceded by eleven years of increasingly-responsible product and marketing management, strategic planning, and business development roles at several biotechnology companies ranging from development-stage to Fortune 500. Early in his career, he conducted research in cell biology at Northwestern University Medical School.

Dr. Parker received a Ph.D. in Cell and Developmental Biology from the Massachusetts Institute of Technology, and an A.B. with high honors in Biochemistry from Princeton University.



Ryan Phelan

Ryan Phelan is the Founder & President of DNA Direct, a San Francisco-based company launched in 2005 that delivers guidance and decision support for genomic medicine to patients, providers and health plans. DNA Direct is pioneering the translation of genomic medicine

into patient care by providing genetic expertise and Web-based decision support to the healthcare industry. In February 2010, DNA Direct became a wholly owned subsidiary of Medco Health Solutions, the country's largest pharmacy benefit manager and one of the most innovative companies in healthcare.

Phelan has been a strong consumer health advocate for the past 25 years, having started the first medical library for consumers in 1978. As Founding Director of Planetree, a nonprofit consumer health care organization, she helped create a national model for humanizing hospitals. Today the Planetree Alliance is a group of over 85 innovative hospitals and health care institutions with shared values, goals and experiences dedicated to implementing Planetree programs.

In 1995 she founded Direct Medical Knowledge (DMK). DMK developed proprietary software that enabled users to drill down through the most current medical literature and retrieve personalized health and medical information. In 1999 Direct Medical Knowledge was acquired by WebMD, and its content became the backbone of WebMD's consumer health site.



Sara Radcliffe

Sara Radcliffe is the Executive Vice President for Health at the Biotechnology Industry Organization (BIO). Previously she served as BIO's Vice President for Science and Regulatory Affairs. Ms. Radcliffe has responsibility for identifying, developing and implementing strate-

gic BIO approaches to improving the ability of BIO's human healthcare focused companies to research and develop products, and to bring these products to market. Before joining BIO, Ms. Radcliffe was Senior Director, Biologics & Biotechnology, and Assistant Vice-President, Preclinical Drug Safety Evaluation, at the Pharmaceutical Research and

Manufacturers of America (PhRMA). Among her responsibilities at PhRMA were to staff the PhRMA Vaccines CEOs Committee and the PhRMA Emergency Preparedness Task Force. She also worked for the Alliance and Technology Group at SmithKline Beecham Pharmaceuticals as a Research and Development Policy Analyst, where her work focused on evaluation and communication of the promise, ethics, and impact of rapidly-developing technologies in DNA Research, including Pharmacogenetics. In addition she worked for the Core Services Committee of the New Zealand Ministry of Health. Ms. Radcliffe holds a Master's of Public Health and a Masters in Philosophy from the Johns Hopkins University.



Emad Rizk, M.D.

Emad Rizk is president of McKesson Health Solutions, a division of McKesson Corporation, that delivers intelligent healthcare solutions that enable payors, providers, and patients to come together to transform the business and process of healthcare.

A world renowned healthcare industry expert, Dr. Rizk brings over 25 years of experience working with payors, physicians, hospital systems and pharmaceutical organizations. He provides the healthcare industry, both the commercial and government sectors, with transformational strategies and operational execution expertise through healthcare information technology.

In his previous position as the global director of Deloitte, Rizk led medical cost and quality management practice across all industries. He also spearheaded the largest redesign of care management and delivery models among health plans and providers nationwide.

Rizk is sought after for his knowledge of the healthcare industry. He has served on many healthcare boards, including the National Clinical Advisory Board and National Quality Review, and currently serves on the boards of DMAA: Care Continuum Alliance, National Association for Hispanic Health, University of Miami, University of North Texas, and Managed Care Magazine.

Rizk is a senior scholar Professor at Jefferson Medical College in Philadelphia and has an extensive portfolio of published journal articles and books, including his contribution to *The Wisdom of Top Health Care CEOs*, a collection of interviews published in 2003. His new book *The New Era of Healthcare: Practical Strategies for Providers and Payers* centers on methods to forge a partnership between providers and payors focused on clinical, administrative,

and economic alignment to bring about more efficient, cost effective care.

