

CONTACT DETAILS

NAME: Andrew David Maynard
Professor or Advanced Technology Transitions, School for the Future of
Innovation in Society, Arizona State University
PO Box 875603, ASU, Tempe AZ 85387-5603

AFFILIATION: Arizona State University

EMAIL: andrew.maynard@asu.edu

ACADEMIC PROFILE: <https://isearch.asu.edu/profile/2670673>

GOOGLE SCHOLAR: <https://scholar.google.com/citations?user=b8NhWc4AAAAJ&hl=en>

ORCID: <http://orcid.org/0000-0003-2117-5128>

CENTER WEBSITE: <http://futureofbeinghuman.asu.edu>

PERSONAL WEBSITE: <http://andrewmaynard.net>

LINKEDIN: <https://www.linkedin.com/in/andrewdmaynard/>

SUBSTACK: <https://andrewmaynard.substack.com/>

EDUCATION

PhD: University of Cambridge, U.K. 1989 – 1992
Cavendish Laboratory, Microstructural Physics Department. Ph.D. (Aerosol Physics).
Thesis: Ultrafine aerosol particle collection and analysis (1992)

BSc: University of Birmingham, U.K. 1984 - 1987
Physics. B.Sc. (Hons): Iii

ACADEMIC EMPLOYMENT AND POSITIONS

Arizona State University 8/3/15 - Present
Associate Dean of Curricula and Student Success, College of Global Futures 7/15/20 – 6/30/22
Associate Director of Faculty, School for the Future of Innovation in Society 8/1/19 – 7/14/20
Professor of Advanced Technology Transitions, 8/3/15 – Present
School for the Future of Innovation in Society
Director, Future of being Human initiative 8/1/22 – Present
Director, Risk Innovation Nexus 8/1/18 - Present
Director, Risk Innovation Lab 8/3/15 – Present

University of Michigan 4/1/10 – 7/30/15
Professor, Environmental Health Sciences, School of Public Health 9/1/10 – 7/30/15
Director, University of Michigan Risk Science Center 4/1/10 – 7/30/15
Chair, Department of Environmental Health Sciences 6/1/12 – 11/30/14
NSF International Chair of Environmental Health Sciences 1/1/13 – 11/30/14
Charles and Rita Gelman Professor of Risk Science 9/1/10 - 12/31/12

NON-ACADEMIC EMPLOYMENT AND POSITIONS

Woodrow Wilson International Center for Scholars 8/15/05 – 3/31/10
Chief Science Advisor, Project on Emerging Nanotechnologies
Science Advisor, Synthetic Biology Project

National Institute for Occupational Safety and Health 1/18/00 – 7/8/05
Team Leader – Aerosols Research Team (GS15) 1/1/04 – 7/8/05
Senior Service Fellow (GS14). (2000 – 2004) 1/18/00 – 1/1/04

Health and Safety Executive, U.K.	9/21/92 – 1/17/00
Head, Exposure Control Section, Health and Safety Laboratory	9/1/98 – 1/17/00
Senior Scientific Officer (1994 – 1998)	9/1/94 – 9/1/98
Higher Scientific Officer (1992 – 1994)	9/21/92 – 9/1/94
Severn Trent Water Ltd., U.K.	1/10/87 – 1/10/89
Management Trainee.	

ACADEMIC AFFILIATIONS

Affiliate Faculty Member	2022 - Present
School of Sustainable Engineering and the Built Environment, Ira A. Fulton Schools of Engineering, ASU	
Affiliate Faculty Member	2022 - Present
Interplanetary Initiative, ASU	
Senior Global Futures Scholar	2021 - Present
Julie Ann Wrigley Global Institute of Sustainability and Innovation, ASU	
Global Sports Scholar	2020 - Present
Global Sports Institute, ASU	
Senior Sustainability Scholar	2016 - 2021
Julie Ann Wrigley Global Institute of Sustainability, ASU	
Faculty Fellow	2015 - Present
Center for Law, Science & Innovation, ASU	
Affiliate Faculty Member	2018 - Present
Global Security Initiative Center for Human, Artificial Intelligence, and Robot Teaming (CHART), ASU	

ACADEMIC LEADERSHIP POSITIONS OF NOTE NOT INCLUDED ABOVE

Member, Space Strategy Committee, Arizona State University	1/11/22 – Present
Chair, Master of Science & Technology Policy program, Arizona State University	1/1/16 – 7/14/20

EXECUTIVE & ADVISORY POSITIONS

National Science Foundation	2023 - Present
Member, 4th Gen ERC Societal Impacts Advisory Committee	
Advanced Technologies for the Preservation of Biological Systems Engineering Research Center (ATP-Bio)	2020 - Present
Member, Ethics and Public Policy panel	
Institute for Advancing Food and Nutrition Science	2021 - Present
IAFNS Board of Trustees (formerly ILSI NA) Co-chair of the Board of Trustees (2021-2023)	
Canadian Institute for Advanced Research	2017 - Present
Member of the President's Research Council	
Nature Nanotechnology Advisory Panel	2017 - Present
Advisory group to the editor on developing content on the relationship between technology and society	
World Economic Forum	2008 - Present
Committee on top ten emerging technologies (2012 – Present)	

Global Futures Council on Agile Governance (2017 – 2019)	
Council on the Future of Technology, Values and Policy (2016 – 2017)	
Global Agenda Council on Emerging Technologies. (2008 – 2014)	
Chair of the World Economic Forum Global Agenda Council on Emerging Technologies. (2010 – 2011)	
Co-chair, World Economic Forum Global Agenda Council on Nanotechnology (2014 – 2016).	
Metacouncil on Emerging Technologies (2014 – 2016)	
Advisory Committee, World Economic Forum Technology Pioneers (2012 – 2020)	
National Academies of Sciences Committees	2008 - 2021
National Academies of Science, Engineering and Medicine Committee on Emerging Areas of Science, Engineering, and Medicine for the Courts: Identifying Chapters for a Fourth Edition of The Reference Manual on Scientific Evidence – A Workshop. (2020 – 2021)	
National Academies of Science Planning Committee on New Technologies and Engagement Approaches to Enhance Research on the Communication about Individual Environmental Health Data. (2016)	
National Academies of Science Committee on the Science of Science Communication (2015 – 2016)	
National Academies of Science Committee to develop a research strategy for environmental, health, and safety aspects of engineered nanomaterials (2010 – 2013)	
National Academies of Science review panel for the National Nanotechnology Initiative Strategy for Nanotechnology Environmental Health and Safety Research (2008)	
International Life Science Institute North America	2012 - 2021
ILSI North America Board of Trustees (2012 – 2021)	
Vice-chair of the Board of Trustees (2019-2021)	
American Association for the Advancement of Science	2015 - 2020
AAAS Early Career Award for Public Engagement with Science Selection Committee	
RELATE (Science Communication)	2015 - 2019
Faculty Advisor	
Center for Policy on Emerging Technologies	2012 – 2018
Senior Fellow	
United Nations Expert Group on Exponential Technological Change	2016 - 2017
New group addressing exponential technological change, automation, and policy implications for sustainable development	
Keep on Questioning (I'm A Scientist USA)	2015 - 2017
Board of Advisors	
Dow Distinguished Faculty Fellows	2013 - 2015
Member, University of Michigan Dow Distinguished Faculty Fellows	
Center for Nanotechnology in Society, ASU	2012 - 2015
Member, Board of Visitors	
Graham Sustainability Institute, University of Michigan	2012 - 2015
Member, Executive Committee	
Center for the Environmental Implications of Nanotechnology	2009 – 2016
Chair, External Advisory Board	
Nanoscale Informal Science Education Network	2009 – 2015
Advisory board member	

Environmental Protection Agency Chair, External Peer Review of the U.S. Environmental Protection Agency Draft Nanomaterial Research Strategy	2008
Environmental Protection Agency Panel member, Public Meeting on Risk Management Practices for the U.S. Nanoscale Materials Stewardship Program	2008
Council of Canadian Academies Expert Panel on Nanotechnology Assessment	2007
President's Council of Advisors on Science and Technology Member of the Nanotechnology Working Group	2010 - 2012
Chemical & Engineering News Advisory Board member	2008 - 2011
International Council On Nanotechnology (ICON) Executive Committee member	2004 - 2011
International Life Sciences Institute Member of the ILSI Health and Environmental Sciences Institute Nanomaterial Safety Subcommittee Project Steering Team.	2004 - 2010
President's Council of Advisors on Science and Technology Member of the Nanotechnology Technical Advisory Group	2006 - 2009
Organization for Economic Cooperation and Development Working Party on Manufactured Nanomaterials. Project on Emerging Nanotechnologies representative.	2005 - 2007

EDITORIAL BOARDS

Annals of Work Exposure and Health International Advisory Board	2017 - Present
Journal of Responsible Innovation Member, Board of Editors	2013 - Present
Annals of Occupational Hygiene International Advisory Board	2006 - 2016
Nano Today Member of the editorial board	2006 - 2009
Journal of Nanoparticle Research Member of the editorial board	2006 - 2012
Nanotoxicology Member of the editorial board	2006 - Present

COMMITTEES (NON-ACADEMIC)

NSET NIOSH representative on the Nanomaterial Science, Engineering and Technology (NSET) subcommittee of the National Science and Technology Council (NSTC).	2004 - 2005
NEHI Co-chair of the Nanotechnology Environmental and Health Impacts (NEHI) interagency working group.	2004 - 2005

International Standards Organization 2001 - 2005
Convener of the International Standards Organization working group
TC146/SC2/WG1: Size-selective aerosol sampling and analysis.

HONORS AND AWARDS

American Association for the Advancement of Science 2020
Lifetime Elected Fellow

Society of Toxicology 2015
Public Communications Award

National Institute for Occupational Safety and Health 2009
Alice Hamilton Award, Biological Sciences Category Winner (co-author)

National Institute for Occupational Safety and Health 2006
Alice Hamilton Award, Biological Sciences Category Winner (co-author)

National Institute for Occupational Safety and Health 2005
Alice Hamilton Award, Biological Sciences Honorable Mention (co-author)

National Institute for Occupational Safety and Health 2004
Alice Hamilton Award, Engineering & Physical Sciences
Honorable Mention (co-author)

National Institute for Occupational Safety and Health 2003
Alice Hamilton Award, Engineering & Physical Sciences
Honorable Mention (co-author)

GOVERNMENT TESTIMONY AND BRIEFINGS

Formal testimony and briefings include:

President's Council on Science and Technology (PCAST)
Private Meeting on Nanotechnology. Invited briefing. *November 1 2011.*

Wisconsin Assembly Committee on Public Health
Presentation at an information hearing on nanotechnology, potential impacts and regulation. *October 2009*

National Organics Standards Board Materials Committee
Comments on Proposed Recommendations for Nanotechnology in Organic Production and Processing *May 2009.*

U.K. House of Lords Select Committee on Science and Technology.
Written evidence to the Inquiry into the use of nanotechnology in the food sector. *March 2009.*

Food and Drug Administration.
Public meeting on FDA-regulated products that may contain nanoscale materials. *September 8 2008.*

U.S. House of Representatives Committee on Science and Technology.
Hearing on The National Nanotechnology Initiative Amendments Act of 2008. Invited testimony. *April 16 2008.*

U.S. House of Representatives Committee on Science and Technology, Subcommittee on Research and Science Education.
Hearing on Research on Environmental and Safety Impacts of Nanotechnology: Current Status of Planning and Implementation under the National nanotechnology Initiative. Invited testimony. *October 31 2007.*

U.S. House of Representatives Committee on Science.
Hearing on Research on Environmental and Safety Impacts of Nanotechnology: What Are the Federal Agencies Doing? Invited testimony. *September 21 2006.*

President's Council on Science and Technology (PCAST)

Public Meeting on Nanotechnology. Invited briefing. *June 25 2007.*

President's Council on Bioethics.

Nanotechnology. Invited briefing. *June 29 2007.*

Nanoscale Science, Engineering and Technology Subcommittee, National Science and Technology Council, Committee on Technology;

Research Needs and Priorities Related to the Environmental, Health, and Safety Aspects of Engineered Nanoscale Materials: Public Meeting. Submitted testimony. *January 4 2007.*

Food and Drug Administration (FDA)

Consideration of FDA-Regulated Products That May Contain Nanoscale Materials; Public Meeting. Submitted testimony. *September 9 2008.*

European Food Safety Authority

Written comments on nanomaterials and nanotechnology and food and feeds. *March 2008.*

Congressional Nanotechnology Caucus.

General Briefing on Nanotechnology. Chair. *March 3 2007.*

Congressional Nanotechnology Caucus.

Meeting on Nanotechnology and Environment, Health and Safety. Invited briefing. *November 19 2007*

THOUGHT LEADERSHIP

Much of my career over the past 20 years has focused on working through various networks, organizations, and platforms, to help guide and inform decision making around advanced technology transitions and socially responsible innovation. This includes testifying before congressional committees, working closely with organizations such as the World Economic Forum, OECD and others, contributing to National Academies studies, working widely with print and broadcast media, and writing extensively for a public audience – including through articles, blogs and newsletters.

My influence and impact as a thought leader, communicator, and public intellectual, are driven by a conviction that academics – especially academics at a public university – have a societal responsibility to ensure knowledge and the insights associated with it are made as accessible, meaningful, and impactful, to as many people as possible, whether these are business leaders, policy makers, civil society, educators, members of the public, or others. They are also underpinned by a deeply transdisciplinary approach to exploring and addressing emerging challenges and opportunities. Through my work I intentionally and strategically leverage my expertise, networks, platforms, and skills, in numerous and often novel ways to mobilize knowledge, understanding, and insights, in the service of empowering others to be part of building a positive future together.

In this context I would highlight the following, although this is by no means an exhaustive list of domains I work across:

Responsible and beneficial development of nanotechnology: Through my work with government agencies, industry, civil society, and other organizations, I have had a global impact on research, policy, and decision making around the safe and beneficial development of nanotechnology over the past two plus decades. In the early 2000's I was responsible for co-leading the US federal government's strategic initiatives around nanotechnology safety. Between 2005 – 2010 I was one of the most influential thought leaders globally in the responsible development of nanotechnology in my role as Chief Science Advisor to the Woodrow Wilson International center for Scholars' Project on Emerging Nanotechnologies. I have testified before congressional committees, served on National Academies committees, worked with organizations that include OSTP, OECD, and the World Economic Forum, and become one of the go-to experts on nanotechnology safety for journalists and policy makers. Although my work now extends far beyond nanotechnology, I continue to contribute to thought leadership here.

Responsible innovation and emerging technologies: My work over the past 15 years has increasingly focused on supporting decision making around responsible innovation and emerging technologies. Since 2008 I have worked extensively with the World Economic Forum, including participating in and chairing Global Agenda Councils and Global Futures Councils, being an invited speaker at Davos and the Annual Meeting of New Champions in China (the “Summer Davos”), and participating since its inception in the working group behind the World Economic Forum’s annual list of top ten emerging technologies. I was influential in informing the ideas that led to the concept of the Fourth Industrial Revolution, and continue to be a leading public thinker around responsible innovation and emerging technologies. My writing and academic publications continue to push the boundaries of thinking around socially responsible and beneficial innovation.

