

## *CURRICULUM VITAE*

### **GARY E. MARCHANT**

Sandra Day O'Connor College of Law  
Arizona State University  
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### **Current Positions**

Professor of Law, Arizona State University College of Law (Associate Professor from Aug. 1999 - July 2003; Professor from July 2003 to present)

Professor of Life Sciences, School of Life Sciences, Arizona State University (July 2004 - present)

Executive Director, Center for the Study of Law, Science and Technology, Arizona State University College of Law (July 2001- present)

Lincoln Professor of Emerging Technologies, Law & Ethics, Arizona State University (July 2005 - present)

### **Courses Taught**

- Environmental Law
- Law, Science and Technology
- Applied Research in Law, Science & Technology
- FDA Regulation of Drugs, Devices & Biologicals
- Nanotechnology Law & Policy
- Biotechnology: Law, Science & Policy
- Genetics and the Law
- Environmental Justice
- Environmental Litigation
- Research Ethics and Law

### **Legal Education**

J.D., magna cum laude, Harvard Law School, 1990 (Class rank 1/540).

Activities: ● Editor-in-Chief, Harvard Journal of Law & Technology  
● Editor, Harvard Environmental Law Review  
● Vice-President, Harvard Law & Technology Society

Awards: ● Harvard Law School Sears Prize, 1988 (awarded to top two students in first year class)  
● Harvard Law School, Fay Diploma, 1990 (awarded to top student in graduating class)

## **Other Education**

Master of Public Policy, John F. Kennedy School of Government, Harvard University, 1990.

Ph.D. (Genetics), Department of Zoology, University of British Columbia, 1986.

B.Sc., University of British Columbia, 1980; Dean's Honor List.

## **Legal Practice**

Kirkland & Ellis, Washington, D.C, Sept. 1990-June 1999, elected Partner in September 1995.

Practice Areas: Environmental, occupational safety & health, and administrative law. Represented clients in cases before the U.S. Supreme Court, the U.S. Court of Appeals for the D.C., First, Second, Fifth and Sixth Circuits, and several federal district courts and state courts. Represented clients in numerous administrative proceedings before the U.S. Environmental Protection Agency, Occupational Safety & Health Administration, Food & Drug Administration, National Toxicology Program, Consumer Product & Safety Commission, National Highway Traffic Safety Administration, and the Federal Trade Commission. Also represented clients in product liability and toxic tort litigation.

## **Activities, Awards and Memberships**

Professor of the Year, Sandra Day O'Connor College of Law, May 2007 (voted by students)

Principal Investigator, "Mechanisms for Transnational Coordination and Harmonization of Nanotechnology Governance," ELSI Grant from Department of Energy Genomes to Life Program, Sept. 2007-August 2009.

Principal Investigator, "Genetic Susceptibility and Environmental Regulation," R01 Grant from the National Human Genome Research Institute and the National Institute of Environmental Health Sciences, May 2003 - February 2005.

Member, National Research Council (National Academy of Sciences) Committee on State Practices in Setting Mobile Source Emission Standards, 2004-2006

Member, National Research Council (National Academy of Sciences) Committee on Applications of Toxicogenomic Technologies to Predictive Technologies, 2005-2007

Law Professor of the Year, 2003, awarded by the Maricopa County Bar Association

Lead Conference/Workshop Organizer – The Law and Ethics of Brain Scanning: The Next Big Thing Coming Soon to a Courtroom Near You?, Phoenix, Arizona, April 13, 2007; Personalized Medicine & Molecular Diagnostics: Legal, Regulatory & Ethical Perspectives, Tempe, AZ, March 2, 2007; Forbidding Science?, Tempe AZ, Jan. 12-13, 2006; Surveillance Technologies, Privacy and the Law, Tempe, AZ, Feb. 17, 2006.

