Seventh Annual

Governance of Emerging Technologies and Science

May 22-23, 2019
Beus Center for Law and Society | Phoenix, AZ

ASU | **Sandra Day O'Connor College of Law**
Arizona State University
Center for Law, Science and Innovation

Welcome

8:00–8:30 a.m.	**Check-in & Breakfast /** *W. P. Carey Foundation Armstrong Great Hall*
8:30–8:45 a.m.	**Welcome /** *W. P. Carey Foundation Armstrong Great Hall*

8:45–10:15 a.m.

Plenary Session 1: Technology: The End of Democracy?

W. P. Carey Foundation Armstrong Great Hall

Moderator: **James Weinstein**, Arizona State University, Sandra Day O'Connor College of Law
> **Brad Allenby**, Arizona State University, College of Engineering
> **Ryan S. Johnson**, Fredrikson & Byron, P.A.
> **Katina Michael**, Arizona State University, School for the Future of Innovation in Society
> **Yvonne Stevens**, Arizona State University, Sandra Day O'Connor College of Law

10:15–11:00 a.m.

Keynote: Smart! Why Artificial Intelligence Isn't Intelligent

W. P. Carey Foundation Armstrong Great Hall

Sheila Hayman, Documentary Film Maker

11:00 –11:30 a.m.

Break

11:30 a.m. –1:00 p.m.

Concurrent Session 1.1: Corporate & Fintech Responsibility
Room 150

Autonomous Corporate Personhood
Carla Reyes, Michigan State University College of Law

The OCC Fintech Charter and its Consumer Protection Implications
Matthew Bruckner, Howard University School of Law

Three Regulatory Challenges for FinTech
Kristin Johnson, Tulane University Law School

Has the Time Arrived for a Cybsecurity Fiduciary Duty?
Mark Latham, Vermont Law School

Concurrent Session 1.2: New Governance Tools
Room 240

Discovering Futures of Nuclear Power through Scenario Planning
Cynthia Selin, Arizona State University, School for the Future of Innovation in Society

Governing ETs: Notes From the Past
Jonathan Coopersmith, Texas A&M University, History

Developing the Anticipating Ethical Issues in a Multi-method Manner (AEIMM) Framework to Evaluate Emerging Technologies
Amanda Courtright-Lim, Cardiff University

Adapting Democracy for the 21st Century
Brad Allenby, Arizona State University, College of Engineering

Concurrent Session 1.3: AI Governance
Room 250

Probabilistic Programming for Machine Learning
Tjaša Zapušek, University of Zürich

Preliminary Results for a Systematic Review on the Regulatory Gaps Created by Artificial Intelligence
Carlos Ignacio Gutierrez, Pardee RAND Graduate School

Framing AI: How We Talk About Artificial Intelligence
James Herrick, Hope College

Regulating Algorithms and Robots for Responsibility?
Lyria Bennett Moses, University of New South Wales Law

Concurrent Session 1.4: Quantum Computing and Virtual Reality
Room 450

Democratizing Virtual Reality (VR): What Interventions Can Make VR More Accessible
Urooj Raja, University of Colorado, Environmental Studies

Soft Law and Quantum Technologies: Learning from the Past, Preparing for the Future
Walter Johnson, Arizona State University, Sandra Day O'Connor College of Law

From Nano to Quantum: What NQI Can Learn from NNI
Kenneth Evans, Rice University, Baker Institute for Public Policy

AR Lawyer: Legal Implications of Applied Augmented-Reality Technologies
Joshua Abbott, Arizona State University, Sandra Day O'Connor College of Law

Concurrent Session 1.5: Technology, Trust and Transparency
Room 550

Identity, Privacy, Decentralization
Jay Carpenter, Founder Desert Blcokchain

Trust in Sociotechnical Systems: Framing in Policy and Governance
Emily LaRosa, Carnegie Mellon University, Philosophy

Transparency's Artificial Intelligence Problem
Hannah Bloch-Wehba, Drexel University, School of Law

Personal Data Protection in Clinical Research and the Road Ahead for Regulatory Harmonization
Tara Sklar, University of Arizona, College of Law

1:00–1:45 p.m.   **Lunch /** *Room 544 on the 5th floor*

1:45–3:15 p.m.