Rizk was selected as one of the Modern Physician 50 Most Powerful Physician Executives for 2010. Ranked at number eight on the list, this is Rizk's second year in the top ten and third consecutive year recognized by this program. Dr. Rizk has also been named among the Top 100 Most Powerful People in Healthcare by Modern Healthcare for the last two years, and one of the nation's Top 25 Leaders in Disease Management by Managed Healthcare Executive in 2008.



Sue Siegel

Sue Siegel is a Partner at Mohr, Davidow Ventures, a top tier Silicon Valley venture firm. She leads investments in companies focused on personalized medicine, enabling platform technologies for biomedical research, and innovative healthcare companies with disruptive business

models. Prior to joining MDV, Sue was President and Director of Affymetrix, Inc., (NASDAQ: AFFX) a company that pioneered GeneChip® technology, which helped accelerate the advent of personalized medicine in modern medicine. Sue serves on the board of directors of Pacific Biosciences, Navigenics, Crescendo Biosciences, Corventis, RainDance Technologies and On-Q-ity.

As a member of the Presidents' Circle of the National Academies, Sue serves as an advisor to the Institute of Medicine. She is board member emeritus of The Silicon Valley Tech Museum, serves on The Gladstone Institutes Advisory Council and the Stanford ITI Council, is a YPO member, and a Henry Crown Fellow of the Aspen Institute. As part of the Crown Fellowship, Sue and her husband co-founded with Stanford Hospital, *Checking-In™*, an organization dedicated to serving our aging population.

Risa Stack, Ph.D.

Risa Stack has 15 years of experience investing in personalized medicine, therapeutics, and platform technologies. Her investment career spans incubations to public companies. Most recently she has focused starting companies, often taking operational roles.

Since joining Kleiner Perkins Caufield & Byers in 2003, Risa has worked to build and support KPCB's personalized medicine portfolio. She has been the founding CEO and a board member of several personalized medicine companies including Nodality and CardioDx. In addition to her work directly with portfolio, Risa is involved in developing public

Conference Speakers *continued*

policy in molecular diagnostics and personalized medicine.

Risa is involved in the development of therapeutics companies including Trius and Corthera. She was most recently a board member of Corthera which was sold to Novartis in December 2009. She is also a board observer at Epizyme and Pacific Biosciences.

Prior to joining KPCB, Risa was a Principal at J.P. Morgan Partners in the life science practice for six years. While at J.P. Morgan Partners she sponsored a series of investments including Acurian, Connetics (acquired by Steifel Laboratories), Diatide (acquired by Berlex), Ilex Oncology (acquired by Genzyme), Illumina, and Triangle Pharmaceuticals (acquired by Gilead). Risa was also involved in JP Morgan Partners' international investing efforts, which included European life sciences companies and managing a portfolio of Israeli early stage life science and IT companies.

Before joining the venture capital industry, Risa worked as a Derivative Specialist on the Chicago Board of Trade where she traded futures and options on government securities.

Risa received her B.S. in Genetics and Development with distinction from the University of Illinois and her Ph.D. in Immunology from the University of Chicago. She was also a member of the second class of Kauffman Fellows.

Risa is a member of the advisory board of the National Summit on Personalized Healthcare and GE's Healthymagination effort. She was named as one of the 100 Most Influential Women in Business by the San Francisco Business Times in 2004.



Mark P. Stevenson

Mark P. Stevenson serves as President and Chief Operating Officer of Life Technologies.

From December 2007 to November 2008, Mr. Stevenson served as President and Chief Operating Officer of Applied Biosystems, which merged with

Invitrogen Corporation in November 2008 to form Life Technologies. He joined Applied Biosystems in Europe in 1998, and held roles of increasing responsibility in Europe and Japan. He moved to the U.S. in 2004 to establish Applied Biosystems' Applied Markets Division and in 2006 was named President of the Molecular and Cellular Biology Division.

Mr. Stevenson has more than 20 years of sales, marketing, and international executive management experience

and received his bachelor's degree in chemistry from the University of Reading, UK, and an M.B.A. from Henley Management School, UK. He serves on the board of trustees of the Keck Graduate Institute.



Guilherme Suarez-Kurtz, M.D., Ph.D.