Associate Editor, *Nonlinearity in Biology, Toxicology and Medicine* (CRC Press), (2003-present)

State Bar of Arizona, Executive Council of Environmental & Natural Resources Law Section, Elected Member 2004-2006

Society for Risk Analysis Section on Risk Science and the Law, Chair, 2005-2006

Translational Genomics Research Institute (TGEN), Conflicts of Interest Committee, Member

American Bar Association, Member

Environmental Law Institute, Member

American Association for the Advancement of Science, Member

Society for Risk Analysis, Member

New York Academy of Sciences, Member

Society of Toxicology, Member

Neuroethics Society, Member

American Society of Law, Medicine & Ethics, Member

## **Publications**

### **Books**

National Research Council, *APPLICATIONS OF TOXICOGENOMIC TECHNOLOGIES TO PREDICTIVE TOXICOLOGY AND RISK ASSESSMENT* (National Academy Press, 2007) (member of authoring committee)

National Research Council, *STATE AND FEDERAL STANDARDS FOR MOBILE-SOURCE EMISSIONS* (National Academy Press, 2006) (member of authoring committee)

Gary E. Marchant and Kenneth L. Mossman, *ARBITRARY & CAPRICIOUS: THE PRECAUTIONARY PRINCIPLE IN THE EUROPEAN UNION COURTS* (Washington, D.C.: AEI Press, 2004).

George M. Gray, William G. Jeffrey and Gary E. Marchant, *RISK ASSESSMENT AND RISK MANAGEMENT OF NON-FERROUS METALS: REALIZING THE BENEFITS AND MANAGING THE RISKS* (ICME, 1997).

### **Book Chapters**

Gary E. Marchant, *Toxicogenomics and Environmental Regulation*, in: *ENVIRONMENTAL REGULATION IN THE ERA OF GENOMICS: ETHICAL, LEGAL, AND POLICY PERSPECTIVES* (Baltimore: John Hopkins Press, in press).

Gary E. Marchant, *Setting Air Quality Standards in the Post-Genomic Era*, in: *ENVIRONMENTAL REGULATION IN THE ERA OF GENOMICS: ETHICAL, LEGAL, AND POLICY PERSPECTIVES* (Baltimore: John Hopkins Press, in press).

Andrew Askland and Gary E. Marchant, *Genetic Data and Toxic Torts: Intimations of Statistical Reductionism*, in: ENVIRONMENTAL REGULATION IN THE ERA OF GENOMICS: ETHICAL, LEGAL, AND POLICY PERSPECTIVES (Baltimore: John Hopkins Press, in press).

Gary E. Marchant and Jamie A. Grodsky, *Genomics and Environmental Justice: Some Preliminary Thoughts*, in: ENVIRONMENTAL REGULATION IN THE ERA OF GENOMICS: ETHICAL, LEGAL, AND POLICY PERSPECTIVES (Baltimore: John Hopkins Press, in press).

Gary Marchant, Douglas Sylvester and Kenneth W. Abbott, *Nanotechnology Regulation: The United States Approach*, in: New Global Frontiers of Regulation: The Age of Nanotechnology (eds. G. Hodge, D. Bowman & K. Ludlow). Cheltenham, U.K: Edward Elgar Publishing, 2007).

Gary E. Marchant. 2007. Genomics, Ethics, and Intellectual Property. In Intellectual Property Management in Health and Agricultural Innovation: A Handbook of Best Practices (eds. A Krattiger, RT Mahoney, L Nelsen, et al.). MIHR: Oxford, U.K., and PIPRA: Davis, U.S.A

Gary E. Marchant, *Applications of Biomarkers in Forensics and Toxic Tort Proceedings*, in Anthony DeCaprio (ed.), TOXICOLOGICAL BIOMARKERS, at 273-288 (New York: Taylor & Francis, 2006).

Gary E. Marchant, *Law, Science & Technology*, in: ENCYCLOPEDIA OF SCIENCE, TECHNOLOGY, AND ETHICS (ed. Carl Mitcham). Detroit: Macmillan Reference, 2005.