Concurrent Session 2.1: Gene Editing and Synthetic Biology
Room 150

Process, Product, or Both? The EU and US Approaches to Synbio Regulation under Inherited GMO Regimes and the Need for a New Approach to Risk Regulation
Nertila Kuraj, University of Oslo, Public and International Law

Why Ask Publics to Deliberate About Gene Editing in the Wild?
Martinho Lucas Pires, Carolyn Neuhaus, The Hastings Center

No One Wants to Eat Technology – or Do They?
Richard Williams, Utah State University, Center for Growth and Opportunity

Soft Law for Synthetic Biology: The Only Viable Option
Justin Firestone, University of Nebraska - Lincoln

Concurrent Session 2.2: Autonomous Vehicles
Room 240

Managing Risk: Safety Assurance for Automated Driving Systems
Jeffrey Wishart, Exponent

Hands Off the Wheel: The Coming Case for Banning Human-Driven Vehicles
Tracy Hresko Pearl, Texas Tech University School of Law

Who Will Be Liable When Automated Vehicles Crash?
Gordon Anderson, UC Davis Policy Institute for Energy, Environment, and the Economy

Standardization Challenges for Automated Vehicles
Rida Bazzi, Arizona State University, Computer Science

Concurrent Session 2.3: Technology, Education and Youth
Room 250

Children and AI: The Next Generation
Jeremy Weissman, University of South Carolina, Philosophy

Ensuring Emancipation When Implementing Education Technology
Amelia von Gemmingen, Carnegie Mellon University, Philosophy

Exploring the Regulatory Sandbox for Innovating AI in Education
Jason C. Brown, Arizona State University, School for the Future of Innovation in Society

Promoting Interdisciplinary Thinking in UK-based Law Students
Sarah Cooper, Birmingham City University, School of Law

Concurrent Session 2.4: Healthcare Autonomy and Consent
Room 450

Pharmacogenomics from Research to Clinic: Sharing Cancer Drug Toxicity Results with Biobank Participants
Annika Beck, Mayo Clinic

Of Autonomy and Automation in Long-Term Care
Fazal Khan, University of Georgia School of Law

Consentability: Consent and Its Limits
Nancy Kim, California Western School of Law

When a Push Becomes a Shove: Using Technology to Nudge in Elderly Care
Katina Michel, Arizona State University, School for the Future of Innovation in Society

Concurrent Session 2.5: Online Platforms and Democracy

Room 550

The New Free Speech Wars
Shane Rusing, University of Arizona, College of Law

Unpacking the Digital Ecosystem
Riccardo Tremolada, Shanghai Jiaotong University

Resolving the Attention Tragedy
Nikolas Guggenberger, Yale Law School

Decentralized Voting Applications (live demonstration with audience participation)
Jay Carpenter, Founder Desert Blockchain

3:15–3:45 p.m.   **Break**

3:45–5:15 p.m.   ## Plenary Session 2: Institutional Innovations in Governing Emerging Technologies

W. P. Carey Foundation Armstrong Great Hall

Moderator: **Diana Bowman**, Arizona State University, Sandra Day O'Connor College of Law
  Christian Kaufholz, World Economic Forum
  Conrad von Kameke, TIGTech (Earning Trust in Tech Governance)
  Hilary Sutcliffe, SocietyInside
  Natalie Kofler, Editing Nature

5:15–6:00 p.m.   ## Participatory Exercise on Trust in Technology (TIGTech)

W. P. Carey Foundation Armstrong Great Hall

6:00–7:30 p.m.   **Dinner Break** (on own)

7:30–9:00 p.m.   ## Special Presentation: Films From the Future

Andrew Maynard, Arizona State University
The FilmBar, 815 N 2nd St, Phoenix, AZ 85004 *(two blocks from the law school)*

| 8:00–8:30 a.m. | **CHECK-IN & BREAKFAST** / *W. P. Carey Foundation Armstrong Great Hall* |

8:30–9:15 a.m.

Keynote: Vortex of Change: Business Metamorphosis (In a Digital Age) and a Corporate Renaissance??

Rachel K. Mushahwar, Vice President, Sales and Marketing Group, Intel Corporation

9:15–10:45 a.m.