Guilherme Suarez-Kurtz is the Head of Pharmacology at the Brazilian National Cancer Institute and the Coordinator of the Brazilian National Pharmacogenetics Network (Refargen).

A pioneer of pharmacogenetic studies in the Brazilian population, his research

explores the impact of genetic admixture on the conceptual development and the praxis of pharmacogenetics/-genomics (PGx). He is a Member of the Brazilian Academy of Sciences, Senior Investigator of the Brazilian National Research Council and Professor of Clinical and Basic Pharmacology at Universidade do Brasil, in Rio de Janeiro, from which he received his M.D. and Ph.D. degrees. Prof. Suarez-Kurtz did postgraduate work at Faculté de Médecine de Paris, Columbia University New York and University College London. In 2007 he was the editor of *Pharmacogenomics in Admixed Populations*, published by Landes Bioscience, a collection of essays on various aspects of PGx and a database for PGx data from peoples of four continents. Presently he serves as a member of IUPHAR's Committee of Clinical Pharmacology and sub-Committee of Pharmacogenetics, and is Associate Editor of *Current Pharmacogenomics and Personalized Medicine* and of *Frontiers in Pharmacogenetics*.



Charles Swanton, Ph.D.

Charles completed the MDPH program at University College London in 1999 having gained his PhD from the laboratory of Nic Jones at the Imperial Cancer Research Fund Laboratories establishing the subversion of cell cycle control by the Kaposi's Sarcoma

Herpesvirus encoded K-Cyclin (Swanton et al. *Nature* 1997) and was awarded the national Pontecorvo Imperial Cancer Research Fund PhD thesis award (Mann et al., 1999; Swanton et al., 1999; Swanton et al., 1997).

Charles continued his interest in cell cycle disruption in cancer and its therapeutic applications (Swanton, *Lancet Oncology* 2004) and was made a Member of the Royal College of Physicians in 2003 and subsequently undertook

his medical oncology training at the Royal Marsden Hospital. He was awarded a Cancer Research UK (CR-UK) clinician scientist fellowship in 2004 which allowed him to conduct his post-doctoral research training at the CR-UK London Research Institute with Prof Julian Downward, establishing multi-drug sensitivity mechanisms through RNA interference screening approaches, associated with paclitaxel and other common chemotherapy agents used in oncological practice (Swanton et al., 2007a; Swanton et al., 2007b). These screening datasets resulted in the observation that molecules that mediate chromosomal stability appeared to be significantly associated with those mediating taxane sensitivity and led to the first phase II clinical trial in colorectal cancer to attempt to define prospectively whether tumour chromosomal instability status alters response to a taxane-like drug.

In 2008, Charles was awarded an MRC and a CR-UK senior clinical research fellowship and appointed MRC/CR-UK Group leader of the Translational Cancer Therapeutics Laboratory at the CRUK London Research Institute and Fellow of the Society of Biologists (FSB). His laboratory focus is aimed at identifying colorectal and breast cancer cell survival regulators associated with specific patterns of genomic instability using functional genomic techniques in order to develop therapeutic approaches to delay the acquisition of multi-drug resistance (Swanton and Caldas, 2009; Swanton and Downward, 2008; Swanton et al., 2008; Swanton et al., 2006).

During this period Charles' research has begun to establish the clinical relevance of RNA interference (RNAi) approaches to the elucidation of drug sensitive patient cohorts; Tumours harbouring a Chromosomal Instability (CIN) phenotype are relatively more resistant to paclitaxel and sensitive to carboplatin in the OV01 ovarian cancer clinical trial cohort, potentially explaining the combinatorial efficacy of these two cytotoxics in vivo (Swanton et al., 2009). Charles has also recently confirmed the ability of RNAi screening methods to generate clinically applicable predictive biomarkers of drug response in breast cancer (Juil et al., 2010). Current translational research is developing these observations, focussed on the rapid identification of predictive biomarkers of drug response in cancer using RNAi screening approaches combined with the parallel genomics analysis of tumour tissue derived from "window of opportunity" neo-adjuvant monotherapy clinical trials.

Charles conducts his clinical research activities at the Royal Marsden Hospital having been appointed a medical oncology consultant physician in 2008. He combines his

laboratory work with clinical duties by aiming to direct novel therapeutics to patients with specific cancer molecular subtypes within clinical trials in the Breast Cancer and Drug Development Units.