Gary E. Marchant, *Genetics and the Future of Environmental Policy*, in ENVIRONMENTALISM AND THE TECHNOLOGIES OF TOMORROW (eds. Robert Olsen & David Rejeski) (Washington, D.C.: Island Press 2004).

Gary E. Marchant, *Environmental Legal Liabilities: Prevention and Control*, in ENVIRONMENTAL STRATEGIES HANDBOOK (McGraw Hill, 1994).

Susan Proctor, Gary Marchant & Michael Baram, *Evaluation of Risk Assessment as Evidence for Risk Decision-Making*, in RISK ANALYSIS: PROSPECTS AND OPPORTUNITIES at 655 (ed. C. Zervos, 1991).

Gary Marchant, *Genetic Disease and the Right to Procreate*, in SCIENCE IN SOCIETY: ITS FREEDOM AND REGULATION (1982), pp. 123-137.

### Articles in Academic Journals

Mark A. Rothstein, Yu Cai, and Gary E. Marchant, *Epigenetics: Legal and Ethical Implications* (submitted for publication, March 2007)

Gary E. Marchant et al., *Applications and Findings of an Occupational Exposure Database for Synthetic Vitreous Fibers* (submitted for publication, Dec. 2007)

Gary E. Marchant, *Hormesis and Toxic Torts*, HUMAN & EXPERIMENTAL TOXICOLOGY 27:97-107 (2008).

Gary E. Marchant, *Hormesis and Toxic Torts: Response to Commentaries*, HUMAN & EXPERIMENTAL TOXICOLOGY 27:119-120 (2008).

Gary E. Marchant and Lynda L. Pope, *The Problems with Regulating Scientific Knowledge*, SCIENCE & ENGINEERING ETHICS (in press).

Gary E. Marchant, Douglas S. Sylvester & Kenneth Abbott, *Risk Management Principles for Nanotechnology*, 2 NANOETHICS 43-60 (2008).

Gary E. Marchant, Robert J. Milligan, and Brian Wilhelmi, *Legal Pressures and Incentives for Personalized Medicine*, 3(4) PERSONALIZED MEDICINE 391-397 (Nov. 2006).

Kenneth W. Abbott, Gary E. Marchant and Douglas J. Sylvester, *A Framework Convention for Nanotechnology?*, 36 *Envtl. Law Reporter* 10931-10942 (2006).

Gary E. Marchant, *Genetic Data in Toxic Tort Litigation*, 14 J. LAW & POLICY 7-37 (2006).

Gary E. Marchant & Douglas Sylvester, *Transnational Models for Regulation of Nanotechnology* 34 J. LAW, MEDICINE & ETHICS 714-725 (2006)

Gary E. Marchant, *Property Rights and Benefit-Sharing for DNA Donors?*, 45 JURIMETRICS 153-178 (2005)

Cary Coglianese and Gary E. Marchant, *The EPA's Risky Reasoning*, 27(2) REGULATION 16-23 (Summer 2004)

Cary Coglianese and Gary E. Marchant, *Shifting Sands: The Limits of Science in Setting Risk Standards*, 152 PENN. L. REV. 1255-1360 (2004).

Gary E. Marchant and Andrew Askland, *GM Foods: Potential Public Consultation and Participation Mechanisms*, 44 JURIMETRICS 99-137 (2003).

Gary E. Marchant, *Introduction: Confidence-Building Measures for Genetically Modified Foods*, 44 JURIMETRICS 1-4 (2003).

Gary E. Marchant, *From General Policy to Legal Rule: The Aspirations and Limitations of the Precautionary Principle*, 111 ENVTL. HEALTH PERSPECT. 1799-1803 (2003).

Gary Marchant, *Genomics and Toxic Substances: Part II - Toxicogenetics*, 33 ENVTL. LAW REP. 10641-10667 (2003).