Advanced Technology Transitions: For over two decades my research and thought leadership have broadly encompassed what may be described as “advanced technology transitions.” This is a field I have highlighted through my public-facing work, and one that represents a unique and broad framework for approaching the beneficial development and use of potentially disruptive new technologies. It is a framework that is becoming increasingly relevant in my thought leadership around advanced technologies such as artificial intelligence and quantum technologies. I founded and direct the ASU Future of Being Human initiative that is explicitly focused on catalyzing conversations around advanced technology transitions, and building thought leadership capacity around technology, society, and the future.

Risk Innovation: Much of my professional career has touched on risk, and has ranged from conventional risk assessment and management (especially within the context of occupational and public health), to grappling with novel risks and innovative ways of thinking about and addressing risk. The latter has led to the emergence of “risk innovation” as a unique approach to understanding and navigating complex social risks in particular that are not covered by existing risk frameworks, and yet are critical to advanced technology transitions. My work around risk innovation is reflected in my time as Director of the University of Michigan Risk Science Center and the Arizona State University Risk Innovation Lab, and has focused on engaging with multiple stakeholders. This includes one of the most successful YouTube learning channels on understanding risk – Risk Bites. The channel provides a unique and highly accessible source of content on understanding risk, and includes some of the top-ranked YouTube videos in areas such as nanotechnology, epidemiology, and the fourth industrial revolution.

Public Engagement: I am known internationally for my work as a highly effective communicator, convener, moderator, and facilitator of public engagement. As well as being a sought-after speaker, I am regularly invited to talk about emerging technologies and responsible innovation by journalists and media outlets. I am a regular contributor to platforms such as Slate Future Tense, World Economic Forum Agenda, and The Conversation (where I am the most prolific and most-read contributor at Arizona State University), and have written for outlets that include the Washington Post, Discover Magazine, Salon, Scientific American, and The Guardian. In addition, I write extensively for my own public-facing platforms, including a highly successful Substack newsletter. I approach my public engagement activities as integral to my position as a tenured professor at a public university, and deeply integrated with my scholarship and teaching. I focus specifically on knowledge mobilization, and opening up pathways and opportunities for emerging knowledge and insights to have far-reaching public accessibility, relevance, and impact.

Popular (Trade) Books: I have written two popular books on technology, society, and the future, that are designed to facilitate knowledge mobilization at scale around future-building in a technologically complex world. These books – “Films from the Future” and “Future Rising” – uniquely bring complex ideas around emerging technologies, society, and the future, to a broad audience. They are written to be engaging and accessible to a broad audience, while taking readers on a transdisciplinary journey of discovery that opens their eyes to new possibilities and ways of thinking as transformative technologies become increasingly complex and influential. Importantly, this has become a transformative avenue for scaling the national and global reach of my thought leadership and work around knowledge mobilization.

10 MOST CITED PUBLICATIONS IN PEER REVIEW JOURNALS

Google Scholar metrics: Citations: 22.702. H-index: 53, i10-index: 109 (Updated 7/13/23)

1. Poland, C. A., R. Duffin, I. Kinloch, A. Maynard, W. A. H. Wallace, A. Seaton, V. Stone, S. Brown, W. MacNee and K. Donaldson (2008). "Carbon nanotubes introduced into the abdominal cavity of mice show asbestos-like pathogenicity in a pilot study." Nature Nanotechnology **3**: 423-428. (2947 citations)
2. Oberdörster, G., A. Maynard, K. Donaldson, V. Castranova, J. Fitzpatrick, K. Ausman, J. Carter, B. Karn, W. Kreyling, D. Lai, S. Olin, N. Monteiro-Riviere, D. Warheit and H. Yang (2005). "Principles for characterizing the potential human health effects from exposure to nanomaterials: elements of a screening strategy." Part. Fiber Toxicol. **2**(8): doi:10.1186/1743-8977-1182-1188. (2457 citations)
3. Maynard, A. D., R. J. Aitken, T. Butz, V. Colvin, K. Donaldson, G. Oberdörster, M. A. Philbert, J. Ryan, A. Seaton, V. Stone, S. S. Tinkle, L. Tran, N. J. Walker and D. B. Warheit (2006). "Safe handling of nanotechnology." Nature **444**(16): 267-269. (1796 citations)
4. Shvedova, A. A., E. R. Kisin, R. Mercer, A. R. Murray, V. J. Johnson, A. I. Potapovich, Y. Y. Tyurina, O. Gorelik, S. Arepalli, D. Schwegler-Berry, A. F. Hubbs, J. Antonini, D. E. Evans, B. K. Ku, D. Ramsey, A. Maynard, V. E. Kagan, V. Castranova and P. Baron (2005). "Unusual inflammatory and fibrogenic pulmonary responses to single-walled carbon nanotubes in mice." Am. J. Physiol.-Lung Cell. Mol. Physiol. **289**: 698-708. (1571)
5. Shvedova, A. A., E. R. Kisin, A. R. Murray, V. Z. Gandelsman, A. D. Maynard, P. A. Baron and V. Castranova (2003). "Exposure to carbon nanotube material: Assessment of the biological effects of nanotube materials using human keratinocyte cells." J. Toxicol. Environ. Health **66**(20): 1909-1926. (1564 citations)
6. Elder, A., R. Gelein, V. Silva, T. Feikert, L. Opanashuk, J. Carter, R. Potter, A. Maynard, J. Finkelstein and G. Oberdorster (2006). "Translocation of inhaled ultrafine manganese oxide particles to the central nervous system." Environmental Health Perspectives **114**(8): 1172-1178. (1292 citations)
7. Maynard, A. D., P. A. Baron, M. Foley, A. A. Shvedova, E. R. Kisin and V. Castranova (2004). "Exposure to Carbon Nanotube Material: Aerosol Release During the Handling of Unrefined Single Walled Carbon Nanotube Material." J. Toxicol. Environ. Health **67**(1): 87-107. (980 citations)
8. Shvedova, A. A., E. Kisin, A. R. Murray, V. J. Johnson, O. Gorelik, S. Arepalli, A. F. Hubbs, R. R. Mercer, P. Keohavong, N. Sussman, J. Jin, J. Yin, S. Stone, B. T. Chen, G. Deye, A. Maynard, V. Castranova, P. A. Baron and V. E. Kagan (2008). "Inhalation vs. aspiration of single-walled carbon nanotubes in C57BL/6 mice: inflammation, fibrosis, oxidative stress, and mutagenesis." Am. J. Physiol.-Lung Cell. Mol. Physiol. **295**: L552-L565.(714 citations)
9. Maynard, A. D. and E. D. Kuempel (2005). "Airborne nanostructured particles and occupational health." Journal Of Nanoparticle Research **7**(6): 587-614. (698 citations)
10. Tsuji, J. S., A. D. Maynard, P. C. Howard, J. T. James, C. W. Lam, D. B. Warheit and A. B. Santamaria (2006). "Research strategies for safety evaluation of nanomaterials, part IV: Risk assessment of nanoparticles." Toxicological Sciences **89**(1): 42-50. (602 citations)

PUBLICATIONS IN ACADEMIC JOURNALS

Google Scholar: <https://scholar.google.com/citations?hl=en&user=b8NhWc4AAAAAJ>

1. Maynard, A. D. and S. M. Dudley (2023) "Navigating Advanced Technology Transitions Using Lessons from Nanotechnology" Nature Nanotechnology. **In Press**
2. Wang, J., A. Maynard, J. Lobo, K. Michael, S. Motsch and D. Strumsky (2022). "Knowledge Combination Analysis Reveals That Artificial Intelligence Research Is More Like "Normal Science" Than "Revolutionary Science"." Journal of Artificial Intelligence Research **Submitted**.
3. Kidd, J., P. Westerhoff and A. Maynard (2021). "Survey of industrial perceptions for the use of nanomaterials for in-home drinking water purification devices." NanoImpact **22**: 100320.
4. Hadi, A. and Maynard, A. D. (2021) Design the Future Activities (DFA): A Pedagogical Content Knowledge Framework in Engineering Design Education. Virtual Conference, ASEE Conferences.
5. Maynard, A. D. (2021). "How to Succeed as an Academic on YouTube." Frontiers in Communication

- 5(130).
6. Kidd, J., P. Westerhoff and A. Maynard (2020). "Public perceptions for the use of Nanomaterials for in-home drinking water purification devices." *NanoImpact*: 100220. DOI: 10.1016/j.impact.2020.100220
 7. Guseva Canu, I., K. Batsungnoen, A. Maynard and N. B. Hopf (2020). "State of knowledge on the occupational exposure to carbon nanotube." *International Journal of Hygiene and Environmental Health* **225**: 113472.
 8. Tournas, L., W. Johnson, A. Maynard and D. Bowman (2019). "Germline Doping for Heightened Performance in Sport." *Australian and New Zealand Sports Law Journal* **12**(1): 1-24.
 9. Maynard, A. D. and M. Scragg (2019). "The Ethical and Responsible Development and Application of Advanced Brain Machine Interfaces." *J Med Internet Res* **21**(10): e16321.
 10. Maynard, A. D. and J. Kidd (2018). "Are assumptions of consumer views impeding nano-based water treatment technologies?" *Nature Nanotechnology* **13**(8): 673-674.
 11. Finkel, A. M., et al. (2018). "A "solution-focused" comparative risk assessment of conventional and synthetic biology approaches to control mosquitoes carrying the dengue fever virus." *Environment Systems and Decisions* **38**(2): 177-197.
 12. Maynard, A. D. (2018). "Thinking Differently about Risk." *Astrobiology* **18**(2).
 13. Hansen, S. F., R. Hjørth, L. M. Skjolding, D. M. Bowman, A. Maynard and A. Baun (2017). "A critical analysis of the environmental dossiers from the OECD sponsorship programme for the testing of manufactured nanomaterials." *Environmental Science: Nano*: 4, 282-291.
 14. Maynard, A. D. and R. J. Aitken (2016). "'Safe handling of nanotechnology' ten years on." *Nature Nanotechnology* **11**: 998-1000.
 15. Maynard, A. D., D. M. Bowman and J. G. Hodge Jr (2016). "Mitigating Risks to Pregnant Teens from Zika Virus." *The Journal of Law, Medicine & Ethics* **44**(4): 657-659.
 16. Maynard, A. D. (2016). "Is nanotech failing casual learners?" *Nature Nanotechnology* **11**(9): 734-735.
 17. Lewis, R. C., R. Hauser, A. D. Maynard, R. L. Neitzel, L. Wang, R. Kavet, P. Morey, J. B. Ford, J. D. Meeker and R. Dadd (2016). "Personal Measures Of Power-Frequency Magnetic Field Exposure Among Men From An Infertility Clinic: Distribution, Temporal Variability And Correlation With Their Female Partners' exposure." *Radiation protection dosimetry* **172**(4): 401-408.
 18. Wilding, L. A., C. M. Bassis, K. Walacavage, S. Hashway, P. R. Leroueil, M. Morishita, A. D. Maynard, M. A. Philbert and I. L. Bergin (2016). "Repeated dose (28-day) administration of silver nanoparticles of varied size and coating does not significantly alter the indigenous murine gut microbiome." *Nanotoxicology* **10**(5): 513-520.
 19. Lewis, R. C., R. Hauser, A. D. Maynard, R. L. Neitzel, L. Wang, R. Kavet and J. D. Meeker (2016). "Exposure to Power-Frequency Magnetic Fields and the Risk of Infertility and Adverse Pregnancy Outcomes: Update on the Human Evidence and Recommendations for Future Study Designs." *Journal of Toxicology and Environmental Health - Part B: Critical Reviews* **19**(1): 29-45.
 20. Wilding, L. A., C. M. Bassis, K. Walacavage, S. Hashway, P. R. Leroueil, M. Morishita, A. D. Maynard, M. A. Philbert and I. L. Bergin (2016). "Repeated dose (28-day) administration of silver nanoparticles of varied size and coating does not significantly alter the indigenous murine gut microbiome." *Nanotoxicology* **10**(5): 513-520.
 21. Maynard, A. D. (2016). "Are we ready for spray-on carbon nanotubes?" *Nature Nanotechnology* **11**: 490-491.
 22. Ault, A. P., D. I. Stark, J. L. Axson, J. N. Keeney, A. D. Maynard, I. L. Bergin and M. A. Philbert (2016). "Protein corona-induced modification of silver nanoparticle aggregation in simulated gastric fluid." *Environmental Science: Nano* **3**(6): 1510-1520.
 23. Maynard, A. D. (2016). "Navigating the risk landscape." *Nature Nanotechnology* **11**(3): 211-212.
 24. Bergin, I. L., L. A. Wilding, M. Morishita, K. Walacavage, A. P. Ault, J. L. Axson, D. I. Stark, S. A. Hashway, S. S. Capracotta, P. R. Leroueil, A. D. Maynard and M. A. Philbert (2016). "Effects of particle size and coating on toxicologic parameters, fecal elimination kinetics and tissue distribution of acutely