Sheila D. Walcoff

Sheila D. Walcoff is a partner in the law firm of McDermott Will & Emery LLP in Washington DC where she focuses her practice on genomics and personalized medicine, FDA regulatory advice, medical product reimbursement policies, CLIA requirements, and legislative strategy

and advocacy on medical products and related science issues. Her clients include innovative diagnostic companies, clinical laboratories, coalitions and associations, a diagnostic standards entity, pharmaceutical and biotechnology companies. Ms. Walcoff served as health and science policy counselor to HHS Secretary Leavitt, Associate Commissioner for External Affairs at the Food and Drug Administration (FDA), and the health policy team leader/senior health policy advisor to a 2008 presidential campaign. She also served as the majority counsel to the U.S. House of Representatives Armed Services Committee. Her ongoing pro bono work includes legislative and policy counsel to a national eating disorder association.

Ms. Walcoff served as a member of the HHS Secretary's Advisory Committee on Genetics, Health and Society (SACGHS) from 2008- 2010, and is a member of the Massachusetts Institute of Technology (MIT) Center for Biomedical Innovation (CBI) Strategy and Policy Council and the Board of the Friends of the National Zoo (FONZ) in Washington DC. She is a frequent speaker on genomics, personalized medicine and related medical product and laboratory regulation and reimbursement issues. She recently co-authored an article on evidentiary standards for comparative effectiveness research and has authored a book chapter on recent developments in FDA law and policy. Outside of her law practice, Ms. Walcoff is a life-long entrepreneur who co-founded several veterinary hospitals.

Conference Speakers *continued*



Scott Weiss, M.D., M.S.

Dr. Weiss is currently Director of the Partners HealthCare Center for Personalized Genetic Medicine (PCPGM) and Associate Director, Channing Laboratory, and Professor of Medicine at Harvard Medical School. In this latter capacity, he leads a 28 investigator, 120

person research group examining the environmental and genetic origins of asthma and COPD.

He has authored or coauthored over 500 publications and four books in the area of asthma and COPD risk factors, natural history, and genetics. His initial work concerned the role of airways responsiveness and environmental tobacco smoke exposure in asthma and COPD, the effect of allergen exposure and airways responsiveness on markers of inflammation and the combined effect of these factors on the development of COPD. In 1996, he developed a strong interest in the genetics of asthma and his work over the past 14 years has focused on this, and novel environmental exposures such as vitamin D and the bowel flora. His laboratory is the only laboratory in the world that has active NIH research in the areas of asthma genetics, asthma pharmacogenetics, and COPD genetics. He is the principal investigator or co-investigator on a total of six separate NHLBI-funded grant proposals in the area of the genetics of asthma and Asthma Pharmacogenetics, including a MERIT award.



M. Kathleen Behrens Wilsey, Ph.D.

Kathleen Behrens Wilsey served as a Member of the President's Council of Advisors on Science and Technology (PCAST), from 2001 to 2009, working on multiple national policy matters. She Chaired PCAST's Subcommittee on Personalized Medicine and led a two

year study that culminated in the September 15, 2008 report, *Priorities for Personalized Medicine*. Kathy was a director of the Board on Science, Technology and Economic Policy (STEP) for the National Research Council from 1997-2005, at which time she participated as a member of the Institute of Medicine Committee on New Approaches to Early Detection and Diagnosis of Breast Cancer. Kathy was a director of the National Venture Capital Association from 1993 to 2000, also serving as President, Chairman and Past Chairman from October of 1999 through April of 2000. Dr. Behrens Wilsey currently serves as a member of the Board of Directors of Amylin Pharmaceuticals, Inc., AVI Biopharma,

Inc and KEW Group LLC. Kathy holds a Ph.D. in Microbiology from the University of California, Davis.

