

EXP SOME MOONSHOT

Monday, May 12

3:00-5:00 PM
5:00-8:00 PM

Registration
Welcoming Reception and Opening Ceremony
Thomas Hartung, *Johns Hopkins University, United States*
Fenna Sillé, *Johns Hopkins University, United States*
Nicole Kleinstreuer, *NIH, United States*

1st Floor
8th Floor/9th Floor

Tuesday, May 13

8:00-8:30 AM

Registration, Networking, Coffee

1st Floor

8:30-9:00 AM

Welcome and Charge to Participants: Why We Are Here
Gary Miller, *Columbia University, United States*
Denis Sarigiannis, *National Hellenic Research Foundation, Greece*
Roel Vermeulen, *Utrecht and University Medical Center Utrecht, The Netherlands*

Virtual / Theater, 158

9:00-9:15 AM

Keynote: The Need for a Human Exposome Project
Introduction by Michelle Bennett, *LMBennett Consulting, United States*
Speaker: Rick Woychik, *NIH, United States*

Virtual / Theater, 158

9:15-10:00 AM

From the Lab to the Law: Moving the Human Exposome Project into the Policy-Maker's Eye

Virtual / Theater, 158

MODERATOR:

Thomas Hartung, *Johns Hopkins University, United States*

PANELISTS:

**Sir Jeremy Farrar, *World Health Organization (WHO), Switzerland*

**Rémi Quirion, *Fonds de Recherche du Québec (FRQ), International Network for Government Science Advice (INGSA), Canada*

**Peggy Oti-Boateng, *African Academy of Sciences, Ghana*

**Ana Persic, *UNESCO, France*

10:00-10:30 AM

Introduction to the Proposed Framework and Pillars: Shaping the Human Exposome Project

Virtual / Theater, 158

PANELISTS:

Chirag Patel, *Harvard University, United States*

Fenna Sillé, *Johns Hopkins University, United States*

10:30-11:00 AM

Morning Break

1st Floor

All times are in Eastern Time (EST)

**** Indicates Virtual Moderators and Panelists**

----- 11:00-11:45 AM	----- Enabling Technologies for Advancing Exposomics MODERATORS: Rima Habre, <i>University of Southern California, United States</i> Emilie Calabre, <i>MEERSENS, France</i> PANELISTS: Krystal Pollitt, <i>Yale School of Public Health, United States</i> **Benjamin Barratt, <i>Imperial College London, United Kingdom</i> Geetha Senthil, <i>NCATS, United States</i> Este Geraghty, <i>Esri, United States</i>	----- Virtual / Theater, 158
----- 11:45 AM-12:30 PM	----- Psychosocial, Ethical, and Societal Implications and Impact MODERATORS: Jeanette Stingone, <i>Columbia University, United States</i> George Gkoutos, <i>University of Birmingham, United Kingdom</i> PANELISTS: Agis Tsouros, <i>World Health Organization Europe, Greece</i> **Jinkook Lee, <i>University of Southern California, United States</i> Caspar Safarlou, <i>The Netherlands</i> Jeanette Stingone, <i>Columbia University, United States</i> George Gkoutos, <i>University of Birmingham, United Kingdom</i>	----- Virtual / Theater, 158
----- 12:30-1:30 PM	----- Lunch (Provided)	----- 8 th Floor
----- 1:30-2:15 PM	----- The Exposome, Big Data, and Artificial Intelligence MODERATORS: Chirag Patel, <i>Harvard University, United States</i> Ashwini Davison, <i>Amazon Web Services (AWS), United States</i> PANELISTS: Marc Chadeau, <i>Imperial College London, United Kingdom</i> **Prashant Shah, <i>Intel Corporation, United States</i> **Tim Althoff, <i>University of Washington, United States</i> Michael Skinnider, <i>Princeton University, United States</i> **John Wambaugh, <i>EPA, United States</i> Venkatesh Murthy, <i>University of Michigan, United States</i> **Nicole Kleinstreuer, <i>NIH, United States</i>	----- Virtual / Theater, 158
----- 2:15-3:00 PM	----- Road to Success: Learning from Other Major Bold Initiatives MODERATORS: Craig E. Wheelock, <i>Karolinska Institute, Sweden</i> Robert Wright, <i>Icahn School of Medicine at Mount Sinai, United States</i> PANELISTS: Human Genome Project: Thomas Metz, <i>Pacific Northwest National Laboratory, United States</i> **European Cancer Network (JANE-2): Delia Nicoară, <i>Institutul Oncologic din Cluj-Napoca, Romania</i>	----- Virtual / Theater, 158
----- 3:00-3:05 PM	----- Instructions for Breakout Session 1	----- Theater, 158
----- 3:05-3:30 PM	----- Afternoon Break	-----
----- 3:30-4:15 PM	----- Breakout Session 1: Shaping the Human Exposome Project Proposed framework and pillars: Comments, suggestions, concerns MODERATORS: Fenna Sillé, <i>Johns Hopkins University, United States</i> Chirag Patel, <i>Harvard University, United States</i> Maximizing partnerships with academia, government, industry, and others	----- 822 426

