

*The National Academies of*  
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INSTITUTE OF MEDICINE

Board on Health Sciences Policy

*Roundtable on Translating Genomic-Based Research for Health*

***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**

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- 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**

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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**

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**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**

500 Fifth Street NW, Washington, DC 20001  
Phone 202.334.2217 E-mail [sbeachy@nas.edu](mailto:sbeachy@nas.edu) [iom.nationalacademies.org/genomicroundtable](http://iom.nationalacademies.org/genomicroundtable)

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**

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**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

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**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.

### **WORKING LUNCH**

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

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**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

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**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