Kathy established a career in the financial services industry, working with Robertson Stephens & Co. until 1996, where she became a general partner and managing director. Dr. Behrens Wilsey continued in her capacity as a General Partner for selected venture funds for RS Investments, after management led a buy-out of that firm from Bank of America. Her professional career includes tenures as a public-market lifesciences securities analyst, as well as venture capitalist focusing on healthcare and technology investments. She was instrumental in the founding of several life-sciences companies including Protein Design Labs, Inc. and CORTherapeutics, Inc. and participated in financing a broad range of health care services and products companies. More recently, Kathy served as a director of Abgenix, Inc. in a role that spanned that firm's early rounds of private financings through the company's sale in 2006 to Amgen, Inc. Dr. Behrens Wilsey has worked for the last two years with KEW Group LLC in developing a fully integrated personalized medicine oncology management company .

Partners HealthCare Center for Personalized Genetic Medicine

The Partners HealthCare Center for Personalized Genetic Medicine (PCPGM) was launched in 2001 as the Harvard Medical School-Partners HealthCare Center for Genetics and Genomics. Its purposes from its founding have been to promote genetics and genomics in research and clinical medicine and to help realize the promise of personalized medicine by accelerating the integration of genetic knowledge into clinical care throughout the Partners HealthCare System (PHS) and in healthcare nationally and globally. PCPGM is accomplishing its mission by supporting and facilitating:

- pursuing important discoveries that will enable advancing the knowledge of how genetics affects human health and disease
- offering genetic-based diagnostic testing and developing new tests through a CLIA- and state-approved Laboratory for Molecular Medicine
- developing an IT infrastructure to integrate genetic and genomic data into clinical decision support systems
- educating practicing clinicians, investigators, health care professionals
- developing a program in Personalized Predictive Medicine

Personalized medicine is the ability to determine an individual's unique molecular characteristics and to use those genetic distinctions to diagnose more finely an individual's disease,

select treatments that increase the chances of a successful outcome and reduce possible adverse reactions. Personalized medicine also is the ability to predict an individual's susceptibility to diseases and thus to try to shape steps that may help avoid or reduce the extent to which an individual will experience a disease.

For personalized medicine to be a fully functioning reality at the clinical level, certain elements are essential: an electronic medical record, personalized genomic data available for clinical use, physician access to electronic decision support tools, a personalized health plan, personalized treatments, and personal clinical information available for research use. Partners HealthCare has made a firm commitment to the principles of personalized medicine and to the importance of genetics and genomics in delivering the best care of patients. PHS also has committed to ensuring that the features above are or will be available.

The essential feature of the revolution in genetics and genomics has been an explosion in the amount of data available for use in translational research. This massive data profusion has enhanced our ability to predict clinical phenotypes and to predict clinical outcomes on the basis of genome scale data. However, to be able to do this sort of prediction investigators

need several tools. First, they need a robust bioinformatics infrastructure with secure pipelines and robust algorithms for data cleaning and manipulation. Second, they need very strong bioinformatics platforms for data analysis and data management. Third, they need access to large numbers of very well phenotyped patients. Fourth, they need access to the genomic platforms to create genomic scale data on these patients for prediction of clinical outcomes. Finally, they need novel statistical and bioinformatics methods to analyze these data for predictive medicine. PCPGM makes all of these resources available to Partners investigators through a highly developed infrastructure consisting of bioinformatics and genetic statistics; biosample repository; core sequencing, genotyping and GeneChip® and microarray laboratories; and information technology services.

For more information about PCPGM, please visit <http://pcpgm.partners.org>.

Harvard Business School

Harvard Business School's mission is to train business leaders in all industries. Healthcare, a \$2 trillion industry, has become one of the school's key priorities. The Healthcare Initiative at HBS was launched in 2005 to bring together the extensive research, thought leadership, and interest in the business and management of healthcare that exists at HBS.

Healthcare research at HBS focuses on entrepreneurship, innovation and disruption. Faculty and students seek to understand and identify new products, services and delivery methods that will help to reshape the industry. HBS believes this focus on "creative destruction" will result in business

models that offer the hope of improved outcomes, reduced costs, streamlined systems, and enhanced services.

Personalized medicine presents tremendous opportunities in healthcare and has garnered much attention at HBS. With its expertise in technology, commercialization, and business model development, HBS can play a critical role in the widespread adoption of personalized medicine applications.

For more information about the HBS Healthcare Initiative, please visit www.hbs.edu/healthcare.