- ingested silver nanoparticles in a mouse model." *Nanotoxicology* **10**(3): 352-360.
25. Maynard, A. D. (2015). "Navigating the fourth industrial revolution." *Nature Nanotechnology* **10**: 1005–1006.
 26. Maynard, A. D. (2015). "Why we need risk innovation." *Nature Nanotechnology* **10**: 730-731.
 27. Axson, J. L., D. I. Stark, A. L. Bondy, S. S. Capracotta, A. D. Maynard, M. A. Philbert, I. L. Bergin and A. P. Ault (2015). "Rapid Kinetics of Size and pH-Dependent Dissolution and Aggregation of Silver Nanoparticles in Simulated Gastric Fluid." *Journal of Physical Chemistry C* **119**(35): 20632-20641.
 28. Maynard, A. D. (2015). "Learning from the past" *Nature Nanotechnology* **10**: 482-483
 29. Maynard, A. D. (2015). "Responsible Innovation – the (nano) entrepreneur’s dilemma." *Nature Nanotechnology* **10**: 199-200.
 30. Harper, S., W. Wohlleben, M. Doa, B. Nowack, S. Clancy, R. Canady and A. Maynard (2015). "Measuring Nanomaterial Release from Carbon Nanotube Composites: Review of the State of the Science." *J Phys Conf Ser* **617**(1).
 31. Maynard, A. D. (2014). Could we 3D print an artificial mind? *Nature Nanotechnology* **9**(12): 955-956.
 32. Maynard A. D. (2014). Old materials, new challenges? *Nature Nanotechnology* **9**: 658-659
 33. Scherer, L. D., A. Maynard, D. C. Dolinoy, A. Fagerlin and B. Zikmund-Fisher (2014). The psychology of 'regrettable substitutions': examining consumer judgments of Bisphenol A and its alternatives. *Health Risk & Society* **16**(7-8): 649-666.
 34. Maynard A. D. (2014). Is novelty overrated? *Nature Nanotechnology* **9**(3): 409-410.
 35. Hodge, G. A., A. D. Maynard and D. M. Bowman (2014). "Nanotechnology: Rhetoric, risk and regulation." *Science and Public Policy* **41**(1): 1-14.
 36. Maynard A. D. (2014). A decade of uncertainty. *Nature Nanotechnology* **9**(3): 159-160.
 37. Ramachandran, G., J. Howard, A. Maynard and M. Philbert (2012). "Handling Worker and Third-Party Exposures to Nanotherapeutics During Clinical Trials." *Journal of Law Medicine & Ethics* **40**(4): 856-864.
 38. Fatehi, L., S. M. Wolf, J. McCullough, R. Hall, F. Lawrenz, J. P. Kahn, C. Jones, S. A. Campbell, R. S. Dresser, A. G. Erdman, C. L. Haynes, R. A. Hoerr, L. F. Hogle, M. A. Keane, G. Khushf, N. M. P. King, E. Kokkoli, G. Marchant, A. D. Maynard, M. Philbert, G. Ramachandran, R. A. Siegel and S. Wickline (2012). "Recommendations for Nanomedicine Human Subjects Research Oversight: An Evolutionary Approach for an Emerging Field." *Journal of Law Medicine & Ethics* **40**(4): 716-750.
 39. Ramachandran G, Ostraat M, Evans DE, Methner MM, O’Shaughnessy P, D’Arcy J, et al. (2011). A Strategy for Assessing Workplace Exposures to Nanomaterials. *JOEH* **8**(11): 673-685.
 40. Kriegel, C., J. Koehne, S. Tinkle, A. D. Maynard and R. A. Hill (2011). "Challenges of Trainees in a Multidisciplinary Research Program: Nano-Biotechnology." *J. Chemical Edu.* **88**(1): 53-55.
 41. Maynard AD, Warheit D, Philbert MA. (2011). The New Toxicology of Sophisticated Materials: Nanotoxicology and Beyond. *Tox Sci* **120**(Suppl 1): S109-S129.
 42. Maynard AD, Bowman D, Hodge G. (2011). The problem of regulating sophisticated materials. *Nature Mat* **10**: 554-557.
 43. Maynard A. D. (2011). Regulators: Don't define nanomaterials. *Nature* **475**: 31.
 44. Shatkin JA, Abbott LC, Bradley AE, Canady RA, Guidotti T, Kulinowski KM, et al. (2010). Nano Risk Analysis: Advancing the Science for Nanomaterials Risk Management. *Risk Analysis* **30**(11): 1680-1687.
 45. Abbott L.C., Maynard A.D. (2010). Exposure Assessment Approaches for Engineered Nanomaterials. *Risk Analysis* **30**(11): 1634-1644.
 46. Aitken, R. J., P. J. A. Borm, K. Donaldson, G. Ichihara, S. Loft, F. Marano, A. D. Maynard, G. Oberdörster, H. Stamm, V. Stone, L. Tran and H. Wallin (2009). "Nanoparticles: one word: a multiplicity of different hazards." *Nanotoxicology* **3**(4): 263-264.
 47. Heitbrink, W. A., D. E. Evans, B. K. Ku, A. D. Maynard, T. J. Slavin and T. M. Peters (2009). "Relationships Among Particle Number, Surface Area, and Respirable Mass Concentrations in Automotive Engine Manufacturing." *J. Occup. Environ. Hyg.* **6**(1): 19-31.

48. Maynard, A. D. and Rejeski, D. (2009) Too small to overlook. *Nature* 460, July 2009
49. Maynard, A. D. (2009). "Commentary: Oversight of Engineered Nanomaterials in the Workplace." *J Law Med Ethics* 37: 651–658.
50. Park, J. Y., Raynor, P. C., Maynard, A. D., Eberly, L. E. and Ramachandran, G. (2009). Comparison of two estimation methods for surface area concentration using number concentration and mass concentration of combustion-related ultrafine particles *Atm. Environ.* 43:502-509.
51. Maynard, A. D. (2009). "Nanotechnology: Ensuring Success through Safety." *Science & Technology* 3: 66-67.
52. Shvedova, A. A., Kisin, E., Murray, A. R., Johnson, V. J., Gorelik, O., Arepalli, S., Hubbs, A. F., Mercer, R. R., Keohavong, P., Sussman, N., Jin, J., Yin, J., Stone, S., Chen, B. T., Deye, G., Maynard, A., Castranova, V., Baron, P. A. and Kagan, V. E. (2008). Inhalation vs. aspiration of single-walled carbon nanotubes in C57BL/6 mice: inflammation, fibrosis, oxidative stress, and mutagenesis. *Am. J. Physiol.-Lung Cell. Mol. Physiol.* 295:L552-L565.
53. Pui, D. Y. H., C. Qi, N. Stanley, G. Oberdörster and A. Maynard (2008). "Recirculating Air Filtration Significantly Reduces Exposure to Airborne Nanoparticles." *Environ Health Perspect* 16(7): 863-866.
54. Poland, C. A., Duffin, R., Kinloch, I., Maynard, A., Wallace, W. A. H., Seaton, A., Stone, V., Brown, S., MacNee, W. and Donaldson, K. (2008). Carbon nanotubes introduced into the abdominal cavity of mice show asbestos-like pathogenicity in a pilot study. *Nature Nanotechnology* 3:423-428.
55. Hansen, S. F., Maynard, A., Baun, A. and Tickner, J. A. (2008). Late lessons from early warnings for nanotechnology. *Nature Nanotechnology* 3:444-447.
56. Maynard, A. D. and Pui, D. Y. H. (2007). Nanotechnology and occupational health: New technologies – new challenges. *J. Nanopart. Res.* 9:1-3.
57. Maynard, A. D., Ku, B. K., Emery, M., Stolzenburg, M. and McMurry, P. H. (2007). Measuring particle size-dependent physicochemical structure in airborne single walled carbon nanotube agglomerates. *J. Nanopart. Res.* 9:85-92.
58. Maynard, A. D. and Aitken, R. J. (2007). Assessing exposure to airborne nanomaterials: Current abilities and future requirements. *Nanotoxicology* 1:26-41.
59. Maynard, A., D. (2007). Nanotechnology: The next big thing, or much ado about nothing? *Ann. Occup. Hyg.* 51:1-12.
60. Ku, B. K., Maynard, A. D., Baron, P. A. and Deye, G. J. (2007). Observation and measurement of anomalous responses in a differential mobility analyzer caused by ultrafine fibrous carbon aerosols. *J. Electrostatics* 65:542-548.
61. Lubick, N. and A. Maynard (2007). "Spoonful of caution with NANO HYPE." *Environmental Science & Technology* 41(8): 2661-2665.
62. Maynard, A. D. (2007). Nanotoxicology: Laying a firm foundation for sustainable nanotechnologies, in *Nanotoxicology. Characterization, Dosing and Health Effects*, N. Monteiro-Riviere and C. L. Tran, eds., Informa, New York.
63. Maynard, A. D. and Pui, D. Y. H., eds. (2007). *Nanoparticles and Occupational Health*. Springer, Dordrecht, Netherlands.
64. Maynard, A. D. (2007). Nanoparticle Safety - A Perspective from the United States, in *Nanotechnology. Consequences for Human Health and the Environment. Issues in Environmental Science and Technology*, Volume 24, R. E. Hester and R. M. Harrison, eds., The Royal Society of Chemistry, Cambridge, UK.
65. Kandlikar, M., Ramachandran, G., Maynard, A., Murdock, B. and Toscano, W. A. (2007). Health risk assessment for nanoparticles: A case for using expert judgment. *J. Nanopart. Res.* 9:137-156.
66. Balbus, J. M., Maynard, A. D., Colvin, V. L., Castranova, V., Daston, G. P., Denison, R. A., Dreher, K. L., Goering, P. L., Goldberg, A. M., Kulinowski, K. M., Monteiro-Riviere, N. A., Oberdörster, G., Omenn, G. S., Pinkerton, K. E., Ramos, K. S., Rest, K. M., Sass, J. B., Silbergeld, E. K. and Wong, B. A. (2007). Hazard Assessment for Nanoparticles: Report from an Interdisciplinary Workshop. *Environ Health Perspect* 115:1654-1659.

-
67. Ku, B. K., Emery, M. S., Maynard, A. D., Stolzenburg, M. R. and McMurry, P. H. (2006). In situ structure characterization of airborne carbon nanofibres by a tandem mobility-mass analysis. *Nanotechnology* 17:3613-3621.
 68. Wallace, W. E., M. J. Keane, D. K. Murray, W. P. Chisholm, A. D. Maynard and T.-M. Ong (2007). "Phospholipid lung surfactant and nanoparticle surface toxicity: Lessons from diesel soots and silicate dusts." *Journal of Nanoparticle Research* 9(1): 23-38.
 69. Elder, A., R. Gelein, V. Silva, T. Feikert, L. Opanashuk, J. Carter, R. Potter, A. Maynard, J. Finkelstein and G. Oberdorster (2006). "Translocation of inhaled ultrafine manganese oxide particles to the central nervous system." *Environmental Health Perspectives* 114(8): 1172-1178.
 70. Maynard, A. D., R. J. Aitken, T. Butz, V. Colvin, K. Donaldson, G. Oberdörster, M. A. Philbert, J. Ryan, A. Seaton, V. Stone, S. S. Tinkle, L. Tran, N. J. Walker and D. B. Warheit (2006). Safe handling of nanotechnology. *Nature* 444(16): 267-269.
 71. Ku, B. K. and A. D. Maynard (2006). Generation and investigation of airborne silver nanoparticles with specific size and morphology by homogeneous nucleation, coagulation and sintering. *J. Aerosol Sci.* 37(4): 452-470.
 72. Peters, T., W. A. Heitbrink, E. D. E., S. T. J. and A. D. Maynard (2006). The Mapping of Fine and Ultrafine Particle Concentrations in an Engine Machining and Assembly Facility. *Ann. Occup. Hyg.* 50(3): 249-257.
 73. Tsuji, J. S., A. D. Maynard, P. C. Howard, J. T. James, C. W. Lam, D. B. Warheit and A. B. Santamaria (2006). Research strategies for safety evaluation of nanomaterials, part IV: Risk assessment of nanoparticles. *Toxicological Sciences* 89(1): 42-50.
 74. Maynard, A. D. and E. D. Kuempel (2005). Airborne nanostructured particles and occupational health. *J. Nanoparticle Res.* 7: 587-614.
 75. Beamer, B. R., S. Shulman, A. D. Maynard, D. Williams and D. Watkins (2005). "Evaluation of Misting Controls to Reduce Respirable Silica Exposure for Brick Cutting." *Ann. Occup. Hyg.* 49: 503-510.
 76. Andresen, P., Ramachandran, G., Pai, P., Lazovich, D. and Maynard, A. (2004). Women's personal and indoor exposure to PM_{2.5} in Mysore, India: Impact of domestic fuel usage. *Atmos. Environ.* 39:5500-5508.
 77. Jones, A. D., R. J. Aitken, J. F. Fabries, E. Kauffer, G. Liden, A. Maynard, G. Riediger and W. Sahle (2005). Thoracic size-selective sampling of fibres: performance of four types of thoracic sampler in laboratory tests. *Ann. Occup. Hyg.* 49: 481-492.
 78. Ku, B. K. and A. D. Maynard (2005). Comparing aerosol surface-area measurement of monodisperse ultrafine silver agglomerates using mobility analysis, transmission electron microscopy and diffusion charging. *J. Aerosol Sci.* 36(9), 1108-1124.
 79. Oberdörster, G., A. Maynard, K. Donaldson, V. Castranova, J. Fitzpatrick, K. Ausman, J. Carter, B. Karn, W. Kreyling, D. Lai, S. Olin, N. Monteiro-Riviere, D. Warheit and H. Yang (2005). Principles for characterizing the potential human health effects from exposure to nanomaterials: elements of a screening strategy. *Part. Fiber Toxicol.* 2(8): doi:10.1186/1743-8977-2-8.
 80. Shvedova, A. A., E. R. Kisin, R. Mercer, A. R. Murray, V. J. Johnson, A. I. Potapovich, Y. Y. Tyurina, O. Gorelik, S. Arepalli, D. Schwegler-Berry, A. F. Hubbs, J. Antonini, D. E. Evans, B. K. Ku, D. Ramsey, A. Maynard, V. E. Kagan, V. Castranova and P. Baron (2005). Unusual inflammatory and fibrogenic pulmonary responses to single-walled carbon nanotubes in mice. *Am. J. Physiol.-Lung Cell. Mol. Physiol.* 289: 698-708.
 81. Chen, B. T., G. A. Feather, A. D. Maynard and C. Y. Rao (2004). Development Of A Personal Sampler For Collecting Fungal Spores. *J. Aerosol Sci.* 38, 926-937.
 82. Lee, S.-A., S. A. Grinshpun, A. Adhikari, W. Li, R. McKay, A. D. Maynard and T. Reponen (2004). Laboratory and Field Evaluation of a New Personal Set-up for Assessing the Protection of given by the N95 Filtering-Facepiece Respirators Against Particles. *Ann. Occup. Hyg.* 49:245-257.
 83. Maynard, A. D., Y. Ito, I. Arslan, A. T. Zimmer, N. Browning and A. Nicholls (2004). Examining elemental surface enrichment in ultrafine aerosol particles using analytical Scanning Transmission Electron Microscopy. *Aerosol Sci. Tech.* 38, 365-381
-