Carol J. Henry, .... Gary Marchant, et al., *Use of Genomics in Toxicology and Epidemiology: Findings and Recommendations of a Workshop*, 110 ENVTL. HEALTH PERSPECT. 1047-1050 (2002)

Gary Marchant, *Genomics and Toxic Substances: Part I - Toxicogenomics*, 33 ENVTL. LAW REP. 10071-10093 (2003)

Gary E. Marchant, *The Genome Cometh*, CHEMISTRY BUSINESS, July/Aug. 2002, at 12-16.

Gary E. Marchant, *Toxicogenomics and Toxic Torts*, 20 TRENDS IN BIOTECH. 329-332 (2002)

Gary Marchant, *Biotechnology and the Precautionary Principle: Right Question, Wrong Answer*, 4 INT. J. BIOTECHNOLOGY 34-45 (2002)

Gary E. Marchant, *Legal Criteria and Judicial Precedents Relevant to Incorporation of Hormesis into Regulatory Decision-Making*, 288 THE SCIENCE OF THE TOTAL ENVIRONMENT 141-153 (2002)

Gary Marchant *et al.*, *A Synthetic Vitreous Fiber (SVF) Occupational Exposure Database: Implementing the SVF Health and Safety Partnership Program*, 17 APPLIED OCCUPATIONAL AND ENVIRONMENTAL HYGIENE 276-285 (2002)

Kenneth L. Mossman & Gary E. Marchant, *The Precautionary Principle and Radiation Protection*, RISK: HEALTH, SAFETY & ENVIRONMENT 137-149 (2002)

Gary Marchant, *Genetics and Toxic Torts*, 31 SETON HALL L. REV. 949-982 (2001).

Edward J. Calabrese and Gary Marchant, *Editorial: Recognizing and Incorporating Health Benefits of Pollutants in Risk Assessment*, 7 HUMAN & ECOL. RISK ASSESS. 639-640 (2001)

Gary E. Marchant, *A Regulatory Precedent for Hormesis*, 20 HUMAN & EXPERIMENTAL TOXICOLOGY 143 (2001)

Gary E. Marchant, *The Precautionary Principle: An 'Unprincipled' Approach to Biotechnology Regulation*, 4 J. OF RISK RESEARCH 143-157 (2001).

Gary E. Marchant, *Book Review: Human Germline Gene Therapy: Scientific, Moral and Political Issues*, 20 POLITICS & LIFE SCIENCES 91-92 (2001)

Gary E. Marchant, *Genetic Susceptibility And Biomarkers in Toxic Injury Litigation*, 41

JURIMETRICS 67-109 (2000).

Michael Baram, Ellen Flannery, Patricia Davis & Gary Marchant, *Symposium: Regulatory and Liability Considerations*, 6 BOSTON U. J. SCI. & TECH. L. 5 (2000)

Gary E. Marchant, *Turning Two Blind Eyes: The EPA's Failure to Consider Costs and Health Disbenefits in Revising the Ozone Standard*, 11 TULANE ENVTL. L.J. 261 (1998).

Edward W. Warren & Gary E. Marchant, *More Good than Harm: A First Principle for Environmental Agencies and Reviewing Courts*, 20 ECOLOGY L. Q. 379 (1993).

Gary E. Marchant, *Freezing CO2 Emissions: An Offset Policy for Slowing Global Warming*, 22 ENVIRONMENTAL LAW 623 (1992).

Gary E. Marchant & Michael Baram, *The Use of Risk Assessment Evidence to Prove Increased Risk and Alternative Causation in Toxic Tort Litigation*, FEDERATION OF INSURANCE & CORPORATE COUNSEL QUART., June 1990, at 95.

Gary E. Marchant & Dawn P. Danzeisen, *'Acceptable' Risk for Hazardous Air Pollutants*, 13 *Harv. Env'tl. L. Rev.* 535 (1989).

Gary E. Marchant, *Modified Rules for Modified Bugs: Balancing Safety and Efficiency in the Regulation of Deliberate Release of Genetically Engineered Microorganisms*, 1 HARV.J. LAW & TECHNOLOGY 163 (1988).