Concurrent Session 3.1: Technology and Privacy
Room 150

Antitrust and Privacy Law Tensions
Erika Douglas, Temple University, Beasley School of Law

New Paradigms for Privacy Law in the Age of Predictive Analytics
Dennis Hirsch, Ohio State Moritz College of Law and Capital Law School

Regulating the Internet of Things (IoT)
Lawrence Trautman, Mind Spring

Facial Recognition Technology
Yvonne Stevens, Arizona State University, Sandra Day O'Connor College of Law

Concurrent Session 3.2: National Security and Emerging Technologies
Room 240

Technology Transfers as Global Soft Power: How the Bureau of Industry and Security's Efforts to Restrict Emerging Technology Exports Could [Further] Upset America's Geopolitical Interests
Scott Nuzum, Van Ness Feldman LLP

Biosecurity Means Ultra-Rapid Response
Robert Bohrer, California Western School of Law

Effective Biosafety, Biosecurity and Cyberbiosecurity Measures for Emerging Technologies Across Borders
Luis Alberto Ochoa, National Reference Laboratory, Ministry of Health, Mexico

Machine Learning in Armed Conflict - Meaningless Human Control?
Shin-Shin Hua, Leiden University, Grotius Center for International Legal Studies

Concurrent Session 3.3: Smart Health
Room 250

Towards the Regulation of Non-medical Implantables: Challenges and Opportunities
Katina Michael, Arizona State University, School for the Future of Innovation in Society

PDA Rejection of Medical Software
Pilar Ossorio, University of Wisconsin Law School

Wearable Tech Adoption and Govenance in the Workplace
Ifeoma Ajunwa, Cornell University, ILR School

The Devil in the Data: Applying a Health Equity Lens to Health Technology
Oliver Kim, University of Pittsburgh School of Law

Concurrent Session 3.4: New Technologies and Intellectual Property
Room 450

When Machines Outpace the Law: Copyright Uncertainty in Artificial Intelligence
John Gray, Perkins Coie LLP

License to Hack
Dyane O'Leary, Suffolk University Law School

The Tethered Economy
Aaron Perzanowski, Case Western Reserve University School of Law

Trade Secrecy and Scientific Communities: The Case of AIRR
Jacob Sherkow, New York Law School

Concurrent Session 3.5: Neuroscience
Room 550

Constitutional Implications of Forensic Neuroprediction
Lyn Gaudet, MINDSET/Mind Research Network

Brain Computer Interface-Ethics, Policy and Law
Lucy Tournas, Arizona State University, School for the Future of Innovation in Society

Predictions of Dangerousness, Big Data, and Social Media: Can and Should Technology Meet the Law's Demands?
Timothy Hall, University of Louisville Brandeis School of Law

Standardized Approaches to Recruitment and Consenting Practices for Human Intracranial Electrophysiology Studies
Jalayne Arias, University of California San Francisco, Neurology

10:45–11:15 a.m.	**Break**

11:15–12:45 p.m.   ## Plenary Session 3: Virtual Reality/Augmented Reality
W. P. Carey Foundation Armstrong Great Hall
Moderator: **Gerard Lewis,** Comcast Corporation
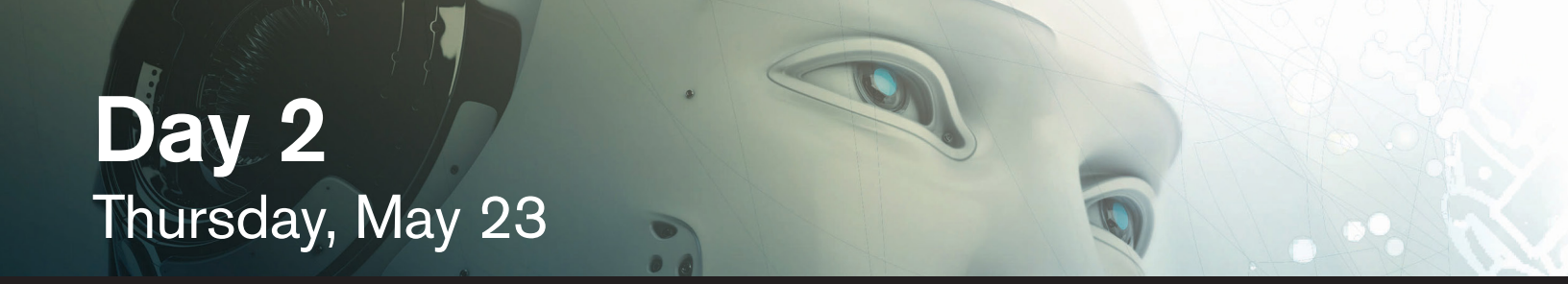**Patricia Velarde Burnett,** Weiss Brown

Michael Wise, CTO, Universal Filmed Entertainment Group
Lindsey Townley, Media Technology Manager, Universal Filmed Entertainment
Jennifer E. Rothman, Loyola Law School
Jessica Lee, Loeb & Loeb LLC

12:45–1:30 p.m.   **Lunch /** *Room 544, 5th floor*

1:30–3:00 p.m.