84. Maynard, A. D., P. A. Baron, M. Foley, A. A. Shvedova, E. R. Kisin and V. Castranova (2004). Exposure to Carbon Nanotube Material. Aerosol Release During the Handling of Unrefined Single Walled Carbon Nanotube Material. *J. Toxicol. Environ. Health* **67**(1), 87-107
85. Pui, D. Y. H., Flagan, R. C., Kaufman, S. L., Maynard, A. D., de la Mora, J. F., Hering, S. V., Jimenez, J. L., Prather, K. A., Wexler, A. S. and Ziemann, P. J. (2004). Experimental methods and instrumentation. *Journal Of Nanoparticle Research* **6**:314-315.
86. Maynard, A. D. and A. T. Zimmer (2003). Development and validation of a simple numerical model for estimating workplace aerosol size distribution evolution through coagulation. *Aerosol Sci. Tech.* **37**, 804-817
87. Maynard, A. D. (2003). Estimating aerosol surface area from number and mass concentration measurements. *Ann. Occup. Hyg.* **47**(2): 123-144.
88. Shvedova, A. A., V. Castranova, E. R. Kisin, A. R. Murray, V. Z. Gandelsman, A. D. Maynard, and P. A. Baron (2003). Exposure to carbon nanotube material: Assessment of nanotube cytotoxicity using human keratinocyte cells. *Journal of Toxicology and Environmental Health-Part a* **66**(20): 1909-1926.
89. Maynard, A. D. (2002). Thoracic size-selection of fibers - dependence of penetration on fiber length for five thoracic sampler types. *Ann. Occup. Hyg.* **46**(6): 511-522.
90. Maynard, A. D. (2002). Experimental determination of ultrafine TiO₂ de-agglomeration in surrogate pulmonary surfactant – preliminary results. *Ann. Occup. Hyg.* **46**(Suppl. 1): 197-202.
91. Maynard, A. D. and R. L. Maynard (2002). A derived association between ambient aerosol surface area and excess mortality using historic time series data. *Atmos. Env.* **36**: 5561-5567.
92. Maynard, A. D. and R. L. Maynard (2002). Ambient aerosol exposure-response as a function of particulate surface-area: re-interpretation of historic data using numerical modeling. *Ann. Occup. Hyg.* **46**(Suppl. 1): 444-449.
93. Maynard, A. D. and A. T. Zimmer (2002). Evaluation of grinding aerosols in terms of alveolar dose: The significance of using mass, surface-area and number metrics. *Ann. Occup. Hyg.* **46**(Suppl. 1): 320-322.
94. Zimmer, A. T. and A. D. Maynard (2002). Investigation of the Aerosols Produced by a High-Speed, Hand-Held Grinder Using Various Substrates. *Ann. Occup. Hyg.* **46**(8): 663-672.
95. Maynard, A. D. (2000). Overview of methods for analysing single ultrafine particles. *Philosophical Transactions of the Royal Society of London Series a-Mathematical Physical and Engineering Sciences* **358**(1775): 2593-2609.
96. Maynard, A. D. (2000). A simple model of axial flow cyclone performance under laminar flow conditions.” *Journal of Aerosol Science* **31**(2): 151-167.
97. Maynard, A. D., J. Thompson, J. Cain and B. Rajan (2000). Air movement visualisation in the workplace - Current methods and new approaches. *Am. Ind. Hyg. Assoc. J.* **61**: 51-55.
98. Brown, L. M., N. Collings, R. M. Harrison, A. D. Maynard and R. L. Maynard (2000). “Ultrafine particles in the atmosphere: introduction.” *Philosophical Transactions of the Royal Society of London Series a-Mathematical Physical and Engineering Sciences* **358**(1775): 2563-2565.
99. Maynard, A. D. (1999). “Measurement of aerosol penetration through six personal thoracic samplers under calm air conditions.” *Journal of Aerosol Science* **30**(9): 1227-1242.
100. Aitken, R. J., P. E. J. Baldwin, G. C. Beaumont, L. C. Kenny and A. D. Maynard (1999). “Aerosol inhalability in low air movement environments.” *Journal of Aerosol Science* **30**(5): 613-626.
101. Kenny, L. C., R. J. Aitken, P. E. J. Baldwin, G. C. Beaumont and A. D. Maynard (1999). “The sampling efficiency of personal inhalable aerosol samplers in low air movement environments.” *Journal of Aerosol Science* **30**(5): 627-638.
102. Baldwin, P. E. J. and A. D. Maynard (1998). “A survey of wind speeds in indoor workplaces.” *Annals of Occupational Hygiene* **42**(5): 303-313.
103. Maynard, A. D., C. Northage, M. Hemingway and S. D. Bradley (1997). “Measurement of short-term exposure to airborne soluble platinum in the platinum industry.” *Annals of Occupational Hygiene* **41**(1): 77-94.

104. Maynard, A. D., R. J. Aitken, L. C. Kenny and P. E. J. Baldwin (1997). "Preliminary investigation of aerosol inhalability at very low wind speeds." *Ann. Occup. Hyg.* **41**(Supplement 1): 695-699.
105. Maynard, A. D. (1996). "Sampling errors associated with sampling plate-like particles using the Higgins- and Dewell-type personal respirable cyclone." *Journal of Aerosol Science* **27**(4): 575-585.
106. Maynard, A. D. (1995). "The Application of Electron-Energy-Loss Spectroscopy to the Analysis of Ultrafine Aerosol-Particles." *Journal of Aerosol Science* **26**(5): 757-777.
107. Maynard, A. D. (1995). "The Development of a New Thermophoretic Precipitator For Scanning-Transmission Electron-Microscope Analysis of Ultrafine Aerosol-Particles." *Aerosol Science and Technology* **23**(4): 521-533.
108. Maynard, A. D. and L. C. Kenny (1995). "Performance assessment of three personal cyclone models, using an aerodynamic particle sizer." *J. Aerosol Sci.* **26**(4): 671-684.
109. McGibbon, A. J., L. M. Brown, A. L. Bleloch, N. D. Browning, F. cadete Santos Aires, P. J. Fallon, P. H. Gaskell, K. W. R. Gilkes, P. L. Hansen, A. Howie, A. D. Maynard, D. W. McComb, D. McMullan, H. Müllejans, Y. Murooka, J. H. Paterson, D. D. perovic, W. T. Pike, I. A. rauf, J. M. Rodenburg, A. Saeed, N. Stelmashenko, K. N. Tu, M. G. Walls, C. A. walsh, J. Yuan and J. Zhao (1993). "Microscopy in Solid State Science." *Microsc. Res. Technique* **24**: 299-315.

BOOKS AND BOOK CHAPTERS

1. Maynard, A. and P. K. Hopke (2022). Introduction to Aerosol Dynamics. Handbook of Indoor Air Quality. Y. Zhang, P. K. Hopke and C. Mandin. Singapore, Springer Nature Singapore: 1-28.
2. Maynard, Andrew (2020) *Future Rising: A Journey from the Past, to the Edge of Tomorrow*. Mango Publishing.
3. Maynard, A. D. and E. Garbee (2019). Responsible innovation in a culture of entrepreneurship: a US perspective. International Handbook on Responsible Innovation. A Global Resource. R. von Schomberg and J. Hankins, Edward Elgar.
4. Maynard, Andrew (2018). *Films from the Future: The Technology and Morality of Sci-Fi Movies*. Mango Publishing.
5. M. Bowman, D., N. D. May and A. D. Maynard (2018). Nanomaterials in Cosmetics: Regulatory Aspects. Analysis of Cosmetic Products (Second Edition). A. Salvador and A. Chisvert, Elsevier: pp 289-302.
6. Maynard, A. D. (2018). Exploring boundaries around the safe use of advanced materials: A prospective product-based case studies approach. Nanotechnology environmental health and safety. Risks, regulations and management. Third Edition. M. Hull and D. Bowman. Netherlands, Elsevier: 427-450.
7. Maynard, A. D. (2017). *Rethinking Risk*. In: *Visions, Venures, Escape Velocities: A collection of Space Futures*. Eds. E. Finn and J. Eschrich. ASU, Tempe.
8. Maynard, A. D. and J. Stilgoe, Eds. (2017). *The Ethics of Nanotechnology, Geoengineering and Clean Technology*. The Library of Essays on the Ethics of Emerging Technologies. London, Routledge.
9. Maynard, A. D. and J. Stilgoe (2017). The Ethics of Noumenal Technologies. In *The Ethics of Nanotechnology, Geoengineering and Clean Technology*. Eds. A. D. Maynard and J. Stilgoe. London, Routledge.
10. Maynard, A. D. (2016). Chapter 1. The Challenge of Nanomaterial Risk Assessment. in Assessing Nanoparticle Risks to Human Health. 2nd Edition. Ed. G. Ramachandran. William Andrew. pp 1-20.
11. Maynard, A. D. (2014). Exploring boundaries around the safe use of advanced materials: A prospective product-based case studies approach. In *Nanotechnology environmental health and safety. Risks, regulations and management. Second Edition*. Eds. M. Hull and D. Bowman. Kidlington, Oxford, William Andrews.
12. Hansen, S. F., A. Maynard, A. Baun, J. A. Tickner and D. M. Bowman (2013). Nanotechnology — early lessons from early warnings. In *Late lessons from early warnings: science, precaution, innovation*, European Environment Agency: 562 - 591.

13. Maynard, A. D., A. Grobe and O. Renn (2012). Responsible innovation, Global Governance, and Emerging Technologies. In *Can Emerging Technologies Make a Difference in Development?* R. A. Parker and R. P. Applebaum. New York, Routledge: 168-187.
14. Volkwein, J. C., A. D. Maynard and M. Harper (2011). Workplace aerosol measurement. In *Aerosol Measurement. Principles, Techniques and Applications. Third Edition*. Eds. P. Kulkarni, P. A. Baron and K. Willeke. Hoboken, NJ, John Wiley & Sons, Inc.: 571-590.
15. Maynard, A. D. (2011). Challenges in Nanoparticle Risk Assessment. In *Assessing Nanoparticle Risks to Human Health*. Ed. G. Ramachandran. Norwich, William Andrew Inc: 1-19.
16. Hodge, G., D. Bowman and A. D. Maynard, Eds. (2010). *International Handbook on Regulating Nanotechnologies*. Cheltenham, England, Edward Elgar.
17. Hodge, G. A., D. M. Bowman and A. D. Maynard (2010). Introduction: The Regulatory Challenges for Nanotechnologies. In *International Handbook on Regulating Nanotechnologies*. Eds. G. A. Hodge, D. M. Bowman and A. D. Maynard. Cheltenham, Edward Elgar.
18. Maynard, A. D., D. M. Bowman and G. A. Hodge (2010). Conclusions: Triggers, gaps, risks and trust. In *International Handbook on Regulating Nanotechnologies*. Eds. G. A. Hodge, D. M. Bowman and A. D. Maynard. Cheltenham, Edward Elgar.
19. Maynard, A. D. (2010). Nanotechnology Environmental Health and Safety: Risks, Regulation and Management Foreword. In *Nanotechnology Environmental Health and Safety: Risks, Regulation and Management*. Eds. M. Hull and D. Bowman. Amsterdam, Elsevier Science Bv: VIII-IX.
20. Poland, C. A., R. Duffin, I. Kinloch, A. Maynard, W. A. H. Wallace, A. Seaton, V. Stone, S. Brown, W. MacNee and K. Donaldson (2009). Multi-wall carbon nanotubes and the asbestos fibre pathogenicity paradigm. In *Inhaled Particles X*. L. Kenny. **151**.
21. Maynard, A. D. (2008). Engineered Nanomaterials. In *Encyclopedia of Quantitative Risk Assessment*. Chichester, John Wiley and Sons Ltd.
22. Maynard, A. D. and D. Y. H. Pui, Eds. (2007). *Nanoparticles and Occupational Health*. Dordrecht, Netherlands, Springer.
23. Maynard, A. D. (2007). Nanotoxicology: Laying a firm foundation for sustainable nanotechnologies. In *Nanotoxicology. Characterization, Dosing and Health Effects*. Eds. N. Monteiro-Riviere and C. L. Tran. New York, Informa: 1-6.
24. Maynard, A. D. (2007). Nanoparticle Safety - A Perspective from the United States. In *Nanotechnology. Consequences for Human Health and the Environment. Issues in Environmental Science and Technology, Volume 24*. Eds. R. E. Hester and R. M. Harrison. Cambridge, UK, The Royal Society of Chemistry.
25. Maynard, A. D. (2007). Nanotechnologies: Overview and issues. In *Nanotechnology - Toxicological issues and environmental safety*. Eds. P. P. Simeonova and M. Luster, Springer: 1-14.
26. Maynard, A. D. and P. A. Baron (2004). Aerosols in the Industrial Environment. In *Aerosols Handbook. Measurement, Dosimetry and Health Effects*. Eds. L. S. Ruzer and N. H. Harley. Boca Raton, CRC Press: 225-264.
27. Brown, L. M., N. Collings, R. M. Harrison, A. D. Maynard and R. L. Maynard, Eds. (2003). *Ultrafine Particles in the Atmosphere*. London, UK, Imperial College Press.
28. Maynard, A. D. (2003). Overview of methods for analysing single ultrafine particles. In *Ultrafine Particles in the Atmosphere*. Eds. L. M. Brown, N. Collings, R. M. Harrison, A. D. Maynard and R. L. Maynard. London, UK, Imperial College Press.
29. Maynard, A. D. and P. A. Jensen (2001). Aerosol Measurement in the Workplace. In *Aerosol Measurement, Principles, Techniques and Applications. Second Edition*. Eds. P. A. Baron and K. Willeke. New York, Wiley Interscience: 779-799.
30. Jones, A. D., R. J. Aitken, L. Armbruster, P. Byrne, J. F. Fabriès, E. Kauffer, G. Lidén, M. Lumens, A. Maynard, G. Riediger and W. Sahle (2001). *Thoracic sampling of fibres*. Norwich, UK, HSE Books.

REPORTS (SELECTED)

1. Maynard, A., C. Corey, A. Greaves, M. Kozar, H. Kwon and M. Scragg (2022). Conducting Socially Responsible and Ethical Counter Operations Research: A Practical Guide for practitioners Arizona State University, Lincoln Laboratory. https://riskinnovation.org/wp-content/uploads/2022/04/Conducting_Ethical_CIO_RD_Final_Jan2022vH001.pdf
2. National Academies of Science (2017). Communicating Science Effectively: A Research Agenda. National Academies Press. <https://www.nap.edu/catalog/23674/communicating-science-effectively-a-research-agenda>
3. National Academies of Science (2013). Research Progress on Environmental, Health, and Safety Aspects of Engineered Nanomaterials. National Academies Press. <https://www.nap.edu/catalog/18475/research-progress-on-environmental-health-and-safety-aspects-of-engineered-nanomaterials>
4. National Academies of Science (2012). A Research Strategy for Environmental, Health, and Safety Aspects of Engineered Nanomaterials. National Academies Press. <https://www.nap.edu/catalog/13347/a-research-strategy-for-environmental-health-and-safety-aspects-of-engineered-nanomaterials>
5. Maynard, A. D. and T. Harper (2011). Building a Sustainable Future: Rethinking the role of technology Innovation in an increasingly interdependent, complex and resource-constrained world. A report from the World Economic Forum Global Agenda Council on Emerging Technologies. Geneva, World Economic Forum.
6. National Academies of Science (2009). Review of the Federal Strategy for Nanotechnology-Related Environmental, Health, and Safety Research. National Academies Press. <https://www.nap.edu/catalog/12559/review-of-the-federal-strategy-for-nanotechnology-related-environmental-health-and-safety-research>
7. Aitken, R. J., S. M. Hankin, B. Ross, C. L. Tran, V. Stone, T. F. Fernandes, K. Donaldson, R. Duffin, Q. Chaudhry, T. A. Wilkins, S. A. Wilkins, L. S. Levy, S. A. Rocks and A. Maynard (2009). EMERGNANO: A review of completed and near completed environment, health and safety research on nanomaterials and nanotechnology. Edinburgh, UK, Institute for Occupational Medicine.
8. Maynard, A. D. (2008). United States House of Representatives Committee on Science & Technology Hearing on: The National Nanotechnology Initiative Amendments Act of 2008. Testimony of: Andrew D. Maynard, Ph.D. Chief Science Advisor, Project on Emerging Nanotechnologies, Woodrow Wilson International Center for Scholars, Washington, DC. April 16 2008. Washington DC, Project on Emerging Nanotechnologies.
9. Maynard, A. D. (2006). Nanotechnology: A research strategy for addressing risk. Washington DC, Woodrow Wilson International Center for Scholars, Project on Emerging Nanotechnologies.
10. Maynard, A. D. (2005). Inventory of Research on the Environmental, Health and Safety Implications of Nanotechnology Washington DC, Woodrow Wilson International Center for Scholars, Project on Emerging Nanotechnologies.
11. Baron, P. A., A. D. Maynard and M. Foley (2003). Evaluation of aerosol release during the handling of unrefined carbon nanotube material. Cincinnati, OH, NIOSH.
12. Kenny, L. C., A. D. Maynard, R. C. Brown, B. Crook, A. Curran and D. J. swan (1999). A scoping study into ultrafine aerosol research and HSL's ability to respond to current and future research needs, health and Safety Laboratory, UK.