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MODERATORS:
 Roel Vermeulen, *Utrecht and University Medical Center Utrecht, The Netherlands*
 Manish Arora, *Icahn School of Medicine at Mount Sinai, United States*
 Identifying the key principles for ensuring transdisciplinary and convergent approaches 428/430

MODERATORS:
 Arcot Rajasekar, *University of North Carolina at Chapel Hill, United States*
 Jessica Ryman, *American Chemistry Council, United States*
 Capturing the lessons learned from previous initiatives that must be applied 820

MODERATORS:
 Geetha Senthil, *NCATS, United States*
 Serena Kern-Libera, *Linkgevity, United Kingdom*

 4:15-4:30 PM Return to Theater -----

 4:30-5:15 PM Lightning Session: Biobanking Efforts and Resources Supporting Exposomics Research
 Virtual / Theater, 158

MODERATORS:
 Susan Teitelbaum, *Icahn School of Medicine at Mount Sinai, United States*
 Poornima Prabhakaran, *Ashoka University, Centre for Chronic Disease Control, India*
 PANELISTS:
 EHEN: Roel Vermeulen, *Utrecht and University Medical Center Utrecht, The Netherlands*
 ExposomeHealthNet: Denis Sarigiannis, *National Hellenic Research Foundation, Greece*
 All of US: Tara Dutka, *NIH, United States*
 Japan Cohorts: Yu Ait Bamai, *Center for Environmental and Health Sciences (CEHS), Hokkaido University, Japan*
 Indian Cohorts: Poornima Prabhakaran, *Ashoka University, Centre for Chronic Disease Control, India*
 **Global Biobank: Alicia Martin, *Massachusetts General Hospital and the Broad Institute, United States*
 Jana Klánová, *RECETOX, Czech Republic*

 5:15-5:30 PM Preparation for tomorrow and closing for today Virtual / Theater, 158
 Fenna Sillé, *Johns Hopkins University, United States*
 Thomas Hartung, *Johns Hopkins University, United States*

Wednesday, May 14

8:00-8:30 AM Breakfast 1st Floor

 8:30-9:00 AM Welcome and Reflections from Day 1 Virtual / Theater, 158
 Anne Thessen, *University of North Carolina Chapel Hill, United States*
 Robert Barouki, *Inserm-public health, France*
 Robert Wright, *Icahn School of Medicine at Mount Sinai, United States*
 Gurdane Bhutani, *MBX Capital, United States*

 9:00-10:15 AM Global Coordination and Collaboration: Research Infrastructures as Models Virtual / Theater, 158
 MODERATORS:
 Roel Vermeulen, *Utrecht and University Medical Center Utrecht, The Netherlands*
 Robert Barouki, *Inserm-public health, France*
 PANELISTS:
 EIRENE: Jana Klánová, *RECETOX, Czech Republic*
 IHEN: Roel Vermeulen, *Utrecht and University Medical Center Utrecht, The Netherlands*
 NEXUS: Gary Miller, *Columbia University, United States*

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UK Biobank: Austin Argentieri, *Massachusetts General Hospital & Broad Institute, United States*
 Japan: Mihye Lee, *Japan*
 South Africa: Zodwa Dlamini, *University of Pretoria, South Africa*
 GECC: Sara Adar, *University of Michigan School of Public Health, United States*
 ExpoHealthNet: Denis Sarigiannis, *National Hellenic Research Foundation, Greece*
 **India: Kalpana Balakrishnan, *WHO Collaborating Center for Occupational and Environmental Health, Sri Ramachandra Institute of Higher Education and Research (SRIHER), India*

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10:15-10:30 AM	Instructions for Breakout Sessions: Identifying Needs, Requirements, and Proposed Solutions for Charting the Human Exposome Theater, 158 Fenna Sillé, <i>Johns Hopkins University, United States</i> Michelle Bennett, <i>LMBennett Consulting, United States</i>	
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10:30-11:00 AM	Morning Break	
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11:00 AM-12:15 PM	Breakout Session 2: Needs What outcomes, outputs, and accomplishments will contribute to characterizing the Human Exposome? Enabling Technologies for Advancing Exposomics 820 MODERATORS: Rima Habre, <i>University of Southern California, United States</i> Emilie Calabre, <i>MEERSENS, France</i> The Exposome, Big Data, and Artificial Intelligence 428/430 MODERATORS: Chirag Patel, <i>Harvard University, United States</i> Areejit Samal, <i>India</i> Psychosocial, Ethical, and Societal Implications and Impact 822 MODERATORS: Jeanette Stingone, <i>Columbia University, United States</i> George Gkoutos, <i>Centre for Environmental Research and Justice (CERJ), University of Birmingham, United Kingdom</i> Global Coordination and Collaboration: Research Infrastructures as Models 426 MODERATORS: Roel Vermeulen, <i>Utrecht and University Medical Center Utrecht, The Netherlands</i> Benedikt Warth, <i>University of Vienna, Exposome Austria, Research Infrastructure and National EIRENE Node, Austria</i>	
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12:15-1:15 PM	Lunch (Provided)	
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1:15-2:30 PM	Breakout Session 3: Milestones and Solutions Identify the inputs, actions, steps that will be required. Enabling Technologies for Advancing Exposomics 820 MODERATORS: Rima Habre, <i>University of Southern California, United States</i> Emilie Calabre, <i>MEERSENS, France</i> The Exposome, Big Data, and Artificial Intelligence 428/430 MODERATORS: Chirag Patel, <i>Harvard University, United States</i> Areejit Samal, <i>India</i> Psychosocial, Ethical, and Societal Implications and Impact 822 MODERATORS: Jeanette Stingone, <i>Columbia University, United States</i> George Gkoutos, <i>Centre for Environmental Research and Justice (CERJ), University of Birmingham, United Kingdom</i>	

