

The National Academies of
SCIENCES • ENGINEERING • MEDICINE

**International Summit on Human Gene Editing:
A Global Discussion**

Convened by:

**The Chinese Academy of Sciences
The Royal Society
The U.S. National Academy of Sciences
The U.S. National Academy of Medicine**

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

December 1-3, 2015

Draft Agenda

Tuesday, 1 December 2015

7:00 am	Registration/ Continental Breakfast
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8:00 am	Welcome and Introductions
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Summit Committee Chair David Baltimore, California Institute of Technology

8:05 am	Opening Remarks from the Convening Parties
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Congressman Bill Foster (D-11th District, Illinois)

Representatives of the Convening Organizations:

Zhihong Xu, Chinese Academy of Sciences
John Skehel, The Royal Society
Ralph Cicerone, U.S. National Academy of Sciences
Victor Dzau, U.S. National Academy of Medicine

8:25 am	Context for Summit
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Summit Planning Committee Chair David Baltimore, California Institute of Technology

8:40 am	Context Through Three Lenses
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Moderator: Ismail Serageldin, The Library of Alexandria

Speakers:

Klaus Rajewsky, Max Delbruck
Daniel J. Kevles, New York University Law School
Alta Charo, University of Wisconsin

9:40 am	Scientific Background on Gene Editing Technologies
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Moderator: Jennifer Doudna, University of California, Berkeley

Speakers:

Emmanuelle Charpentier, Max Planck Institute of Infection Biology
Maria Jasin, Memorial Sloan Kettering Cancer Center
Jin-Soo Kim, Seoul National University / Institute for Basic Science
Jonathan Weissman, University of California, San Francisco

10:40 am	Panel Discussion with Speakers and Panelists
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Panelists:

J. Keith Joung, Massachusetts General Hospital and Harvard Medical School
Bill Skarnes, Wellcome Trust Sanger Institute
Feng Zheng, Broad Institute of MIT and Harvard

11:05 am	Comments from the Floor
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11:30 am	Lunch
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1:00 pm	Applications I (Germline Modification)
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Moderator: Robin Lovell-Badge, The Francis Crick Institute

Speakers:

Peter Braude, King's College London
George Q. Daley, Boston Children's Hospital
Kyle Orwig, University of Pittsburgh

2:00 pm	Panel Discussion with Speakers and Panelists
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Panelists:

George Church, Harvard Medical School
Azim Surani, The Gurdon Institute

2:30 pm	Comments from the Floor
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3:00 pm	Break
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3:30 pm	Societal Implications I
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Moderator: Annelien L. Bredenoord, University Medical Center Utrecht

Speakers:

John Harris, University of Manchester
Marcy Darnovsky, Center for Genetics and Society
Hille Haker, Loyola University Chicago
Sharon Terry, Genetic Alliance

4:30 pm	Comments from the Floor
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5:30 pm	Limits to Our Understanding
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Speaker: Eric Lander, The Broad Institute

6:00 – 7:00 pm	Breakout Sessions
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6:30	Reception
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8:00 pm	Adjourn
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Wednesday, 2 December 2015

7:15 am	Registration/ Continental Breakfast
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8:15 am	Welcome
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Summit Planning Committee Chair David Baltimore, California Institute of Technology

8:30 am	Applications IIa (Basic Research)
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Moderator: Duanqing Pei, Guangzhou Institutes of Biomedicine and Health

Speakers:

Rudolf Jaenisch, Massachusetts Institute of Technology
Janet Rossant, The Hospital for Sick Children
Jinsong Li, Shanghai Institutes for Biological Sciences

9:15 am	Comments from the Floor
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9:45 am	Break
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10:15 am	Applications IIb (Somatic Cell Therapy)
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Moderator: Adrian Thrasher, University College London

Speakers:

Matthew Porteus, Stanford University
Fyodor Urnov, Sangamo BioSciences
Ji Weizhi, Kunming Institute of Zoology

11:00 am	Panel Discussion with Speakers from IIa and IIb and Panelists
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Panelists:

Chad Cowan, Harvard University
Marco Weinberg, The Scripps Research Institute

11:30 am	Comments from the Floor
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12:00 pm	Lunch
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1:30 pm	Governance at the Institutional and National Level
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Moderator: Pilar Ossorio, University of Wisconsin School of Law

Speakers:

Jonathan Kimmelman, McGill University
Barbara J. Evans, University of Houston Law Center
Zhihong Xu, Peking University
Jennifer Merchant, Université Paris II

2:10 pm	Comments from the Floor
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2:30 pm	Break
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3:00 pm	Governance at the International Level
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Moderator: Indira Nath, All India Institute of Medical Sciences

Speakers:

Gary Marchant, Arizona State University
Thomas Reiss, Fraunhofer Institute
Philip Campbell, *Nature*

3:30 pm	Comments from the Floor
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4:00 pm	Break
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4:30 pm	International Perspectives
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Moderator: Ernst-Ludwig Winnacker, International Human Frontier Science Program Organization

Speakers:

Fola Esan, Nigerian Academy of Sciences, Nigeria
Bärbel Friedrich, Leopoldina, Germany
Pierre Jouannet, Université Paris Descartes, France
Efrat Levi-Lahad, Hebrew University, Israel
Keymanthri Moodley, Stellenbosch University, South Africa
Staffan Normark, Karolinska Institute, Sweden
K. Vijay Raghavan, Department of Biotechnology, Government of India

6:00 pm	Breakout Sessions
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7:00 pm	Adjourn
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Thursday, 3 December 2015

7:15 am	Registration/ Continental Breakfast
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8:15 am	Welcome
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Summit Planning Committee Chair David Baltimore, California Institute of Technology

8:30 am	Societal Implications II (Equity/Access/Race/Gender)
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Moderator: Françoise Baylis, Dalhousie University

Speakers:

Ruha Benjamin, Princeton University
Catherine Bliss, University of California, San Francisco
Tetsuya Ishii, Hokkaido University

9:30 am	Comments from the Floor
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10:15 am	Break
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10:45 am	Governance - Dual Use/Ownership/Commercialization
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Moderator: Hank Greely, Stanford University

Speakers:

David Relman, Stanford University
Richard Gold, McGill University
Charis Thompson, University of California, Berkeley

11:15 am	Comments from the Floor
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12:00 noon	Lunch
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1:30 pm	Going Forward: Closing Thoughts
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Summit Committee Chair David Baltimore, California Institute of Technology

3:00 pm	Adjourn
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