Applying an Implementation Science Approach to Genomic Medicine:  
A Workshop  
November 19, 2015

National Academy of Sciences Building  
Lecture Room  
2101 Constitution Avenue NW  
Washington, DC 20418

MEETING OBJECTIVES

- TO ELUCIDATE OPTIONS FOR ACCELERATING THE PACE OF IMPLEMENTATION AND EVIDENCE GENERATION IN GENOMIC MEDICINE BY CONVENING MEDICAL IMPLEMENTATION SCIENCE EXPERTS WITH STAKEHOLDERS REPRESENTING THE CONTINUUM OF GENOMICS TRANSLATIONAL RESEARCH
- TO DISCUSS POSSIBLE STRATEGIES FOR REACHING AND ENGAGING DIVERSE POPULATIONS WHEN INTRODUCING GENOMIC MEDICINE INTO PRACTICE
- TO EXPLORE THE CHALLENGES, SUCCESSES, AND BEST PRACTICES THAT FACILITATE RAPID AND APPROPRIATE TRANSLATION OF GENOMIC KNOWLEDGE FROM EARLY DISCOVERY TO POPULATION HEALTH

AGENDA

8:30–8:35 A.M.  
Welcoming Remarks

Sharon F. Terry, Roundtable Co-Chair  
President and CEO  
Genetic Alliance

Geoffrey Ginsburg, Roundtable Co-Chair  
Director, Duke Center for Applied Genomics & Precision Medicine;  
Professor of Medicine and of Pathology and Biomedical Engineering,  
Duke University Medical Center

INTRODUCTION: OPPORTUNITIES IN GENOMICS THAT CHALLENGE THE TRADITIONAL IMPLEMENTATION PATHWAY

Objectives: To define and explore the stages and roles of implementation science from basic science discoveries to advancing genomic medicine in routine clinical care

8:35 A.M.  
Charge to workshop speakers and participants: Considering the role of implementation science across the translational spectrum in genomics
Greg Feero, *Workshop Co-Chair*
Associate Editor, Journal of the American Medical Association; Faculty, Maine Dartmouth Family Medicine Residency Program

Debra Leonard, *Workshop Co-Chair*
Professor and Chair of Pathology and Laboratory Medicine
The University of Vermont Medical Center

8:45 A.M.

**Overview of Implementation Science: Methods and Approaches**

David Chambers
Deputy Director for Implementation Science
National Cancer Institute

Brian Mittman
Research Scientist III, Research & Evaluation
Kaiser Permanente Research
Senior Advisor, VA Center for Implementation Practice and Research Support, Los Angeles, CA
Consultant, UCLA Institute for Innovation in Health
Senior Advisor, RAND Health

9:30 A.M.

Clarifying Questions

**SESSION I: DESIGNING FOR IMPLEMENTATION: ENGAGING LARGE POPULATIONS FOR ANALYSIS**

**Objectives:** To assess best practices for engaging diverse patient and provider groups and evaluating how information collected from large groups could be leveraged for discovery efforts and improved health outcomes

**Moderator:** Bruce Blumberg, Institutional Director of Graduate Medical Education, Northern California Kaiser Permanente

9:40 A.M.

Andrew Faucett
Director of Policy and Education
Geisinger Health System

Consuelo H. Wilkins
Executive Director, Meharry-Vanderbilt Alliance
Associate Professor of Medicine
Vanderbilt-Ingram Cancer Center
Marc LePage  
President and CEO  
Genome Québec

10:30 A.M.  
**Break**

10:45 A.M.  
**Discussion with Speakers, Reactants, and Attendees**

*Speakers*

Andrew Faucett  
Consuelo H. Wilkins  
Marc LePage

*Reactants*

Bernice Coleman  
Nurse Scientist and Nurse Practitioner  
Heart Transplantation and Mechanical Assist Device Programs  
Cedars Sinai Medical Center, Los Angeles