COURSES TAUGHT

Pizza and a Slice of Future (FIS 394) 1 Credit Hour Arizona State University School for the Future of Innovation in Society	2023 – Present
Basic Prompt Engineering with ChatGPT: Introduction (FIS 394) 1 Credit Hour Arizona State University School for the Future of Innovation in Society	2023 – Present

Antarctica: The Frozen Continent (FIS 494/HSD 598) 3 Credit Hours (Study Abroad) Arizona State University School for the Future of Innovation in Society	2022
Antarctica: Humans and the Environment (FIS 494/HSD 598) 3 Credit Hours. Arizona State University School for the Future of Innovation in Society	2022
The Moviegoer's Guide to the Future (FIS 394/FIS 338) 3 Credit Hours. Arizona State University School for the Future of Innovation in Society	2018 – Present
Intro to Western Theory & Response (HSD 591) 2 Credit Hours. Co-taught Arizona State University School for the Future of Innovation in Society	2019 – 2020
From Reanimation to Robots: Making Sense of Emerging Technologies OLLI 4-session course Arizona State University Osha Life Long Learning Institute	2019 – 2020
Research & Development Administration (HSD 598) 3 Credit Hours. Co-taught. Arizona State University School for the Future of Innovation in Society	2017
Risk and the Future (FIS 332) 3 Credit Hours Arizona State University School for the Future of Innovation in Society	2016 – 2018
Advanced Science and Technology Policy (HSD 502) 3 Credit Hours Arizona State University School for the Future of Innovation in Society	2015 – 2021
Introduction to Risk Innovation (HSD 598) 3 Credit Hours Arizona State University School for the Future of Innovation in Society	2015 – 2016
Entrepreneurial Ethics 1.5 Credit Hours University of Michigan College of Engineering	2013 – 2015
Principles of Risk Assessment 2 Credit Hours University of Michigan School of Public Health	2011 - 2015
Professional Perspectives in Environmental Health 2 Credit Hours University of Michigan School of Public Health	2011 - 2014
Environmental Health Policy 2 Credit Hours University of Michigan School of Public Health	2012 - 2014
Communicating Science through Social Media 2 Credit Hours University of Michigan School of Public Health	2012 - 2013
Aerosol Dynamics 3 Credit Hours	2002 - 2004

University of Cincinnati, Department of Environmental Health

PHD COMMITTEES

Chris Brandt (chair), ASU. Focus: Military innovation.	Current
Jared Byrne (chair), ASU. Focus: Entrepreneurship training in higher ed.	Current
Kevin Johnson (chair), ASU. Focus: philosophy of love and innovation	Current
Jonathan Klane (chair), ASU. Focus: Narrative and laboratory safety.	Current
Anna Muldoon (co-chair), ASU. Focus: Infectious diseases and conspiracy theories	Current
Chantal Sathi (chair), ASU. Focus: Entrepreneurship and space data usage	Current
Jeishu Wang (chair), ASU. Focus: AI and invention	Current
Jamie Winterton (chair). Focus: Cyber security	Current
Dania Wright (chair), ASU. Focus: Online science communication	Current
Sean Dudley (member), ASU. Focus: Life extension technologies	Current
Amy Pate (member), ASU. Focus: Learning design leadership	Current
Rizwan Virk (member) ASU. Focus: Metaverse	Current
Shivam Zaveri (member) ASU. Aligning Decisions with Mission: Using Socio-Technical Integration for Workers in Industrial Organizations	2023
Nicole Mayberry (co-chair), ASU. Shrouded Cartographies of Subordination: How Science Fiction Stories Build Anti-Black Futures	2022
Kevin Dwyer , ASU. Assessing the Resilience of Dams to Unexpected Events and Emerging Threats	2022
Jason Brown (chair), ASU. Thinking Like a Futurist: Investigating the Theories and Processes of Threatcasting Post-Analysis	2021
Robert Sickler (chair), ASU. The Technology Triad: Reimagining the Relationship Between Technology and Military Innovation	2021
Justin Kidd , ASU. An Interdisciplinary Approach to Identifying the Potential Environmental, Human Health, and Societal Impacts of Engineered Metallic and Carbon Nanomaterials	2020
Changdeok Gim , ASU. Institutional Management for Infrastructure Resilience	2019
Elizabeth Garbee (chair), ASU. The Value of a STEM PhD	2018
Ryan Lewis , University of Michigan. Exposure Science Issues Concerning 60 Hz Magnetic Fields.	2015
Dingsheng Li , University of Michigan,.A Physiologically Based Pharmacokinetic Model Study of the Biological Fate, Transport, and Behavior of Engineered Nanoparticles	2014
Ei-Wen Lo , University of Michigan. A Model to Predict Driver Performance When Interacting with In-Vehicle Speech Interfaces for Destination Entry and Music Selection	2012
Kristen Russ , University of Michigan. Cellular Toxicity of C60 Fullerenes in RAW 264.7 Immortalized Macrophages	2012
Sebastien Bau , INRS, France. Surface area measurement of nanoscale aerosols.	2008
Shu An Lee , University of Cincinnati. Laboratory and field evaluation of N95 respirators using a new method	2004

RESEARCH SUPPORT (Post 2010)

Future of Being Human initiative

Funding: ASU, 2022 - 2027

Role: Director

Direct Costs: \$750,000

Risk Innovation Accelerator

Funding: ASU, 2017 – 2019

Role: Principle Investigator

Direct Costs: \$250,000

Nanosystems Engineering Research Center for Off-Grid Nanotechnology Enabled Water Treatment (NEWT).

Funding: NSF 2015 – 2025

Role: Investigator

Center for Ingredient Safety and Risk Assessment-Risk Communications Subcontract

Funding: Michigan State University 2014 – 2017

Role: Principle Investigator

Direct costs: \$370,149

Designing a "Solution-Focused" Governance Paradigm for SynBio: Case Studies of Improved Risk Assessment and Creative Regulatory Design

Funding: Alfred P Sloan Foundation (via University of Pennsylvania subcontract) 2013 - 2014

Role: Participating Investigator

Direct costs (personal): \$7,964

Seminar series: Information Communication through Data Visualization

Funding: University of Michigan OVPR. 2012 – 2013

Role: Principle Investigator

Direct costs: \$7,500

Workshop: A roadmap for developing and implementing minimum nanomaterial characterization reporting requirements within regulatory and development communities

Funding: NSF CBET-1239092. 2012 – 2013

Role: Principle Investigator

Direct costs: \$29,500

Modulation of immune-GI function by nanoAg. The goal is to better understand the mechanisms by which ingested engineered nanomaterials interact with the GI tract and the microbiome, and impact on further organs and systems.

Funding: NIEHS, U01. 2010 - 2015

Role: Co-Investigator

Direct costs: \$387,276.00

Support for 2011 Risk Science Symposium. 2011

Funding: Sloan Foundation (B2011-23) 2011

Role: Principle Investigator

Direct costs: \$20,000

University of Michigan Risk Science Center

Funding: Private Donation

Role: Director (2010 – 2015)

Direct costs: ~\$5M

INVITED LECTURES AND ADDRESSES - SELECTED

A selection from over 300 invited lectures, talks and presentations:

1. Geography 2050. Invited talk at the 2022 Geography 2050 conference: Past is Prologue: What Soylent Green Got Wrong. (11/17/22)
2. National Science Foundation. Gen-4 workshop invited presentation: How can the Gen-4 ERCs map and engage non-industry stakeholders to secure societal benefit? (5/18/22)
3. Global Futures Laboratory. Hosted panel discussion: The Future in 2022 (4/21/22)
4. Global Futures Laboratory. Hosted four Firestarter Chats as part of the opening of the Rob and Melani Walton Center for Planetary Health (4/18-22/22)
5. American Bar Association Toxic Torts and Environmental Law conference. Invited presentation: Rethinking Risk in a COVID-Normal Future (4/8/22)
6. India Science Festival: Fireside chat on innovation and the future. Virtual (1/12/22)
7. The Matrix: Public film showing and panel discussion moderated by Andrew Maynard, at the Majestic Cinema, Tempe (12/10/21)
8. El Paso Space Festival: Nerd Night showing of Contact, with introduction and commentary by Andrew Maynard. (9/22/21)
9. National Academies of Science and Los Alamos National Laboratory Harnessing Transformational Technologies Symposia Series: AI and the Art of Manipulation – How We Need to Think Differently About AI as We Develop Socially Responsible Applications (7/20/21)
10. ATP Bio invited lecture (University of Minnesota): Creating Value in a Complex World (6/29/21)
11. 2021 FRANKx Lecture, ASU: Bounded Infinities, Quantum Tunneling, and the Future of Education (3/19/21)
12. Invited presentation at ISTAS20: Living on the Edge of Tomorrow: A Moviegoer’s Guide to Public Interest Technology (11/12/20)
13. Security and Sustainability Forum, moderator for panel discussion” Prove I Made a Low Carbon Choice – Can smart systems do this? (10/28/20)
14. Invited comments to the National Academies of Science, Engineering and Medicine Committee on Science, Technology, and Law (10/2/20)
15. Arizona MedTech Summit, keynote address: Living on the Edge of Tomorrow: A Moviegoer’s Guide to MedTech? (8/26/20)
16. ANSI Nanotechnology Standards Panel, invited remarks on advanced materials (8/20/20)
17. ILSI NA Annual Meeting: Panel Discussion on Trust in Science (moderator) (7/23/20)
18. Phoenix Arts, Science & Culture Salon (Spirit of the Senses): Future Rising (5/21/20)
19. AZ Tech Council Med Tech Roundtable – presenter (5/19/20)
20. Preparing Future Minority Faculty 2020 Symposium, North Carolina Agricultural and Technical State University: Rethinking the “Pipeline” – Thoughts on Thriving as a STEM PhD (with Elizabeth Garbee) (5/14/20)
21. AME Digital Culture series (ASU): Future Rising: A Journey from the Past to the Edge of Tomorrow (2/27/20)
22. KEEN National Conference: Thin Different: New Tools for Creating Value in an Uncertain World (1/4/20)
23. Arizona Biosecurity Workshop: Innovative ways of thinking about risk in emerging technologies (12/5/19)
24. Phoenix Arts, Science & Culture Salon (Spirit of the Senses): Films from the Future (12/4/19)

25. Waymo: Fireside chat with Governor Doug Ducey (9/19/19)
26. Arizona STEM & Innovation Summit: Pardon my science! (9/17/19)
27. Marsh Digital: Thinking Differently About Risk (7/15/19)
28. ILSI North America: A Moviegoer's Guide to Responsible and beneficial Innovation (6/24/19)
29. Phoenix Fan Fusion: Multiple panels (5/24/19)
30. Governance of Emerging Technology and Science: Films from the Future (5/22/19)
31. CSPO 20th anniversary: Sci-Fi Snug (5/9/19)
32. Film Bar: Introduction to Planet of the Apes (4/25/19)
33. Let's Talk Self-Driving: A Fireside Conversation with Waymo's Tekedra Mawakana (4/11/19)
34. Emerge 2019: Engines of Desire (3/30/19)
35. ASU Law & Society Salon: The Future: Insights from Sci-Fi Films. 1/31/19
36. CES panel *Balancing the speed of innovation and regulation*. Las Vegas 1/9/19
37. Sparks & Honey Daily Briefing—Films from the Future and Cultural Trends. New York City, NY. 12/13/18
38. Films from the Future: What Sci-Fi Movies Can Teach Tech Companies About Socially Responsible Innovation. Tech 2025, Brooklyn NY, 12/13/18
39. Films from the Future: Can science fiction movies really teach us anything about technology innovation? NEXT Conference, San Francisco. 12/5/18
40. The Moviegoer's Guide to the Future. Alamo Draft House Cinema, Tempe AZ. 11/27/18
41. Base Code: How convergent technologies are transforming the future of sustainable materials, and the challenges and opportunities they in turn present. McGill's Sustainability Sciences Initiative Annual Symposium, Montreal, Canada. (10/23/18)
42. Humility is not a four-letter word. ASU Grad College Knowledge Impact Awards Keynote. 4/26/18
43. Risk Innovation: The roles of creativity, imagination, and rigor, in exploring future pathways around existential risk. Cambridge Conference on Existential Risk, Cambridge UK, 4/18/18
44. Presentation to a meeting of the National Academies of Science Board of Lifesciences Annual Meeting, on risk, 11/30/17
45. Workshop leader, workshop on agile governance at the World Economic Forum Annual Meeting of the Global Future Councils, Dubai, 11/9/17
46. Workshop on Agile Governance, World Economic Forum Annual Center for the Fourth Industrial Revolution, 9/25/17
47. Presentation to the National Academies of Science Meeting of Experts: Planetary Protection and Terrestrial Contamination Requirements Associated with Sample Caching and Return. 7/31/17
48. Interdisciplinary Perspectives on Complex Risk Analysis Relevant to Emerging Technologies. Presentation to the National Academies of Science Committee to Review Planetary Protection Policy Development Processes, 6/27/17
49. Swiss National Science Foundation: Invited keynote on the culmination of the NRP 64 program on Opportunities and Risks of Nanotechnology. 6/2/17
50. Planetary Protection: Assessing the Risks. A Community Conversation. Plenary at the 2017 Astrobiology Science Conference 4/24/17
51. Risk Communication & Talking to the Public About Chemicals. Panel at GlobalChem 2017, 2/24/17
52. Emerging technologies and their applications – a presentation to the United Nations Expert Meeting on Exponential Technological Change, automation, and their policy implications for sustainable development, 12/6/16
53. Innovating for Social and Economic Success. NEWT Science Seminar, 11/28/16
54. The Future of Zika. Event hosted by the School for the Future of Innovation in Society, 11/9/16
55. American Industrial Hygiene Association Fall Conference. Risk Innovation and the Workplace of the Future. 10/25/16