Concurrent Session 4.1: International Governance of Space and the Atmosphere
Room 150

Space Biocontamination Regulation - the Risk Is Not Zero
Colin Victoria Sutton, Texas Tech University School of Law

The Future of Global Space Governance
Timiebi Aganaba-Jeanty, Arizona State University, School for the Future of Innovation in Society

Linking Solar Geoengineering and Emissions Abatement Policies: Resolving an International Climate Policy Dilemma
Jesse L. Reynolds, University of California Los Angeles School of Law

Governing Climate Engineering: A Proposal for Immediate Governance of Solar Radiation Management
Sikina Jinnah, University of California Santa Cruz, Politics

Concurrent Session 4.2: Modifying Humans
Room 240

Tis the Season: The Regulation of Gene Doping in Sports
Robert Copple, Copple & Associates

The Coming Age of Gene Editing: Medical Promise, Regulation, and the Revival of Decades of Debate
Myrisha Lewis, Howard University School of Law

The Need for Responsible Reporting on Life Extension Therapies & Risks
Natasha Vita-More, Humanity+

On Editing the Genetic Composition of Human Embryos
Paul Enríquez, North Carolina State University, Molecular and Structural Biochemistry

Concurrent Session 4.3: AI and Legal Systems
Room 250

Do We Resist or Greet Our Robot Overlords? The Growing Impact of AI on the Legal Profession
John Browning, SMU Dedman School of Law

Leveraging Legal Analytics and Spend Data as a Law Firm Self-Governance Tool
Joseph Tiano, Legal Decoder

How to Regulate Robo-Advisors: Recent Developments
Chao-Sheng Chiang, Tunghai University, College of Law

AI: The Design of Future Legal Systems
Thomas Barton, California Western School of Law

Concurrent Session 4.4: Risk Management of New Technologies
Room 450

Not an Either/Or Proposition. On Managing Precaution and Innovation in the European Union
Kathleen Garnett, Wageningen University

Artificial Intelligence and Countering Violent Extremism: A Much Needed Conversation
Jordan Brunner, Arizona State University, Sandra Day O'Connor College of Law

Law and Unknown Unknowns on the Scientific Frontier
Eric E Johnson, University of Oklahoma College of Law

Process Tools for Soft Law Governance of Emerging Technologies
Gary Marchant, Arizona State University, Sandra Day O'Connor College of Law

Concurrent Session 4.5: Blockchain and Cryptocurrencies
Room 550

Regulating Token Offerings
Yuliya Guseva, Rutgers University, School of Law

A New Model for Blockchain Companies: Blockchain-as-a-Service
Nima Maleki, Experience Legal, PC

Robochain: How Developments in AI, Blockchain, and Machine Learning can Encourage Concurrent Innovation
AJ Gilman, Arizona State University, Sandra Day O'Connor College of Law

Energy as a Service: Blockchain & The Emerging Energy Cloud
Mark Goldstein, International Research Center

3:00–3:30 p.m. **Break**

3:30–5:00 p.m. ## Plenary Session 4: Government Officials on Governing Emerging Technologies
W. P. Carey Foundation Armstrong Great Hall

Moderator: Megan Brown, Partner, Wiley Rein LLP

Steven G. Bradbury, General Counsel of the U.S. Department of Transportation

Paul Watkins, Director of the Office of Innovation at the U.S. Consumer Financial Protection Bureau

Stacey Amin, Chief Counsel of the U.S. Food and Drug Administration, Deputy General Counsel of the U.S. Department of Health and Human Services

Katie Biber, General Counsel at Anchorage

5:00–6:30 p.m.