Conference Organizing Committee

Raju Kucherlapati, Ph.D., Chair
Paul C. Cabot Professor of Genetics,
Professor of Medicine
Harvard Medical School

Edward Abrahams, Ph.D.
President
Personalized Medicine Coalition

Mara G. Aspinall
President and CEO
On-Q-ity

Brook Byers
Partner
Kleiner Perkins Caufield & Byers

Nadine Cohen, Ph.D.
Head of Pharmacogenomics
and Senior Research Fellow
Johnson & Johnson Pharmaceutical
Research and Development East Coast
and Europe

Neil de Crescenzo
Senior Vice President
and General Manager
Oracle Health Sciences
Global Business Unit

Frank Douglas, Ph.D., M.D.
President and CEO
Austen BioInnovation Institute
Founder
PureTech Ventures

Gregory Downing, Ph.D.
Senior Advisor and Director,
Personalized Health Care Initiative
The U.S. Department of Health and
Human Services

Robert S. Epstein, M.D., M.S.
Chief Medical Officer and President,
Medco Research Institute
Medco Health Solutions, Inc.

Kathy Giusti
Founder and CEO
Multiple Myeloma Research Foundation
(MMRF)

John P. Glaser, Ph.D.
CEO, Health Services Division
Siemens Medical Solutions

Richard G. Hamermesh, D.B.A.
MBA Class of 1961 Professor of
Management Practice
Faculty Chair, HBS Healthcare Initiative
Harvard Business School

Katherine Johansen, Ph.D.
Senior Scientist, Genetics and
Molecular Medicine
American Medical Association

Marcia A. Kean
CEO
Feinstein Kean Healthcare

David P. King
President and CEO
Laboratory Corporation of America

Gerald J. McDougall
Partner
PricewaterhouseCoopers

Lori M. Reilly
Vice President for Policy and Research
PhRMA

Hakan Sakul, Ph.D.
Senior Director, Translational
Oncology Group
Pfizer – Oncology Business Unit

Sue Siegel
Partner
Mohr, Davidow Ventures
Scott Weiss, M.D., M.S.
Professor of Medicine,
Harvard Medical School
Director, Partners HealthCare Center
for Personalized Genetic Medicine

Robert Wells
Head, Biotechnology Unit,
Science and Technology Policy Division
Directorate for Science, Technology
and Industry
Organisation for Economic
Co-operation and Development (OECD)

M. Kathleen Behrens Wilsey, Ph.D.
Founder
KEW Group, LLC

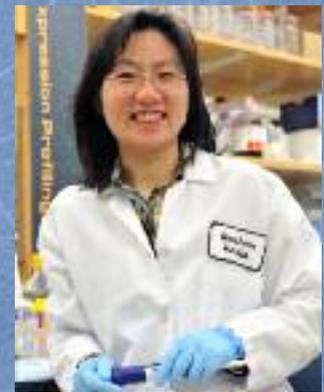
PCPGM CONTACTS

Alfred A. Blum, Jr.
Chief Development Officer
Partners HealthCare Center for
Personalized Genetic Medicine (PCPGM)

Janice Larson
Development Associate
Partners HealthCare Center for
Personalized Genetic Medicine (PCPGM)

Amy McGlinn
Program Coordinator
Partners HealthCare Center for
Personalized Genetic Medicine (PCPGM)

Rebecca Rehm
Program Associate
Partners HealthCare Center for
Personalized Genetic Medicine (PCPGM)



PERSONALIZED MEDICINE: *Impacting Healthcare*



Scott Weiss, M.D., M.S.

Scientific Director, Partners HealthCare Center for Personalized Genetic Medicine
Professor of Medicine, Harvard Medical School, Brigham and Women's Hospital

CONFERENCE STAFF

Partners HealthCare Center for Personalized Genetic Medicine



Alfred A. Blum, Jr.
Chief Development Officer
aablum@partners.org



Rebecca Rehm
Program Associate
rehm@partners.org



Janice Larson
Development Associate
jalarson@partners.org



Meini Sumbada Shin
Administrative Director
msumbadashin@partners.org



Amy McGlinn
Program Coordinator
amcglin@partners.org

SAVE THE DATE

7th Annual Personalized Medicine Conference
November 9-10, 2011

www.personalizedmedicineconference.org