Gary Marchant. & David Holm, *Genetic Analysis of the Heterochromatin of Chromosome 3 in Drosophila melanogaster. I. Products of Compound-Autosome Detachment*, 120 GENETICS 503 (1988).

Gary Marchant & David Holm, *Genetic Analysis of the Heterochromatin of Chromosome 3 in Drosophila melanogaster. II. Vital Loci Identified Through EMS Mutagenesis*, 120 GENETICS 519 (1988).

#### Other Publications

Gary E. Marchant, *Personalized Medicine and the Law*, ARIZONA ATTORNEY, Oct. 2007, pp. 12-20.

Robert Milligan, Gary Marchant, and Brian Wilhelmi, *Pharmacogenomics and Physician Liability*, BIOTECH BRIEFING (ABA), 3(1): 4-8, Fall/Winter 2006/07.

Gary Marchant, *Unprincipled Precaution* (op ed), WALL STREET J. EUROPE, Oct. 13, 2005, at A7.

Gary E. Marchant and Kenneth L. Mossman, *Please Be Careful*, LEGAL TIMES, Aug. 15, 2005

Michael E. Berens & Gary E. Marchant, *Genetic Samples and Genetic Philanthropy*, VIRTUAL MENTOR (American Medical Association), November 2004. [HTTP://www.ama-assn.org/ama/pub/category/13193.html](http://www.ama-assn.org/ama/pub/category/13193.html)

Gary Marchant, *Book Review: Precaution, Environmental Science, and Preventive Public Policy*, 111 ENVTL. HEALTH PERSPECT. A 492 (2003).

Edward W. Warren, Timothy Hardy & Gary E. Marchant, *Appeals Court Ruling Overturning EPA Asbestos Ban: Taking the Rust Off the Toxic Substances Control Act,* CHEM REG. REP. (BNA), July 10, 1992, at 716.

Michael Baram & Gary Marchant, TRANSNATIONAL CORPORATIONS AND INDUSTRIAL HAZARDS DISCLOSURE (United Nations Centre on Transnational Corporations, 1991).

F. William Brownell, Norman Fichthorn & Gary Marchant, *Vinyl Chloride: An Opportunity for Rational Decision Making*, 4 NATURAL RESOURCES & ENVIRONMENT (ABA) 26 (Spring 1989).

## **Presentations**

*Omics and the Precautionary Principle*, International Workshop on Omics for Assessing Unclear Risks, Berlin, Germany, May 28, 2008

*Liability Implications of Genetic Susceptibility Testing*, Health Helix Webcast on How Genomic Medicine Is Changing the Management of Breast & Ovarian Cancer, May 21, 2008.

*Oversight of Nanotechnology and Emerging Technologies*, Workshop on Evaluating Oversight Model for Active Nanostructures and Nanosystems, University of Minnesota, Minneapolis, MN, May 20, 2008

*Emerging Technologies and the Practice of Law*, Snell & Wilmer LLP Annual Meeting, Scottsdale, AZ, May 17, 2008

*The Future of Law and Emerging Technologies*, Presentation to the Arizona Attorney General's Office, Phoenix, AZ, March 6, 2008.

*Project on Nanotechnology Regulation*, Presentation to the 1<sup>st</sup> Annual Conference on Nanotechnology Law, Regulation and Policy, Washington, D.C., Feb. 29, 2008.

*The Law of Neuroscience: Lie Detection*, Presentation to the National Association of Criminal defense Lawyers 2008 Midwinter Meeting, Tucson, AZ, Feb. 22, 2008.

*Technology in the Courtroom*, Presentation to Arizona Federal District Court Annual Conference, Phoenix, AZ, Feb. 8, 2008.