Concurrent Session 5.1: Stakeholder Engagement

Room 150

The Gene Drive Mouse and Generative Deliberation: Using Stakeholder Engagement to Explore Governance Possibilities
Dalton George, North Carolina State University Genetic Engineering and Society Center

Governance in Civic Smart Cities
John Harlow, Engagement Lab @ Emerson College

Undermining Democracy by Reinforcing Experts: Framings of Public Engagement in Human Genome Editing Discussions
Christian H. Ross, Arizona State University, Biology and Society

The Greater Phoenix Smart Region Consortium
Diana Bowman, Arizona State University, Sandra Day O'Connor College of Law

Concurrent Session 5.2: Genetic Testing

Room 240

Genetic Identity in the Regulation of Innovative Reproductive Technologies
Karinne Ludlow, Monash University, Faculty of Law

Precision Medicine and the Resurgence of Race in Genomic Medicine
Jonathan Kahn, Mitchell Hamline School of Law

Does Emerging AI Architecture Create Novel Ethical, Legal and Governance Issues for the Physician's Duty To Re-contact Patients?
Amalia Issa, University of the Sciences

Non-Invasive Prenatal Whole Genome Sequencing: Post-Birth Governance Challenges
Vardit Ravitsky, University of Montreal, Social and Preventive Medicine

Concurrent Session 5.3: New Technologies and Government Regulation

Room 250

Modern Aerial Law: Emerging Legal Tensions in National and State Drone Policies
Brent Skorup, George Mason University, Mercatus Center

Canadian Federal Regulations Governing Cannabis: Evolving from a Medical to Recreational Regulatory Framework
Shane Morris, Aurora Cannabis

Recent Transformations of Technological Governance in Latin America
Martin Andres Perez Comisso, Arizona State University, School for the Future of Innovation in Society

National Pursuit of Emerging Biotechnologies - Divergent Motives and Expectations of 12 Countries
Anne Beall, J. Craig Venter Institute

Concurrent Session 5.4:Cybersecurity and Cyber-Rights
Room 450

Breaking Down the Cyber/Privacy/Corporate Compliance Silos
Paul Flanagan, Drexel University Thomas R. Kline School of Law

Cyberbullying & the Law
Gabriel Lim, Legal-Ease Podcast

Cyber Security as a Behavioral Science
Robert Copple, Copple & Associates

Multi Jurisdiction Compliance with Data Privacy Laws
K Royal, TrustArc

Concurrent Session 5.5: Big Data and Healthcare
Room 550

Property Rights and Policymaking for the Human Body: Genomic Piracy, Privacy, and Property
Nathaniel Wade, Arizona State University, College of Health Solutions

The Data Minefields –What Can Gen-ethics Teach Us About Ethics and Legal Regulation of AI Datamining?
Sharon Bassan, Princeton University Center for Human Values

Precision Medicine Privacy
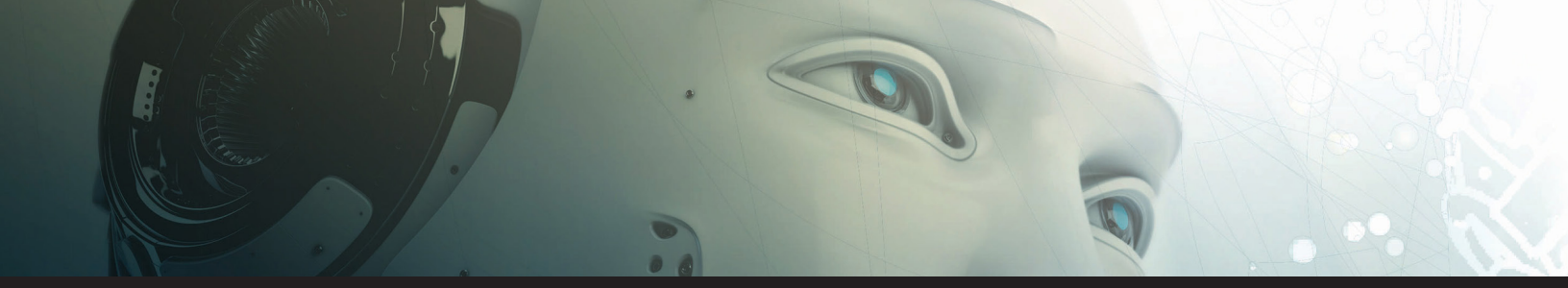Jennifer Oliva, West Virginia University, Petrie-Flom Center

Unintended Uses of mHealth Device Data
Gary Marchant, Arizona State University, Sandra Day O'Connor College of Law

6:00–8:00 p.m.　　　## Poster Presentations & Closing Reception
Room 544

Thank you!

ASU | Lincoln Center
for Applied Ethics
Arizona State University

Save the Date

May 27 & 28, 2020

Mark your calendar for the 8th Annual Conference on
Governance of Emerging Technologies and Science (GETS)
and stay informed by visiting
events.asucollegeoflaw.com/gets/

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