56. Responsible Industry workshop, Berlin: Responsible Research and Innovation^[1]A US Perspective. 6/22/16
57. Future Tense: Engineering Away Disease (panel discussion). 2/23/16
58. AAAS 2016 Annual Meeting. Moderating panel on Public Engagement and Risk Communication: Case Study of Synthetic Biology. 2/11/16
59. World Economic Forum Summit on the Global Agenda. Panel discussion on the Fourth Industrial evolution. 10/26/15. <https://www.youtube.com/watch?v=Oj3a7O-73bY>
60. NanOEH conference, South Africa. Plenary Presentation “Responsible Innovation and Nanotechnology”. 10/18/15
61. Notre Dame University. Invited lecture “Is responsible nanotechnology doomed to failure?” 10/27/14
62. Royal Society of London meeting on bio-nano interactions: new tools, insights and impacts. Invited lecture: “Innovative approaches to emergent risks”. 5/1/14
63. National Academy of Sciences Forum on Synthetic Biology invited presentation: “Innovative approaches to emergent risks” 3/13/14
64. World Economic Forum Annual Meeting of the New Champions, Dalian China. Panelist “Building the 21st century regulatory system” 9/12/13
65. Argentinean Foundation of Nanotechnology. “Thinking critically and imaginatively about the challenges of sophisticated materials” 10/30/12
66. 2012 Arnold Small Lecture, Human Factors and Ergonomics Society Annual Meeting. “From the nanoscale to the human scale: Connecting nanotechnology and human factors” 10/24/12
67. Harvard University. “The new science of sophisticated materials: Nanomaterials and beyond” 4/13/12
68. Swiss National Science Foundation. “The new science of sophisticated materials: Nanomaterials and beyond” 3/3/11
69. World Economic Forum Annual Meeting, Davos. Challenge to the panel. “The science agenda in 2011” 1/26/11
70. Cincinnati Contemporary Arts Center. “Small Gods... and the art of technology innovation” 12/11/10
71. University of Cambridge Center for Research in the Arts, Social Sciences and Humanities (CRAASH). 6/1/10 “Governing emerging technologies under conditions of uncertainty”
72. Johnson & Johnson. “Effective evidence-based communication strategies. Lessons from nanotechnology” 5/19/10
73. Wisconsin Assembly Committee on Public Health. “Nanotechnology. Opportunities and challenges.” 10/6/09
74. Brookings Institution. “Controlling wayward science: Dangers of unanticipated consequences.” 6/19/09
75. Transatlantic Consumer Dialogue. “Nanomaterials and consumer products. A perspective from the US.” 6/10/08
76. International Joint Commission. “Nanotechnology in perspective. New technologies, new challenges?” 3/30/09
77. Oxford University. “Rethinking science and technology innovation for the 21st century: A nanoscale perspective.” 3/12/09
78. Royal Society. Briefing on Synthetic Biology 10/17/08
79. European Aerosol Conference. “Developing Responsible Nanotechnologies. An Aerosol Perspective.” 8/28/08
80. Gothenburg University, Gothenburg, Sweden. “Managing the Small Stuff. Ensuring the success of safe nanotechnologies.” 5/13/08
81. Swedish Academies of Science. “Smart Science. Challenges and opportunities in the race to develop safe nanotechnologies.” 5/12/08
82. New York Academy of Sciences. “Nanotechnology. Science, society and policy.” 5/14/07
83. Nanoscience Centre, University of Cambridge, UK. “Nanotechnology and potential risk. Challenges to measuring exposure to engineered nanomaterials.” 05/05/07
84. Johns Hopkins University. “The science of nanotechnology and public health” 4/10/07

85. Health Effects Institute annual conference. “Nanoparticles from manufacturing.” 4/16/07
86. CalEPA. “Nanotechnology. Maximizing the benefits. Minimizing the risks.” 3/8/07
87. Senior Management at the Hong Kong Department of Labor. “Nanotechnology benefits and challenges.” 2/8/07
88. Rabobank North American Agribusiness Advisory Board. “Nanotechnology. Why should you care?” 1/30/07
89. University of Virginia. Invited comments on the Opening ceremony for Wilsdorf Hall. 11/10/06
90. NATO ARW, Bulgaria. “Nanotechnology: Overview and issues.” 8/13/06
91. The Conference Board. “Nanotechnology. An introduction to the technology, and its EH&S implications.” 06/08/06
92. Warner Lecture, British Occupational Hygiene Society. “Nanotechnology: The next big thing, or much ado about nothing?” 04/25/06
93. Robert and Floretta Austin Distinguished Lecture in Science. University of Idaho, Moscow. “Nanotechnology: The next big thing, or much ado about nothing?” 04/17/06
94. Institute of Occupational Safety and Health (IOSH), Taiwan. “Working at the Nanoscale. Nanotechnology and Potential Occupational Health Risk” 01/05/06
95. Academia Sinica, Taiwan. “Nanotechnology: Environment, Safety and Health.” 01/04/06
96. Asia Nanotechnology Forum. “Assessing the environmental safety and human health risk of emerging nanotechnologies” 12/9/05
97. Australian Institute for Occupational Hygiene. “Engineered Nanomaterials and Occupational Health” 12/4/05
98. Society Of Toxicology. “Engineered Nanomaterials and Occupational Health” 11/2/05
99. NASA. “Nanotechnology: Overview and relevance to Occupational Health” 10/21/05
100. National Academies of Science, Chemical Sciences Round Table. “Nanotechnology: Opportunities and Challenges in a Changing World.” 09/21/05
101. American Industrial Hygiene Association “Nanotechnology: Overview and Relevance to Occupational Health. 09/14/05
102. EPA. “Nanotechnology and Occupational Health.” 6/13/05
103. Korean Society of Toxicology. “Nanotechnology and occupational health – addressing potential health risks.” 5/13/05
104. American Association for the Advancement of Science. “Nanoaerosol exposure. Generating and characterizing airborne nanoparticles.” 2/20/05
105. American Chemistry Council. Nanotechnology and Occupational Health. “Ensuring a safe and healthful workforce in a changing environment.” 10/24/04
106. NIOSH Board of Scientific Councilors. “The NIOSH Nanotechnology Initiative. Ensuring a safe and healthful workforce in a changing environment.” 10/21/04
107. California Department of Health Services”. Perspectives on a ‘small’ problem. Nanotechnology and Occupational Health.” 3/25/04
108. Scandinavian Electron Microscopy Conference. “From Nuisance dusts to Nanoparticles. The Role of Electron Microscopy in Occupational and Environmental Health.” 6/13/03
109. Royal Society. “Overview of methods for analyzing single ultrafine particles.” 3/15/00

CONFERENCE & WORKSHOP LEADERSHIP

Seventh International Symposium on Nanotechnology and Occupational Health
South Africa (2015). Advisor, and member of the International Advisory Board

2015 Michigan Meeting: Academic engagement in public and political discourse
Ann Arbor (2015). Meeting organizing committee

2013 Bernstein Symposium: Why Is It Hard to Pivot Based on Science?

Ann Arbor (2013). Symposium Chair

Sixth International Symposium on Nanotechnology and Occupational Health

Japan (2013). Advisor, and member of the International Advisory Board

2011 Risk Science Symposium: Risk, Uncertainty and Sustainable Innovation

Ann Arbor MI (2011). Symposium Chair

Fifth International Symposium on Nanotechnology and Occupational Health

Boston (2011). Advisor, and member of the International Advisory Board

Fourth International Symposium on Nanotechnology and Occupational Health

Helsinki (2009). Advisor, and member of the International Advisory Board

Third International Symposium on Nanotechnology and Occupational Health

Taiwan (2007). Co-chair

Second International Symposium on Nanotechnology and Occupational Health

Minneapolis, USA (2005). Co-chair

Materials Research Society

Symposium: Nanomaterials and the Environment (2005). Co-chair

First International Symposium: Nanotoxicology: Biomedical Aspects

Miami (2005). Organizing committee

Developing Experimental Approaches for Evaluation of Toxicological Interactions of Nanoscale Materials

Gainesville Florida (2004) Steering Committee member

First International Symposium on Nanotechnology and Occupational Health

Buxton, UK (2004). Co-chair

Emerging Issues in Nanoaerosol Science and Technology

Workshop sponsored by the National Science Foundation and the Environmental Protection Agency (2003).

Panel Member

Royal Society (London)

“Ultrafine Particles in the Atmosphere” (London, 2000). Co-chair

PUBLIC WRITING (SELECTED)

Contributor to:

- [The Washington Post](#)
- [Substack](#)
- [The Conversation](#)
- [Slate Future Tense](#)
- [World Economic Forum Agenda](#)
- [Scientific American](#)
- [Edge of Innovation](#)

Selected articles include:

1. Maynard (2023) “What’s a Luddite? An expert on technology and society explains” [The Conversation](https://theconversation.com/whats-a-luddite-an-expert-on-technology-and-society-explains-203653), <https://theconversation.com/whats-a-luddite-an-expert-on-technology-and-society-explains-203653>
2. Maynard (2022) “Five Robot Movies That Will Make You Cry” [Medium](https://medium.com/edge-of-innovation/five-robot-movies-that-will-make-you-cry-47848fb79ef3), <https://medium.com/edge-of-innovation/five-robot-movies-that-will-make-you-cry-47848fb79ef3>

3. Maynard (2022) “I asked Open AI’s ChatGPT about responsible innovation. This is what I got” Medium <https://medium.com/edge-of-innovation/i-asked-open-ais-chatgpt-about-responsible-innovation-this-is-what-i-got-c0f4bfe14776>
4. Maynard (2022) “56 Stunning AI-Generated Images Inspired By The Future of Being Human” Medium <https://medium.com/edge-of-innovation/56-stunning-ai-generated-images-inspired-by-the-future-of-being-human-6d3ef5cd6674>
5. Maynard (2022) “Why Soylent Green Got 2022 So Wrong” Slate Future Tense. <https://slate.com/technology/2022/08/soylent-green-2022.html>
6. Maynard (2022) ““Jurassic World’ scientists still haven’t learned that just because you can doesn’t mean you should – real-world genetic engineers can learn from the cautionary tale” The Conversation <https://theconversation.com/jurassic-world-scientists-still-havent-learned-that-just-because-you-can-doesnt-mean-you-should-real-world-genetic-engineers-can-learn-from-the-cautionary-tale-184369>
7. Maynard (2022) “Scarlett Johansson’s Amazon Alexa Super Bowl Ad May Be Fun, But It Also Raises Serious Questions” Medium <https://medium.com/edge-of-innovation/scarlett-johanssons-amazon-alexa-super-bowl-ad-may-be-fun-but-it-s-also-scary-cc11d2913707>
8. Maynard (2021) “Artificial intelligence: Friend or foe for building a better future?” Global Futures | Futurecast Volume 1. https://issuu.com/asuoked/docs/asugflfuturecast_fall2021/s/14160187
9. Maynard (2021) “Why we should take Elon Musk’s Tesla Bot seriously” FastCompany <https://www.fastcompany.com/90673676/elon-musk-tesla-bot>
10. Maynard (2020) “10 ways we can build a better relationship with the future” World Economic Forum <https://www.weforum.org/agenda/2020/12/10-ways-we-can-build-a-better-relationship-with-the-future/>
11. Johnson, Bowman, Tournas and Maynard (2019) “We Are Not Ready to Deal With Gene-Edited Athletes” Future Tense <https://slate.com/technology/2019/12/crispr-prime-editing-gene-doping-athletes.html>
12. Maynard (2019) “The Many Ways Elon Musk’s Neuralink Could Go Wrong” OneZero <https://onezero.medium.com/how-to-build-a-better-brain-machine-interface-while-not-falling-at-the-first-hurdle-cc238836a2b7>
13. Maynard (2019) “How to Ensure Our Digital Legacy Isn’t Lost to the Future” OneZero <https://onezero.medium.com/how-to-ensure-our-digital-legacy-isnt-lost-to-the-future-f6a226bc6792>
14. Maynard (2019) “Neuralink’s Technology Is Impressive. Is It Ethical?” OneZero <https://onezero.medium.com/neuralinks-technology-is-impressive-is-it-ethical-812afb38b19e>
15. Maynard (2019) “Ethics Boards Won’t Save Big Tech” OneZero <https://onezero.medium.com/tech-companies-need-an-ethics-reset-4d936a27960e>
16. Lathan and Maynard (2019) “Collaborative Telepresence Could Render Distance (Relatively) Meaningless” Scientific American <https://www.scientificamerican.com/article/collaborative-telepresence-could-render-distance-relatively-meaningless/>
17. Maynard (2019) “The Forgotten Risk of Fitness Trackers” OneZero <https://onezero.medium.com/personal-fitness-tracking-and-the-hidden-risks-of-seductive-technologies-4070bf17897f>
18. Maynard (2018) “The 1995 Anime “Ghost in the Shell” is more relevant than ever in today’s technologically complex society” BoingBoing <http://boingboing.net/2018/11/16/the-1995-anime-ghost-in-the.html>
19. Maynard (2018) “It’s time for tech startups and their funders to take “orphan risks” seriously” LinkedIn. <https://www.linkedin.com/pulse/its-time-tech-startups-funders-take-orphan-risks-andrew-maynard/>
20. Maynard (2018) “The True Cost of Stain-Resistant Pants” Future Tense <https://slate.com/technology/2018/11/man-in-the-white-suit-nanotechnology-science-innovation.html>
21. Maynard (2018) “Sci-Fi Movies Are the Secret Weapon That Could Help Silicon Valley Grow Up” Singularity Hub <https://singularityhub.com/2018/11/17/sci-fi-movies-are-the-secret-weapon-that-could-help-silicon-valley-grow-up/>
22. Finn and Maynard (2018) “How Google Became an Architect of Reality” Slate. <https://slate.com/technology/2018/09/google-manufactures-reality.html>

23. Johnson, Maynard, and Kirshenbaum (2018) “Burgers grown in a lab are heading to your plate. Will you bite?” Washington Post. https://www.washingtonpost.com/national/health-science/burgers-grown-in-a-lab-are-heading-to-your-plate-will-you-bite/2018/09/07/1d048720-b060-11e8-a20b-5f4f84429666_story.html?utm_term=.7bc29683d45f
24. Maynard (2018) “Nanotechnology: sifting the science from what Elon Musk calls ‘BS’” Australian Broadcasting Company. <http://www.abc.net.au/news/2018-05-30/nanotechnology-elon-musk-bs-science-nanometres/9810978>
25. Maynard (2018) “When will the companies behind self-driving cars listen to the public?” Houston Chronicle. <https://www.houstonchronicle.com/local/gray-matters/article/self-driving-cars-need-community-engagement-12770306.php>
26. Maynard (2018) “Hold Off Dyeing Your Hair With Graphene Nanoparticles” Discover Magazine. <http://blogs.discovermagazine.com/crux/2018/03/20/graphene-nanoparticle-hair-dye/>
27. Flegal and Maynard (2017) ‘Geostorm’ movie shows dangers of hacking the climate – we need to talk about real-world geoengineering now. The Conversation US. <https://theconversation.com/geostorm-movie-shows-dangers-of-hacking-the-climate-we-need-to-talk-about-real-world-geoengineering-now-85866> (republished in a number of outlets, including Popular Science)
28. Maynard (2017) Elon Musk’s Sexy Spacesuit Is One Giant Leap for Space Tourism. Fortune. <http://fortune.com/2017/08/24/spacex-spacesuit-elon-musk-design-space/>
29. Maynard (2017) Dear Elon Musk: Your dazzling Mars plan overlooks some big nontechnical hurdles. The Conversation US. <https://theconversation.com/dear-elon-musk-your-dazzling-mars-plan-overlooks-some-big-nontechnical-hurdles-84948> (republished in a number of outlets, including the Chicago Tribune)
30. Szejda and Maynard (2017) Is lead in the US food supply decreasing our IQ? The Conversation US. <https://theconversation.com/is-lead-in-the-us-food-supply-decreasing-our-iq-79481>
31. Garbee and Maynard (2017) In Praise of Self-Driving Cars and Fender-Benders. Slate Future Tense. http://www.slate.com/articles/technology/future_tense/2017/04/fender_benders_tell_us_more_about_self_driving_cars_than_the_trolley_problem.html
32. Stilgoe and Maynard (2017) It’s time for some messy, democratic discussions about the future of AI. The Guardian. <https://www.theguardian.com/science/political-science/2017/feb/01/ai-artificial-intelligence-its-time-for-some-messy-democratic-discussions-about-the-future>
33. Maynard (2016) In a Post-Truth World, how should we communicate about science? US News & World Report (reposted from The Conversation) <http://www.usnews.com/news/national-news/articles/2016-12-13/what-does-research-say-about-how-to-effectively-communicate-about-science>
34. Maynard and Scheufele (2016) What does research say about how to effectively communicate about science? The Conversation US. <https://theconversation.com/what-does-research-say-about-how-to-effectively-communicate-about-science-70244>
35. Maynard (2016). Will driving your own car become the socially unacceptable public health risk smoking is today? The Conversation US. <https://theconversation.com/will-driving-your-own-car-become-the-socially-unacceptable-public-health-risk-smoking-is-today-65891>
36. Maynard, A. D. (2016) Frankenstein foods, nanotech and the trouble with communicating technology. World Economic Forum. <https://www.weforum.org/agenda/2016/10/the-trouble-with-technology-innovation/>
37. Maynard, A. D. (2016) Why I’m Suffering From Nanotechnology Fatigue. Slate Future Tense. http://www.slate.com/articles/technology/future_tense/2016/09/why_i_m_suffering_from_nanotechnology_fatigue.html
38. Maynard, A. D. (2016). Considering ethics now before radically new brain technologies get away from us. The Conversation US. <https://theconversation.com/considering-ethics-now-before-radically-new-brain-technologies-get-away-from-us-65215>
39. Maynard, A. D. (2016). How Risky are These Top 10 Emerging Technologies? Brink. <http://www.brinknews.com/how-risky-are-these-top-10-emerging-technologies/>