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	Global Coordination and Collaboration: Research Infrastructures as Models	426
	MODERATORS: Roel Vermeulen, <i>Utrecht and University Medical Center Utrecht, The Netherlands</i> Benedikt Warth, <i>University of Vienna, Exposome Austria, Research Infrastructure and National EIRENE Node, Austria</i>	
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2:30-2:45 PM	Afternoon Break	
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2:45-3:45 PM	Breakout Session 4: Major Goals and their Milestones	
	Enabling Technologies for Advancing Exposomics	820
	MODERATORS: Rima Habre, <i>University of Southern California, United States</i> Emilie Calabre, <i>MEERSENS, France</i>	
	The Exposome, Big Data, and Artificial Intelligence	428/430
	MODERATORS: Chirag Patel, <i>Harvard University, United States</i> Areejit Samal, <i>The Institute of Mathematical Sciences (IMSc), India</i>	
	Psychosocial, Ethical, and Societal Implications and Impact	822
	MODERATORS: Jeanette Stingone, <i>Columbia University, United States</i> George Gkoutos, <i>Centre for Environmental Research and Justice (CERJ), University of Birmingham, United Kingdom</i>	
	Global Coordination and Collaboration: Research Infrastructures as Models	426
	MODERATORS: Roel Vermeulen, <i>Utrecht and University Medical Center Utrecht, The Netherlands</i> Benedikt Warth, <i>University of Vienna, Exposome Austria, Research Infrastructure and National EIRENE Node, Austria</i>	
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3:45-4:00 PM	Return to Theater	
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4:00-5:00 PM	Creating the Human Exposome Project	Virtual / Theater, 158
	MODERATORS: Jana Klánová, <i>RECETOX, Czech Republic</i> Fenna Sillé, <i>Johns Hopkins University, United States</i>	
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5:00-5:15 PM	Preparation for tomorrow and closing for today	Virtual / Theater, 158
	Geetha Senthil, <i>NCATS, United States</i> TBD	

Thursday, May 15

8:45-9:15 AM	Welcome and Reflections from Day 2	Virtual / Theater, 158
	Peng Gao, <i>Harvard T.H. Chan School of Public Health, United States</i> Myriam Mrad, <i>University of Balamand, Health and Environment Response Agency (HERA), Lebanon</i> Cavin Ward-Caviness, <i>EPA, United States</i> Beate Escher, <i>Helmholtz Centre for Environmental Research (UFZ), German Center for Child and Adolescent Health (DZKJ), Germany</i>	
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9:15-10:00 AM	Partnering for Success	Virtual / Theater, 158
	MODERATORS: Anil Bajnath, <i>George Washington University, United States</i> David Balshaw, <i>NIH, United States</i> PANELISTS: Tina Woods, <i>Collider Health and International Institute of Longevity, United Kingdom</i>	

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**Arjon Van Hengel, *European Commission, Belgium*
 Manish Arora, *Linus Biotechnology, United States*
 Courtney Silverthorn, *FNIH, United States*
 **David Furman, *Stanford School of Medicine, Buck Institute for Research on Aging, United States*
 Geoff Still, *Pediatric Brain Tumor Foundation, United States*

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10:00-10:30 AM	Morning Break	
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10:30-11:30 AM	Assembling the Roadmap for the Human Exposome Project	Virtual / Theater, 158
	MODERATOR:	
	Michelle Bennett, <i>LMBennett Consulting, United States</i>	
	Part 1: Overall synthesis from the meeting	
	Gary Miller, <i>Columbia University, United States</i>	
	Roel Vermeulen, <i>Utrecht and University Medical Center Utrecht, The Netherlands</i>	
	Part 2: Operationalizing commitment into the future	
	Thomas Hartung, <i>Johns Hopkins University, United States</i>	
	Nicole Kleinstreuer, <i>NIH, United States</i>	
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11:30 AM-12:00 PM	Declaration Ceremony: Commitment to Global Collaboration, Innovation, and Inclusion	
		Virtual / Theater, 158
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12:00-1:00 PM	Press Conference, Interviews, Networking	

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