Robert McDonough  
Head of Clinical Policy Research & Development  
Aetna

Brian Mittman  
Research Scientist III, Research & Evaluation  
Kaiser Permanente Research  
Senior Advisor, VA Center for Implementation Practice and  
Research Support, Los Angeles, CA  
Consultant, UCLA Institute for Innovation in Health  
Senior Advisor, RAND Health

Jane Perlmutter  
President and Founder  
Gemini Group

Alexandra Shields  
Associate Professor, Harvard Medical School and Mass. General Hospital  
Director, Harvard/MGH Center on Genomics, Vulnerable Populations, and Health Disparities
SESSION II: EXPLORING MODELS FOR IMPROVING IMPLEMENTATION WHILE GENERATING EVIDENCE IN CLINICAL SETTINGS

Objectives: To explore case studies where implementation in clinical care has had varying degrees of success in achieving practice change

Moderator: Catherine Wicklund, Past President, National Society of Genetic Counselors; Director, Graduate Program in Genetic Counseling, Northwestern University

11:30 A.M. Approaches to Implementation
Edward Kim
Chair, Solid Tumor Oncology and Investigational Therapeutics and the Donald S. Kim Distinguished Chair for Cancer Research
Levine Cancer Institute, Carolinas HealthCare System

Mary Norton
Professor of Obstetrics, Gynecology, and Reproductive Sciences
University of California, San Francisco

Stephen Kimmel
Professor of Medicine
University of Pennsylvania School of Medicine

12:20 P.M. Discussion with Speakers, Reactants, and Attendees

Speakers
Edward Kim
Mary Norton
Stephen Kimmel

Reactants
Bernice Coleman
Robert McDonough
Brian Mittman
Jane Perlmutter
Alexandra Shields

1:00 P.M. LUNCH

SESSION III: POPULATION HEALTH AND GENOMICS: INCREMENTAL IMPLEMENTATION OR RADICAL REFORM?

Objectives: To explore effective strategies and infrastructure that facilitates implementation and how these could be applied to advance the future of genomic medicine

Moderator: Greg Feero, Workshop Co-Chair; Associate Editor, Journal of the American Medical Association; and Faculty, Maine Dartmouth Family Medicine Residency
Program

2:00 P.M.  Deb Duquette  
Genomics Coordinator  
Michigan Department of Health and Human Services

Marc LePage  
President and CEO  
Genome Québec

Toni Pollin  
Associate Professor, Medicine  
University of Maryland School of Medicine

2:50 P.M.  Discussion with Speakers, Reactants, and Attendees

Speakers  
Deb Duquette  
Marc LePage  
Toni Pollin

Reactants  
Bernice Coleman  
Robert McDonough  
Brian Mittman  
Jane Perlmutter  
Alexandra Shields

3:30 P.M.  Break

SESSION IV: ACHIEVING THE VISION

Objectives: To reflect on the potential value of implementation science to the translation of genomics to achieve improved health outcomes. To provide concrete examples of how integration of principles of implementation science might accelerate the translational pipeline now and over the next 5-10 years.

Moderator:  Debra Leonard, Workshop Co-chair and Professor and Chair of Pathology and Laboratory Medicine, The University of Vermont Medical Center

3:45 P.M.  Stakeholder Reaction Panelists

Health Care Provider Perspective  
Bernice Coleman
Payer Perspective
Bob McDonough

Patient Perspective
Jane Perlmutter

Health Disparities Perspective
Alexandra Shields

4:20 P.M.
Discussion with Reactants and Attendees

5:00 P.M.
CONCLUDING REMARKS
Summary of Important Points and Potential Approaches to Genomic Medicine Implementation

David Chambers
Deputy Director for Implementation Science
National Cancer Institute

5:20 P.M.
ADJOURN

Greg Feero, Workshop Co-Chair
Associate Editor, Journal of the American Medical Association;
Faculty, Maine Dartmouth Family Medicine Residency Program

Debra Leonard, Workshop Co-Chair
Professor and Chair of Pathology and Laboratory Medicine
The University of Vermont Medical Center