40. Maynard, A. D. (2016). It'll take more than tech for Elon Musk to pull off audacious new Tesla master plan. The Conversation US. <https://theconversation.com/itll-take-more-than-tech-for-elon-musk-to-pull-off-audacious-new-tesla-master-plan-62884>
41. Maynard, A. D. (2016) How Terrified Should We Be of This Year's World Economic Forum Top 10 Emerging Technologies? Slate Future Tense. http://www.slate.com/blogs/future_tense/2016/06/27/world_economic_forum_2016_emerging_technologies_imperil_humanity.html
42. Garbee, E. and Maynard, A. D. (2016). The future of personal satellite technology is here – are we ready for it? The Conversation US. <https://theconversation.com/the-future-of-personal-satellite-technology-is-here-are-we-ready-for-it-58478>
43. Maynard, A. D. (2016) What Do You Think About Scientists Creating Human-Nonhuman Hybrids? Slate Future tense. http://www.slate.com/articles/technology/future_tense/2016/08/nih_asks_for_public_input_on_chimeras_human_nonhuman_hybrids.html
44. Maynard, A. D. (2016). There are microscopic needles in your baby's formula. Just how worried should you be? Salon. http://www.salon.com/2016/05/21/there_are_nanoparticles_in_your_babys_formula_just_how_worried_should_you_be_partner/
45. Maynard A. D. (2016). Public universities must do more: the public needs our help and expertise. The Conversation US. <https://theconversation.com/public-universities-must-do-more-the-public-needs-our-help-and-expertise-56016>
46. Maynard, A. D. (2016). Three ways synthetic biology could annihilate Zika and other mosquito-borne diseases. The Conversation US. <https://theconversation.com/three-ways-synthetic-biology-could-annihilate-zika-and-other-mosquito-borne-diseases-54087>
47. Maynard, A. D. (2016). A further reading list on the Fourth Industrial Revolution. World Economic Forum. <https://www.weforum.org/agenda/2016/01/mastering-the-social-side-of-the-fourth-industrial-revolution-an-essential-reading-list/>
48. Maynard, A. D. (2016). Can citizen science empower disenfranchised communities? The Christian science Monitor. <http://www.csmonitor.com/World/Making-a-difference/Change-Agent/2016/0129/Citizen-science-can-empower-communities> (Also in The Conversation)
49. Maynard, A. D. (2016). The fourth industrial revolution: what does WEF's Klaus Schwab leave out? The Conversation US. <https://theconversation.com/the-fourth-industrial-revolution-what-does-wefs-klaus-schwab-leave-out-53049>
50. Maynard, A. D. (2016). Thinking innovatively about the risks of tech innovation. The Conversation US. <https://theconversation.com/thinking-innovatively-about-the-risks-of-tech-innovation-52934>
51. Maynard, A. D. (2015). If Elon Musk is a luddite, count me in! The Conversation US. <https://theconversation.com/if-elon-musk-is-a-luddite-count-me-in-52630>
52. Maynard, A. D. (2015) Are hoverboards bad for you? The Houston Chronicle. <http://www.houstonchronicle.com/local/gray-matters/article/Are-hoverboards-bad-for-you-6723610.php>
53. Maynard, A. D. (2015) What's the real risk from drones this holiday season? The Conversation US. <https://theconversation.com/whats-the-real-risk-from-consumer-drones-this-holiday-season-52330>
54. Maynard, A. D. (2015) Is public engagement really career limiting? Times Higher Education. <https://www.timeshighereducation.com/blog/public-engagement-really-career-limiting>
55. Hoffman, A. J. and Maynard, A. D. (2015) American Universities: Reclaiming our role in society. The Conversation US. <https://theconversation.com/american-universities-reclaiming-our-role-in-society-42522>
56. Maynard, A. D. (2015) Dunkin' Donuts ditches titanium dioxide – but is it actually harmful?. The Conversation US. <https://theconversation.com/dunkin-donuts-ditches-titanium-dioxide-but-is-it-actually-harmful-38627>
57. Maynard, A. D. (2015). Responsible development of new technologies critical in complex, connected

- world. The Conversation US. <https://theconversation.com/responsible-development-of-new-technologies-critical-in-complex-connected-world-38195>
58. Maynard, A. D. (2015). Are quantum dot TVs – and their toxic ingredients – actually better for the environment? The Conversation. <https://theconversation.com/are-quantum-dot-tvs-and-their-toxic-ingredients-actually-better-for-the-environment-35953>
59. Maynard, A. D. (2014). We might be able to 3-D print an artificial mind one day. Slate. http://www.slate.com/blogs/future_tense/2014/12/11/3d_printing_an_artificial_mind_might_be_possible_one_day.html
60. Maynard, A. D. (2014). How Can We Balance the Risks and Rewards of New Technologies? Huffington Post. http://www.huffingtonpost.com/andrew-maynard/how-can-we-balance-the-risks-and-rewards_b_4868729.html
61. Maynard, A. D. (2014). No, Metal Oxides in your food Won't Kill You. The Conversation US. <https://theconversation.com/no-metal-oxide-nanoparticles-in-your-food-wont-kill-you-27545>
62. Maynard, A. D. (2014). Small Packages. A new case study on the health risks of nanotech doesn't tell the whole story: Slate. http://www.slate.com/articles/technology/future_tense/2014/05/nanotechnology_health_risks_why_you_shouldn_t_be_concerned.html
63. Zikmund-Fisher, Scherer and Maynard (2014) What that 'BPA-free' label isn't telling you. The Conversation U. S. <https://theconversation.com/what-that-bpa-free-label-isnt-telling-you-34725>
64. Maynard, A. D. (2008). Living with nanoparticles. Nano Today 3:64.
65. Maynard, A. D. (2008). Setting the nanotech research agenda, in Bulletin of the Atomic Scientists. <http://thebulletin.org/setting-nanotech-research-agenda-0>
66. Maynard, A. D. (2007). Weighing nanotechnology's risks. New York Times. <http://www.nytimes.com/2007/03/28/opinion/28iht-edmaynard.1.5055157.html>
67. Maynard, A. (2006). Nanodollars. New Scientist 189 (2540): 25-25. <https://www.newscientist.com/letter/mg18925400-700-nanodollars/>

ONLINE CONTENT (SELECTED)

Future of Being Human Substack (<https://andrewmaynard.substack.com/>)

Weekly articles on technology, society, and the future of being human

Ten recent articles:

1. Regulating Frontier AI: To Open Source or Not? (July 12, 2023) <https://andrewmaynard.substack.com/p/regulating-frontier-ai-models>
2. What does EU Artificial Intelligence regulation mean for AI in education? (July 10, 2023) <https://andrewmaynard.substack.com/p/eu-ai-act-and-education>
3. Is biological computing the future of AI? (May 30, 2023) <https://andrewmaynard.substack.com/p/organoid-intelligence-ai>
4. Can large language models be used for predictive policing? And if so, should we be worried? (May 22, 2023) <https://andrewmaynard.substack.com/p/can-large-language-models-be-used>
5. Respectfully Erik Schmidt, industry can't get AI governance right on its own! (May 15, 2023) <https://andrewmaynard.substack.com/p/erik-schmidt-ai-regulation>
6. Tipping Points and Broken Symmetries (May 4, 2023) <https://andrewmaynard.substack.com/p/tipping-points-and-broken-symmetries>
7. In Bill Joy's "Why The Future Doesn't Need us" AI is nowhere, and everywhere (April 26, 2023) <https://andrewmaynard.substack.com/p/in-bill-joys-why-the-future-doesnt>
8. Universities need to be investing in responsible AI now more than ever (April 18, 2023)

<https://andrewmaynard.substack.com/p/universities-need-to-be-investing>

9. Navigating Advanced Technology Transitions (April 12, 2023)
<https://andrewmaynard.substack.com/p/navigating-advanced-technology-transitions>
10. What are the alternatives to calling for a pause on giant AI experiments? (April 3, 2023)
<https://andrewmaynard.substack.com/p/what-are-the-alternatives-to-calling>

Risk Bites (<https://www.youtube.com/user/riskbites>)

Risk Bites is a YouTube channel produced by and featuring content created by Andrew Maynard. Risk Bites uses white board videos to explore risk for a broad audience. Launched July 2012.

Analytics as of 7/13/23: Subscribers: 23,700. Views: 4,385,045. Watch Time: 156,000 hours.

Selected videos (limited to 10 out of over 100):

11. Ten AI Dangers You Can't Ignore. (April 3, 2023) https://youtu.be/y_gEw_KDnMI
12. How Effective are Face Masks Against COVID Infection? (August 29, 2022)
<https://youtu.be/9siVaVqUAoM>
13. Five Ethical Challenges of Advanced Brain Computer Interfaces (November 23, 2020)
<https://youtu.be/514agonyu7c>
14. A Practical Guide to Responsible Innovation (October 12, 2020) <https://youtu.be/qFYG9ZnQjHs>
15. The Risks and Ethics of Facial Recognition Technology (June 25, 2020) <https://youtu.be/2SdpzTZTznw>
16. Can sci-fi movies lead to more ethical technologies? (January 20, 2019)
https://www.youtube.com/watch?v=pMuO7zJa5_Q
17. How dangerous is radon to your health? (May 2 2018). <https://www.youtube.com/watch?v=SIRVdKdTBFE>
18. What is the Fourth Industrial Revolution? And why should you care? (Jan 16 2018).
<https://www.youtube.com/watch?v=qhLvhYFLoWE>
19. What is nanotechnology? (July 2016). <https://www.youtube.com/watch?v=DAOFpgocfrg>
20. What are gene drives? A Risk Bites guide (November 2015)
<https://www.youtube.com/watch?v=KgvhUPiDdq8>

Mission: Interplanetary podcast (<https://podcasts.apple.com/us/podcast/mission-interplanetary/id1557978522>)

A podcast co-hosted with former astronaut Cady Coleman, and produced through the ASU Interplanetary Initiative. Series one was hosted by Slate.

Launched April 2021.

Recent episodes:

1. How will we govern the moon? (Nov 15, 2022) <https://podcasts.apple.com/us/podcast/how-will-we-govern-the-moon/id1557978522?i=1000586235889>
2. What are we learning from the JWST? (Nov 8, 2022) <https://podcasts.apple.com/us/podcast/what-are-we-learning-from-the-jwst/id1557978522?i=1000585457362>
3. What is the future of food in space? (Nov 1, 2022) <https://podcasts.apple.com/us/podcast/what-is-the-future-of-food-in-space/id1557978522?i=1000584635756>
4. What can building spaceships teach us about teams? (Oct 18, 2022)
<https://podcasts.apple.com/us/podcast/what-can-building-spaceships-teach-us-about-teams/id1557978522?i=1000582997573>
5. What will we do on the moon? (Oct 11, 2022) <https://podcasts.apple.com/us/podcast/what-will-we-do-on-the-moon/id1557978522?i=1000582254547>
6. What can we do about space debris? (Oct 4, 2022) <https://podcasts.apple.com/us/podcast/what-can-we-do-about-space-debris/id1557978522?i=1000581540359>
7. Are We Done Searching for Intelligent Life? (May 10, 2022) <https://podcasts.apple.com/us/podcast/are-we-done-searching-for-intelligent-life/id1557978522?i=1000560236245>

8. What Will People Do on a Private Space Station? (May 3, 2022) <https://podcasts.apple.com/us/podcast/what-will-people-do-on-a-private-space-station/id1557978522?i=1000559440170>
9. Making Space Accessible Part 2 (April 26, 2022) <https://podcasts.apple.com/us/podcast/making-space-accessible-pt-2/id1557978522?i=1000558714851>
10. Making Space Accessible Part 1 (April 19, 2022) <https://podcasts.apple.com/us/podcast/making-space-accessible-pt-1/id1557978522?i=1000558010513>
11. Mars vs Venus (April 12, 2022) <https://podcasts.apple.com/us/podcast/mars-vs-venus/id1557978522?i=1000557210454>
12. Space and Climate Change (April 5, 2022) <https://podcasts.apple.com/us/podcast/space-and-climate-change/id1557978522?i=1000556279947>
13. The Dangers of a Crewed Mission to Mars (March 29, 2022) <https://podcasts.apple.com/us/podcast/the-dangers-of-a-crewed-mission-to-mars/id1557978522?i=100055561265>
14. Is Space Mining Really Viable? (March 22, 2022) <https://podcasts.apple.com/us/podcast/is-space-mining-really-viable/id1557978522?i=1000554825289>
15. Sharing Space (May 11, 2021) <https://podcasts.apple.com/us/podcast/sharing-space/id1557978522?i=1000521276726>
16. Trash at 17,000 mph (May 4, 2021) <https://podcasts.apple.com/us/podcast/trash-at-17-000-mpg/id1557978522?i=1000520014287>
17. Murder in Space (April 27, 2021) <https://podcasts.apple.com/us/podcast/murder-in-space/id1557978522?i=1000518803810>
18. Closing Time (April 20, 2021) <https://podcasts.apple.com/us/podcast/closing-time/id1557978522?i=1000517873681>
19. No Space for Columbus (April 13, 2021) <https://podcasts.apple.com/us/podcast/no-space-for-columbus/id1557978522?i=1000516925309>
20. Our Mars Fixation (April 6, 2021) <https://podcasts.apple.com/us/podcast/our-mars-fixation/id1557978522?i=1000515961646>
21. A Space of One's Own (March 30, 2021) <https://podcasts.apple.com/us/podcast/a-space-of-ones-own/id1557978522?i=1000514997016>
22. Our Celestial Bodies, Ourselves (March 23, 2021) <https://podcasts.apple.com/us/podcast/our-celestial-bodies-ourselves/id1557978522?i=1000514085254>

Future Rising podcast (<https://podcasts.apple.com/us/podcast/future-rising/id1566786422>)

A podcast based on the book Future Rising: A Journey from the Past to the Edge of Tomorrow.
Launched May 2021.

