

First Annual Conference on

Governance of Emerging Technologies: Law, Policy and Ethics

May 20-21, 2013 // Sheraton Wild Horse Pass Resort & Spa // Chandler, Arizona

ANDRA DAY O'CONNOR College *of* Law

CENTER FOR

Law, Science & Innovation

PROGRAM	Monday, May 20
7:30–8:30 a.m.	Check-in and continental breakfast
8:30–8:45 a.m.	Welcome Doug Sylvester, Dean, Sandra Day O'Connor College of Law, Arizona State University Jason Robert, Interim Director, Lincoln Center for Applied Ethics, Arizona State University
8:45–9:15 a.m.	Opening Keynote Address <i>Technology Innovation and the New Social Responsibility</i> Andrew Maynard, University of Michigan
9:15–10:30 a.m.	 The Challenges and Opportunities in Governance of Emerging Technologies Session Chair, Gary Marchant, Arizona State University <i>Title TBA</i> Sally Tinkle, Science and Technology Policy Institute <i>Title TBA</i> Dietram A. Scheufele, University of Wisconsin <i>Policy Opportunities in the Global Crisis Being Created by AI, Robots, Desktop Manufacturing and BioMedicine</i> James Hughes, Institute for Ethics & Emerging Technologies
10:30–10:45 a.m.	Coffee break
10:45 a.m.–12:45 p.m.	 Concurrent Session A A.1 - Military Technologies Session Chair, Brad Allenby, Arizona State University Emerging Military and Security Technologies and the Laws of War Brad Allenby, Arizona State University Engineering for Responsibility Wendell Wallach, Yale Interdisciplinary Center for Bioethics Ethical, Legal and Policy Issues in Military Genomics Max Mehlman, Case Western Reserve University Clearing Up the Fog in the Fifth Dimension: Regulating Cyber-warfare Brian Orend, University of Waterloo Guerrilla Science and Blitzkrieg Technology: Military Theories for Governing Emerging Technologies Michael Burnham-Fink, Arizona State University

	 A.2 - Public Engagement and Risk: Synthetic Biology Session Co-Chairs - Diana Bowman, University of Michigan, and Andrew Maynard, affiliationXX???? Living the Global Social Experiment: An Analysis of Public Discourse on Solar Radiation Management and its Implications for Governance Phil Macnaghten, University of Campinas and Durham University Exploring Genome Editing: Actors, Arenas, and Attitudes Towards Governance Jennifer Kuzma and Aliya Kuzhabekova, University of Minnesota Beyond the Lab and Far Away: Immediate and Future Challenges in Governing the Bio-economy Todd Kuiken and Eleonore Pauwels, Woodrow Wilson Center Challenges for Public Engagement About the Ethics of Synthetic Biology Gregory Kaebnick and Michael Gusmano, The Hastings Center Synthetic Biology Practices at SynBERC Megan Palmer and Drew Endy, Stanford University
	 A.3 - New Tools for Governing Emerging Technologies Session Chair - TBA In Pursuit of Third Generation Human Rights with Fourth Generation Technologies Hans Somsen, Tilburg University Federal Regulation of Robotic Aircraft Timothy Takahashi, Arizona State University The Invisible Handoff: Policy Issues along the Research to Deployment Continuum David Bjornstad, Amy Wolfe, Barry Shumpert and Maria Fernanda Campa, Oak Ridge National Laboratory Methodologies in Regulating Emerging Technologies and a Proposal for the Future Victoria Sutton, Texas Tech University Convergent Governance Principles & Stakeholder Capitalism Alan Singer, Appalachian State University
12:45–1:30 p.m.	Lunch (boxed lunches provided)
1:30–3:10 p.m.	 Responsible Innovation Session Chair – David Guston, Arizona State University? Governing Intent: Responsible Innovation and the Politics of Geoengineering Jack Stilgoe, University College London Governance of Financial Innovation and Perceptions of Responsibility: Insights from an Ethnographic Case Study Keren Asante and Richard Owen, University of Exeter Business School

PROGRAM	Monday, May 20 (cont.)
	 Democratic Theory and Epochal Technologies: The Case of 3D Printing Edward Woodhouse, Rensselaer Polytechnic Institute The Collision of Incentive Structures of Actors and Proposed Mechanisms for Responsible Research and Innovation Clare Shelley-Egan, Universiteit Twente, and Douglas Robinson, TEQNODE Limited; Université Paris-Est, LATTS-IFRIS
3:10–3:30 p.m.	Coffee break
3:30–5:30 p.m.	Concurrent Session B
	 B.1 - Smarter Medicine Session Chair - Gary Marchant, Arizona State University Immunosignaturing: Towards Comprehensive, Consumer-based, Health Monitoring Neal Woodbury, Arizona State University International Governance Approaches to Whole Genome Sequencing Rebecca Boxhorn and Susan Wolf, University of Minnesota Liability Drivers and Impediments to Individualized Medicine Rachel Lindor and Gary Marchant, Arizona State University The Emerging Enterprise of Mobile Health Technology: Ethical Considerations in the Age of the Smartphone Tsion Tesfaye, Young Invincibles, and Donna Hanrahan, Columbia University The Role of Informal Data Aggregated from Social Media Platforms in Disease Surveillance and Epidemiological Research Donna Hanrahan, Columbia University B2 - Nanotechnology Session Chair - TBA Ground Control: Linking Top-Down and Bottom-Up Approaches for International Nanotechnology Governance Rider Foley, Youngjae Kim and Michael Bernstein, Arizona State University The Role of Social Responsibility in Leading Nano-Scientists' Perceptions About Nanotech Research and Regulation Youngjae Kim, Arizona State University, Elizabeth A. Corley, and Dietram A. Scheufele AFFILLATION? Towards Regulating Engineered Nanomaterials: A Framework as a Tool for Overcoming the Existing Limitations Kiril H. Hristovski, Arizona State University Beefing Up FDA Oversight of Nano-Sunscreens and Nano-Cosmetics Robin Fretwell Wilson, Washington and Lee University School of Law

