

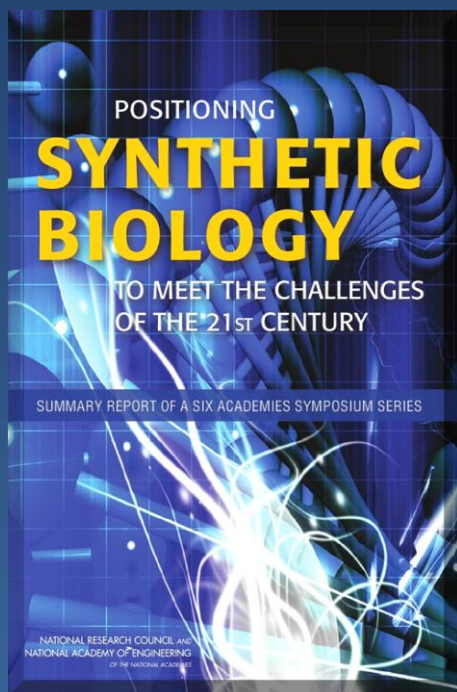


NATIONAL ACADEMY OF SCIENCES

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The Evolving Nature of Synthetic Biology

A Panel Discussion on Key Science, Policy, and Societal Challenges Facing the International Community



Introduction by

E. William Colglazier

Science and Technology Adviser to the Secretary of State

Moderator:

Jonathan Margolis

Deputy Assistant Secretary for Science, Space and Health
U.S. Department of State

Presenters:

Drew Endy

Stanford University

Richard A. Johnson

GlobalHelix LLC

Eleonore Pauwels

Woodrow Wilson International Center for Scholars

Friday, August 16, 2013

10:00 a.m. – 11:30 a.m.

East Auditorium, Marshall Center, U.S. Department of State

21st St Entrance at the intersection of 21st St & Virginia Ave, NW, Washington, DC

Presentations will be followed by a Q&A session

*Guests from outside the State Department must RSVP to
Colin Heasley at HeasleyCP@State.gov or 202-663-3241*

This event is sponsored by the U.S. Department of State and the Forum on Synthetic Biology of the National Academy of Sciences' Committee on Science, Technology, and Law

Speaker Biographies

Dr. E. William Colglazier was appointed in July 2011 as the fourth Science and Technology Adviser to the Secretary of State. The mission of the Office of the Science and Technology Adviser to the Secretary (STAS) is to provide scientific and technical expertise and advice in support of the development and implementation of U.S. foreign policy. From 1994 to 2011, Dr. Colglazier served as Executive Officer of the National Academy of Sciences (NAS) and the National Research Council (NRC). (<http://www.state.gov/r/pa/ei/biog/169019.htm>)

Jonathan Margolis, a career member of the Senior Executive Service, serves as Acting Deputy Assistant Secretary for Science, Space and Health in the Department of State's Bureau of Oceans and International Environmental and Scientific Affairs. In this position, he is responsible for policies and programs in the areas of International Science & Technology Cooperation, Space & Advanced Technologies, and International Health and Biodefense. (<http://www.state.gov/r/pa/ei/biog/bureau/158912.htm>)

Drew Endy runs the world's first "fables" genetic engineering lab in the new Bioengineering program at Stanford University and previously helped start the Biological Engineering major at the Massachusetts Institute of Technology. His Stanford research team develops genetically encoded computers and redesigns genomes. Dr. Endy co-founded the BioBricks Foundation as a public-benefit charity supporting free-to-use standards and technology that enable the engineering of biology. He co-organized the International Genetically Engineered Machines (iGEM) competition and the BIOFAB International Open Facility Advancing Biotechnology (BIOFAB). He is a new voting member of the U.S. National Science Advisory Board for Biosecurity (NSABB). He chaired the 2003 Synthetic Biology Study as a member of DARPA ISAT, served as an ad hoc member of the U.S. NIH Recombinant DNA Advisory Committee, and co-authored the 2007 "Synthetic Genomics: Options for Governance" report with colleagues from the Center for Strategic & International Studies and the J. Craig Venter Institute. *Esquire* named Endy one of the 75 most influential people of the 21st century. He lives in Menlo Park, CA with his wife and Stanford Bioengineering colleague Professor Christina Smolke.

Richard A. Johnson is engaged with shaping the policy, legal, ethical, investment, research funding, biosecurity, and governance issues related to synthetic biology. Johnson is a member of the Board on Life Sciences at the National Academy of Sciences and recently Co-chaired the comprehensive Board review of the National Academies' science, technology and economic policy programs. He serves as a Director of the BioBricks Foundation, and is the Chairman of the OECD/BIAC Biotechnology Committee and Vice-Chairman of the Technology and Innovation Committee. Johnson is also the Chairman of the Brown Advisory Council on Biology and Medicine, a member of the MIT Corporation Visiting Committee, the Brown Institute on Brain Science, the European Union's IT Futures of Medicine initiative, and several other research university boards and task forces. He participates in a number of synthetic biology policy and legal task forces, the Human Genome Organization's Genomics and Society Committee, and the U.S. State Department's international S&T joint consultative meetings. Johnson is the CEO and founder of Global Helix LLC, an analytical consulting and government strategy firm. After 30 years, Johnson retired as Senior Partner in Arnold & Porter LLP, where he represented many of the leading research universities, foundations, and high growth companies about: (1) enabling basic research, innovation and collaborative mechanisms; (2) creating a number of path-breaking university-industry collaborations, pre-competitive consortia, and public-private partnerships; (3) translating research into new markets and solutions to meet emerging societal challenges; and (4) assessing the globalization of research, competitiveness, and new sources of economic growth.

Eleonore Pauwels is a public policy scholar with the Science and Technology Innovation Program at the Woodrow Wilson International Center for Scholars. Her primary focus is a comparative and critical analysis of the EU and US approaches towards the societal governance of synthetic biology. She is also examining the challenges that new forms of biotechnology pose for political and public policy organizations, and the regulatory innovations that emerge alongside developments in cutting edge technologies. Her past research has included risk communication, citizen participation in technical controversies, and the epistemology of regulatory and social scientific experiments. Ms. Pauwels holds a M.A. in European Public Policy and Politics awarded by *L'Institut d'études politiques de Paris* (IEP) and Bath University within the European American University Consortium. She pursued postgraduate studies at the College of Europe (Academic University Institute for Postgraduate European Studies, Bruges) where she completed a cursus in European Regulatory Governance related to EU Research Policy. In 2006-2007, she was part of the Governance & Ethics Unit of the Directorate-General for Research at the European Commission.