Ten recent episodes:

1. Intelligence – Part of the “secret sauce” of future-building (June 18, 2021) <https://podcasts.apple.com/us/podcast/intelligence-part-of-the-secret-sauce-of-future-building/id1566786422?i=1000525987973>
2. Knowledge – Fueling Our Understanding (June 21, 2021) <https://podcasts.apple.com/us/podcast/knowledge-fueling-our-understanding/id1566786422?i=1000526249676>
3. Reason – A Window into the Future (June 23, 2021) <https://podcasts.apple.com/us/podcast/reason-a-window-into-the-future/id1566786422?i=1000526590034>
4. Thinking differently about the future (Bonus episode) 9 August 10, 2021) <https://podcasts.apple.com/us/podcast/thinking-differently-about-the-future-bonus-episode/id1566786422?i=1000531574805>
5. Feelings – Transcending mere facts (November 29, 2021) <https://podcasts.apple.com/us/podcast/feelings->

- [transcending-mere-facts/id1566786422?i=1000543342726](https://podcasts.apple.com/us/podcast/transcending-mere-facts/id1566786422?i=1000543342726)
6. Faith – Believing in futures that lie beyond understanding (December 6, 2021) <https://podcasts.apple.com/us/podcast/faith-believing-in-futures-that-lie-beyond-understanding/id1566786422?i=1000544065911>
 7. Imagination – Envisioning alternative futures (December 13, 2021) <https://podcasts.apple.com/us/podcast/imagination-envisioning-alternative-futures/id1566786422?i=1000544782292>
 8. Curiosity – Scratching the Itch of the Unknown (December 20, 2021) <https://podcasts.apple.com/us/podcast/curiosity-scratching-the-itch-of-the-unknown/id1566786422?i=1000545482363>
 9. Creativity – The New Innovation (December 27, 2021) <https://podcasts.apple.com/us/podcast/creativity-the-new-innovation/id1566786422?i=1000546192064>
 10. Art – The Oxygen that Fuels our Creativity (Jan 3, 2022) <https://podcasts.apple.com/us/podcast/art-the-oxygen-that-fuels-our-creativity/id1566786422?i=1000546763855>

Future Out Loud Podcast (<https://soundcloud.com/user-723097380>)

Future Out Loud is a podcast conceived and produced by Heather Ross, and co-hosted by Andrew Maynard. It explores the intersection between science, technology and society.

Launched November 2016.

Recent episodes (selection from over 50 episodes):

1. Estonian Election Security (June 2019) <https://soundcloud.com/user-723097380/estonian-election-security>
2. Elections for the Next Generation (June 2019) <https://soundcloud.com/user-723097380/elections-for-the-next-generation>
3. Ranked Choice Voting (April 2019) <https://soundcloud.com/user-723097380/ranked-choice-voting>
4. Election Security with Maricopa County Recorder Adrian Fontes (April 2019) <https://soundcloud.com/user-723097380/election-security-adrian-fontes>
5. AZ Secretary of State Katie Hobbs (April 2019) <https://soundcloud.com/user-723097380/az-secretary-of-state-katie-hobbs>
6. Elections (April 2019) <https://soundcloud.com/user-723097380/elections>
7. Films from the Future (2018) <https://soundcloud.com/user-723097380/films-from-the-future>
8. Should technology solve humanity's problems? (2018) <https://soundcloud.com/user-723097380/google-ceo>
9. 3D printed guns (2018) <https://soundcloud.com/user-723097380/3d-guns>
10. Global innovation in human rights, with Erica Kochi (May 2018) <https://soundcloud.com/user-723097380/human-rights>
11. How to govern emerging technologies, with Gillian Hadfield (May 2018) <https://soundcloud.com/user-723097380/hadfield>
12. DIY Biohacking, with Todd Kuiken (May 2018) <https://soundcloud.com/user-723097380/diy-biohacking>
13. Autonomous Vehicle Fatality Number 1 (2018) <https://soundcloud.com/user-723097380/av-fatality>
14. Future of Energy Systems (2018) <https://soundcloud.com/user-723097380/future-energy-systems>
15. EpiFinder (2018) <https://soundcloud.com/user-723097380/epifinder>
16. GeneSports (February 2018) <https://soundcloud.com/user-723097380/genesports>
17. Can My Tech Feel Me? (February 2018) <https://soundcloud.com/user-723097380/can-my-tech-feel-me>
18. Sci Fi Grounded in Space (January 2018) <https://soundcloud.com/user-723097380/sci-fi-grounded-in-space>
19. Net Neutrality (January 2018) <https://soundcloud.com/user-723097380/net-neutrality>
20. Greg Benford (December 2017) <https://soundcloud.com/user-723097380/greg-benford>

Edge of Innovation (<https://theconversation.com/columns/andrew-maynard-128048>)

Edge of Innovation was a column written for The Conversation between 2015 – 2016 (when column writers were incorporated into mainstream articles on the website). A full list of articles on The Conversation can be found here: <https://theconversation.com/profiles/andrew-maynard-128048/articles>

Selection of articles (also listed elsewhere in CV):

1. Will driving your own car become the socially unacceptable public health risk smoking is today? (September 2016) <https://theconversation.com/will-driving-your-own-car-become-the-socially-unacceptable-public-health-risk-smoking-is-today-65891>
2. Considering ethics now before radically new brain technologies get away from us (September 2016) <https://theconversation.com/considering-ethics-now-before-radically-new-brain-technologies-get-away-from-us-65215>
3. It'll take more than tech for Elon Musk to pull off audacious new Tesla master plan (July 2016) <https://theconversation.com/itll-take-more-than-tech-for-elon-musk-to-pull-off-audacious-new-tesla-master-plan-62884>
4. How risky are the World Economic Forum's top 10 emerging technologies for 2016? (June 2016) <https://theconversation.com/how-risky-are-the-world-economic-forums-top-10-emerging-technologies-for-2016-61349>
5. Nanoparticles in baby formula: should parents be worried? (May 2016) <https://theconversation.com/nanoparticles-in-baby-formula-should-parents-be-worried-59246>
6. We don't talk much about nanotechnology risks anymore, but that doesn't mean they're gone (March 2016) <https://theconversation.com/we-dont-talk-much-about-nanotechnology-risks-anymore-but-that-doesnt-mean-theyre-gone-56889>
7. Public universities must do more: the public needs our help and expertise (March 2016) <https://theconversation.com/public-universities-must-do-more-the-public-needs-our-help-and-expertise-56016>
8. Three ways synthetic biology could annihilate Zika and other mosquito-borne diseases (February 2016) <https://theconversation.com/three-ways-synthetic-biology-could-annihilate-zika-and-other-mosquito-borne-diseases-54087>
9. Can citizen science empower disenfranchised communities? (January 2016) <https://theconversation.com/can-citizen-science-empower-disenfranchised-communities-53625>
10. The fourth industrial revolution: what does WEF's Klaus Schwab leave out? (January 2016) <https://theconversation.com/the-fourth-industrial-revolution-what-does-wefs-klaus-schwab-leave-out-53049>

Science Showcase (<http://scienceshowcase.org>)

Science Showcase is a YouTube platform that was established by Andrew Maynard. It provides a forum for researchers to showcase highly accessible videos on the “what” and “how” of science, technology and engineering.

Miscellaneous Media

Select online content featuring Andrew Maynard:

1. The Relentless Pursuit Podcast: "Into the Metaverse" - an Interview with Professor Andrew Maynard (November 1, 2022) <https://podcasts.apple.com/us/podcast/into-the-metaverse-an-interview-with/id1514156204?i=1000584740117>
2. Center for Responsible Innovation podcast: RISK INNOVATION and the power of WONDER & AWE in innovation success (October 10, 2022) <https://www.youtube.com/watch?v=go1NDNJ2QBQ>
3. 'Full Self-Driving' clips show owners of Teslas fighting for control, and experts see deep flaws Washington Post. (February 10, 2022) (extensively interviewed and quoted). <https://www.washingtonpost.com/technology/2022/02/10/video-tesla-full-self-driving-beta/>

4. Horizon, Arizona PBS: The metaverse could become a reality in the next few years (December 16, 2021) <https://azpbs.org/horizon/2021/12/metaverse-could-become-a-reality-next-few-years/>
5. KJZZ: 'Future Rising': How Technology Might Stop Humanity From Repeating Past Mistakes (November 23, 2020): <https://kjzz.org/content/1638027/future-rising-how-technology-might-stop-humanity-repeating-past-mistakes>
6. KPCW: A Journey From The Past To The Edge of Tomorrow with Dr. Andrew Maynard (November 19, 2020) <https://www.kpcw.org/post/journey-past-edge-tomorrow-dr-andrew-maynard#stream/0>
7. WAMC: "Future Rising" By Andrew Maynard (October 29, 2020) <https://www.wamc.org/post/future-rising-andrew-maynard>
8. ASU Now: 'Future Rising' looks back to design for the future (October 20, 2020) <https://asunow.asu.edu/20201020-creativity-future-rising-looks-back-design-future>
9. NPR: Precautionary Behavior Around Coronavirus Aligns With Perceived Risk (March 21, 2020) <https://www.npr.org/2020/03/21/819629077/precautionary-behavior-around-coronavirus-aligns-with-perceived-risk>
10. KJZZ: ASU Professor: Some Businesses Struggle To Adapt, Innovate (December 16, 2019) <https://kjzz.org/content/1357611/asu-professor-some-businesses-struggle-adapt-innovate>
11. The Future Will Not Be Podcast podcast: Science Fiction (September 17, 2019) <http://www.thefuturewillnotbepodcast.com/sci-fi>
12. ASU Thought Huddle Podcast: Future Visions, Past Reflections (September 2019) <https://asunow.asu.edu/thought-huddle/future-visions-past-reflections>
13. Tech2025 podcast: Tech News Roundup with Andrew Maynard (August 5, 2019) <https://tech2025.com/2019/08/05/tech-news-roundup-with-andrew-maynard-your-face-is-a-weapon-google-employees-love-berniewarren-new-bill-on-tech-addiction-and-turning-children-into-cyborgs/>
14. This Week in Tech – Andrew Maynard, Films from the Future (August 2, 2019) <https://twit.tv/shows/triangulation/episodes/408>
15. Balancing the speed of innovation and regulation (panel discussion at CES 2019 – February 2019) <https://videos.ces.tech/detail/video/5987711783001/balancing-the-speed-of-innovation-and-regulation>
16. Big Picture Science – Sci-Fi From the Future (January 2019) <http://radio.seti.org/episodes/sci-fi-future>
17. KJZZ – What Science Fiction Can Teach Us About Today's Social Issues (November 2018) <https://kjzz.org/content/731355/what-science-fiction-can-teach-us-about-todays-social-issues>
18. Spark Radio – From precogs to T-rex, sci-fi films teach us about the ethics of new technology (December 2018) <https://www.cbc.ca/radio/spark/from-precogs-to-t-rex-sci-fi-films-teach-us-about-the-ethics-of-new-technology-1.4955887>
19. IEEE Spectrum – Q&A: Can Sci-fi Movies Help Us Avoid Technological Disaster? (November 2018) <https://spectrum.ieee.org/tech-talk/at-work/innovation/can-scifi-movies-help-us-avoid-disaster>
20. ASU/Got a Minute – Andrew Maynard on Fear (September 2018) <https://asunow.asu.edu/content/andrew-maynard-fear>
21. FastCompany – How The World Economic Forum Is Tackling The Dangers Of Big Tech (January 2018) <https://www.fastcompany.com/40518077/how-wef-tackles-dangers-of-big-tech>
22. World Economic Forum – Podcast: The Fourth Industrial Revolution and the future of work (February 2018) <https://www.weforum.org/agenda/2018/02/podcast-work-in-the-4ir/>
23. The State Press – Frankenstein Project is starting conversations about scientific responsibility (October 2017) <http://www.statepress.com/article/2017/10/spscience-frankenstein-is-used-to-start-conversations-about-scientific-responsibility>
24. Salon – The Impossible Burger wouldn't be possible without genetic engineering (September 2017) https://www.salon.com/2017/09/03/the-impossible-burger-would-not-be-possible-without-genetic-engineering_partner-2/
25. ASU Now – ASU prof hosts video contest to bolster science communication (August 2017)

- <https://asunow.asu.edu/20170803-solutions-asu-prof-hosts-video-contest-bolster-science-communication>
26. Space.com – Planetary Protection: Contamination Debate Still Simmers (May 2017)
<https://www.space.com/36708-planetary-protection-astrobiology-nasa-missions.html>
 27. Scientific American – Could "Planetary Protection" Scuttle Otherworldly Exploration? (May 2017)
<https://www.scientificamerican.com/article/could-planetary-protection-scuttle-otherworldly-exploration/>
 28. Express – Nanotechnology among us but regulators aren't doing enough to protect humans, experts warn (March 2017) <https://www.express.co.uk/news/science/776686/nanotechnology-danger-cancer-brain-lungs>
 29. KEDtalks – Risk is not just a four letter word (January 2017) <https://vimeo.com/196890016>
 30. Big Picture Science – Amelia Earhart: Andrew Maynard / Inescapable Uncertainty (January 2017)
<http://blog.bigpicture-science.org/2017/01/big-picture-science-amelia-earhart-andrew-maynard-inescapable-uncertainty/>
 31. Big Picture Science – Skeptic Seth: Andrew Maynard / Fearing Technology (August 2015)
<http://blog.bigpicture-science.org/2015/08/big-picture-science-skeptic-seth-andrew-maynard-fearing-technology/>
 32. Big Picture Science – The Me in Measles: Andrew Maynard / Accurate Data (March 2015)
<http://blog.bigpicture-science.org/2015/03/big-picture-science-the-me-in-measles-andrew-maynard-accurate-data/>
 33. Big Picture Science – Tale of the Distribution: Andrew Maynard / Risk Assessment (October 2014)
<http://blog.bigpicture-science.org/2014/10/big-picture-science-tale-of-the-distribution-andrew-maynard-risk-assessment/>
 34. Michigan Radio – Here's why so few people get flu shots (October 2014)
<https://www.michiganradio.org/post/heres-why-so-few-people-get-flu-shots>
 35. University of Michigan School of Public Health: Think Small (as in Nano Small). (May 2012).
<https://www.youtube.com/watch?v=p77fzbfNyes>
 36. Discovery – Nanotech Risks (April 2009) <https://www.youtube.com/watch?v=qc0KLV8CW08>
 37. Discovery – Nanotech Rewards (April 2009) https://www.youtube.com/watch?v=yYXWHVZU0_g

Interplanetary Community in a Box Project (Medium – <https://medium.com/interplanetary-community-in-a-box-initiative>)

The Interplanetary Community in a Box Project is a multi-author Medium publication with Maynard as Editor-in-Chief, that is designed to kick-start conversations around off-world community building.

Medium (<https://2020science.medium.com/>)

Since 2014 Maynard has published over 100 thought pieces on the platform Medium.

2020 Science (2007 – 2019) (<http://2020science.org>)

2020 Science was a personal blog exploring emerging technologies and responsible innovation. It was archived in 2019 as Maynard focused increasingly on other communication platforms.

Mind the Science Gap (<http://mindthesciencegap.org>)

Mind the Science Gap was launched in 2012 as a unique approach to helping public health graduate students at the University of Michigan hone their science communication skills, and ran until 2014. While active, it had nearly 400 posts, over 4000 comments, and half a million page views.