	 Evidence-based Regulation of Food Nanotechnologies: A Perspective from the European Union and United States Diana Bowman, University of Michigan
	B.3 – The Digital World
	 Session Chair – Joshua Abbott, Arizona State University Complying with Facebook's Terms of Use in Academic Research: A Contractual, Regulatory, and Ethical Perspective on Data Mining Lauren Solberg, University of Florida Ubiquity, Interrupted? A Comparison of European, Chinese, and U.S. Governance of the Internet of Things as an Emerging Technology Mailyn Fidler, Stanford University Anticipatory Gaming: Governing Emerging Technologies through Digital Media Jesse Shedd, Arizona State University Implications of the Proliferation of In-the-Body Technologies
	Implications of the Proliferation of In-the-Body Technologies Joseph Carvalko, AFFILIATION?
	 Securing the Internet of Things
	Joshua Abbott, Arizona State University
5:30–6:30 p.m.	Break
0.00 7	
6:30–7 p.m.	Dinner
6:30–7 p.m. 7–7:45 p.m.	Introduction of Dinner Speaker Novel Governance & Technology Strategies for BioSafety & Sharing Genomic/Brain Data Mildred Z. Solomon, The Hastings Center
	Introduction of Dinner Speaker Novel Governance & Technology Strategies for BioSafety & Sharing Genomic/Brain Data Mildred Z. Solomon, The Hastings Center Dinner Speaker
	Introduction of Dinner Speaker Novel Governance & Technology Strategies for BioSafety & Sharing Genomic/Brain Data Mildred Z. Solomon, The Hastings Center
	Introduction of Dinner Speaker Novel Governance & Technology Strategies for BioSafety & Sharing Genomic/Brain Data Mildred Z. Solomon, The Hastings Center Dinner Speaker

PROGRAM	Tuesday, May 21
7:30–8:30 a.m.	Check-in and continental breakfast
8:30–10 a.m.	 Neuroscience: The Next Big Emerging Technology? Session Chair – Jennifer Kuzma, University of Minnesota The White House Neuroscience Initiative: Policy as Embodied Action Philip Rubin, White House Office of Science and Technology Policy The Neurolaw Revolution Adam Kolber, Brooklyn Law School Public (Mis)understanding of Transcranial Direct Current Stimulation as a Cognitive Enhancer Laura Cabrera and Peter Reiner, University of British Columbia The Future of Brain-Based Lie Detection: Beyond the Courtroom Francis Shen, University of Minnesota Law School
10–10:15 a.m.	Coffee break
10:15 a.m.–12:15 p.m.	 Concurrent Session C Session Chair – TBA The Case for Adaptation in the Governance of Emerging Technologies Marc Saner, University of Ottawa Regulatory Competitive Shelters—An Emerging Mechanism for Encouraging Technological Innovation Yaniv Heled, Georgia State University College of Law Goding International Law Molly Land, New York ??? Law School Governing the Governance of Emerging Technologies Gary Marchant, Arizona State University, and Wendell Wallach, Yale Interdisciplinary Center for Bioethics Patent Law's Neglect of the Extraordinary Role of the Ordinary User in Disseminating Technologies Gaia Bernstein, Seton Hall University

	 C.2 Smart Machines Session Chair - TBA The Machine Question: Can Machines Have Rights? David J. Gunkel, Northern Illinois University Assuring Privacy and Security in Vehicle-to-Vehicle Safety Communications Dorothy Glancy, Santa Clara University The Ethical and Social Ramifications of Rossler's Blueprint for Making Benevolent Robots Kevin LaGrandeur, NYIT & IEET Compliance Measures for an Autonomous Weapons Convention Mark Gubrud, Princeton University The "Bright Green Line" of Responsibility Mark Waser, Digital Wisdom Institute
	 C.3 - Life Sciences Innovation Session Chair - TBA Policy Uncertainty, Ethical Controversy and Emerging Technologies: Lessons from the Funding of Stem Cell Science Aaron Levine, Georgia Institute of Technology From Lab Bench to Fuel Pump: Policy Implications in the Development of Lignocellulosic Biofuels Maria Fernanda Campa, David Bjornstad, Amy Wolfe and Barry Shumpert, Oak Ridge National Laboratory Different Risk, Different Name?: The Debate over Assignment of Nonproprietary Names for Biosimilar Biologics Jordan Paradise, Seton Hall University Privatizing Biomedical Citizenship Jonathan Kahn, Hamline University School of Law Leveraging the New Predictive Toxicology Paradigm in Evaluating Emerging Technology Elizabeth Beryt and Timothy Malloy, UCLA
12:15–12:45 p.m.	Lunch
12:45–1:30 p.m.	Luncheon Speaker <i>Title TBA</i> George Poste, Arizona State University
1:30–2 p.m.	Informal discussion and conference follow-up

CENTER FOR

Law, Science & Innovation





SANDRA DAY O'CONNOR

COLLEGE of LAW

ARIZONA STATE UNIVERSITY



Sponsors // Silver





The MacArthur Foundation Research Network on and Neuroscience



Sponsors // Bronze

Ethics + Emerging Sciences Group CAL POLY





