

## ***How Disadvantage Gets “Under the Skin”: Using Epigenomic Methods to Better Understand & Address Health Disparities***

**October 2, 2017 (12:30 – 5:00 pm, followed by a cocktail reception)**

Joseph B. Martin Conference Center, 77 Avenue Louis Pasteur, Boston, MA 02115

### **DRAFT SYMPOSIUM AGENDA & TOPICS TO BE COVERED**

#### **Welcome & Opening Remarks: 12:30 pm**

**Alexandra Shields, PhD**, Massachusetts General Hospital & Harvard Medical School

#### **Panel I: 12:35 – 1:45 pm**

Emerging issues in the measurement & analysis of epigenomic data, particularly with regard to addressing health disparities

**Andrea Baccarelli, MD, PhD**, Columbia Mailman School of Public Health (Moderator)

- What is the correct epigenome to study? Target vs. surrogate tissue and cell-type specificity
- Causal modeling and other analytic approaches in longitudinal epigenomics research (**Linda Valeri, PhD**, Harvard T.H. Chan School of Public Health)
- On interpreting small effect sizes in epigenomics (**Carrie Breton, ScD**, Keck School of Medicine of USC)
- Challenges measuring epigenetic changes over the lifecourse (**Allan Just, PhD**, Icahn School of Medicine at Mount Sinai)

#### **Panel II: 1:45 – 2:45 pm**

Epigenomic signals in relation to social and environmental influences

**Alexandra Shields, PhD**, Massachusetts General Hospital & Harvard Medical School (Moderator)

- Psychosocial stress (**Heather Burriss, MD, MPH**, HMS & Harvard T.H. Chan School of Public Health)
- Transgenerational epigenomic effects of trauma and stress (**Kerry Ressler, MD, PhD**, McLean Hospital & HMS)
- Trauma and PTSD (**Andrew Ratanatharathorn, MA**, Columbia University Medical Center)
- Environmental stressors (**Andrea Baccarelli, MD, PhD**, Columbia Mailman School of Public Health)

#### **BREAK: 2:45 – 3:00 pm**

#### **Panel III: 3:00 – 4:00 pm**

Transdisciplinary Roundtable: To what extent can epigenomics be a tool for addressing health disparities and social disadvantage? What kinds of questions can epigenomics research answer, and what kinds of questions are beyond its scope? Are there ways that epigenomics research could become more powerful in the quest to understand and address health disparities by bringing in methods/strategies from other disciplines?

**Evelynn Hammonds, PhD**, Harvard University (Moderator)

- Epigenomics & Environmental Health (**Andrea Baccarelli, MD, PhD**, Columbia Mailman School of Public Health)
- Distributive Justice (**Norman Daniels, PhD**, Harvard T.H. Chan School of Public Health)
- Psychiatry & Neuroscience (**Steven Hyman, MD**, Broad Institute of MIT and Harvard)
- Sociology (**Michèle Lamont, PhD**, Harvard University)
- Health Policy & Disparities Research (**Alexandra Shields, PhD**, Mass. General Hospital & Harvard Medical School)

#### **Break-Out Sessions & Reporting Back: 4:00 – 5:00 pm**

Small group discussions to come up with top ideas for future research that would most advance the field and contribute to our understanding of health disparities.

#### **Cocktail Reception: 5:00 – 6:00 pm**

## Planning Committee

**Andrea Baccarelli, MD, PhD** (Co-Chair)

Leon Hess Professor and Chair, Department of Environmental Health Sciences, Columbia Mailman School of Public Health

**Alexandra Shields, PhD** (Co-Chair)

Associate Professor, Harvard Medical School

**Heather Burris, MD, MPH**

Assistant Professor of Pediatrics, Harvard Medical School

Assistant Professor, Harvard T.H. Chan School of Public Health

**Dawn DeMeo, MD, MPH**

Associate Professor, Harvard Medical School

**Dana Dolinoy, PhD**

Associate Professor, University of Michigan School of Public Health

**Marie-France Hivert, MD, MMSc**

Associate Professor, Harvard Medical School

**Liming Liang, PhD**

Associate Professor, Harvard T.H. Chan School of Public Health

## Sponsors

**Harvard Catalyst Health Disparities Research Program**

The Health Disparities Research Program increases the prominence and impact of research on health disparities at Harvard. The program promotes health equity by facilitating new collaborative research, education, and training opportunities in the biomedical, clinical, health policy, and social sciences to address racial, ethnic, socioeconomic, gender, sexual orientation, and other disparities in health and healthcare. The program facilitates Harvard-wide research on health disparities through research and methods seminars, personalized consultations, networking events, and transdisciplinary symposia. The program also provides training and mentorship for junior faculty, fellows, and students interested in health disparities research. The Health Disparities Research Program works to increase the local and national impact of health disparities research by creating collaborations with local and national clinical and translational science centers and community partners. ([catalyst.harvard.edu](http://catalyst.harvard.edu))

**Harvard/MGH Center on Genomics, Vulnerable Populations, and Health Disparities**

The Harvard/MGH Center on Genomics, Vulnerable Populations, and Health Disparities conducts interdisciplinary work at the intersection of genomics, epidemiology, and health disparities research, with a specific focus on the diseases prevalent in populations currently underserved in the health care system. The Center's goal is to analyze this intersection throughout the research trajectory, "from bench to bedside," with a focus on highly prevalent chronic conditions (e.g., cardiovascular disease, cancer, and hypertension) for which advances in treatment and prevention would have the greatest potential to improve our nation's health and reduce health disparities. The Center is a joint initiative of Harvard University and Massachusetts General Hospital/Partners HealthCare, engaging faculty from across the Harvard Community. ([cgvh.harvard.edu](http://cgvh.harvard.edu))

Additional financial support provided by the **John Templeton Foundation**. ([templeton.org](http://templeton.org))