*Nanotechnology Regulation*, Presentation to the conference on Capitalizing on Nanoplastics, San Antonio, TX, Feb. 4, 2008

*Public Health and the Environment*, Panel Discussion at the 2008 Earth, Life, and Social Science Graduate Research Symposium, Tempe, AZ, Jan. 31, 2008

*Radical New Technologies: The Promise and the Concerns*, Series of five 2-hour weekly seminars on Personalized Medicine, Surveillance Technology, Brain Scanning, Nanotechnology and Human Enhancement, ASU President's Community Enrichment Program, Scottsdale, AZ, Jan. 10-Feb. 7, 2008.

*Cost-Benefit Analysis*, George Mason University Law & Economic Center Institute on Science in the Courts, Captiva, FL, Dec. 4, 2007.

*Risk Management Principles for Nanotechnology*, University of Pennsylvania Law School/Wharton School Risk Regulation Seminar Series, Philadelphia, PA, Nov. 27, 2007.

*The Rule and Role of Law in the Global Development of Biotechnology*, Horning Lecture, Oregon State University, Corvallis, OR, Nov. 15, 2007

*The Precautionary Principle: Wrong Answer to the Right Question*, Department of Political Science Seminar, Oregon State University, Corvallis, OR, Nov. 15, 2007.

*The Legal and Ethical Issues Associated with the Collection of Tissue Samples*, Society of Clinical Research Associates Valley of the Sun Chapter Speaker Series, Phoenix, AZ, Oct. 25, 2007.

*Ethics and Emerging Technologies*, ABA Section of Environment, Energy, and Resources 21<sup>st</sup> Annual Petroleum Marketing Roundtable, Scottsdale, AZ, Oct. 10, 2007.

*Emerging Technologies and the Environment*, Center for Responsible Nanotechnology Conference on Challenges & Opportunities: The Future of Nano & Bio Technologies, Tucson, AZ, Sept. 10, 2007.

*Tensions and Challenges in U.S. Nanotechnology Regulation*, European Consortium for Political Research Annual Conference, Pisa, Italy, Sept. 8, 2007.

*Are Your Genes Being Patented?*, Presentation to the Spirit of the Senses Speaker series, Phoenix, AZ, Aug. 2, 2007.

*Biotech in the Courts: Recent Developments*, Presentation to the American Society of Horticultural Science Annual Conference, Scottsdale, AZ, July 16, 2007.

*Ethics, Law and Emerging Technologies*, Chautauqua Institution, New York, June 25, 2007.

*Brain Scanning in the Courts ... The Story So For*, Presentation to Conference on The Law and

Ethics of Brain Scanning: The Next Big Thing Coming Soon to a Courtroom Near You?, Phoenix, Arizona, April 13, 2007.

*Embryonic Stem Cells: Ethical and Legal Issues*, Presentation to A Panel on Stem Cell Research: A Modern Perspective, The Liberty Project, Tempe, AZ, April 3, 2007.

*Liability and Personalized Medicine*, Presentation to Conference on Personalized Medicine & Molecular Diagnostics: Legal, Regulatory & Ethical Perspectives, Tempe, AZ, March 2, 2007

*The Complexity of Risk ... Or Why We Make Such a Mess of Risk Decision-Making*, Presentation to ASU Retirees Day, Tempe, AZ, Feb. 17, 2007

*Asthma Toxicogenomics: Ethical, Legal and Social Issues*, Workshop on Using Toxicogenomic Research to Understand Disease Mechanisms: An Asthma Case Study, National Academy of Sciences, Washington, D.C., Feb. 8, 2007.

*Property Rights for Tissue Donors?*, Presentation to conference on The Tissue Issue: Ethical and Legal Issues in Biorepository Research, Phoenix, Arizona, January 31, 2007

Workshop Participant, Workshop on Ethical Aspects of Nanotechnology, ASU, Tempe, AZ, January 11-12, 2007.

*Legal Pressures for Incorporation of Genetics Into Medical Practice*, Mayo Hospital Family Medicine Grand Rounds, Dec. 14, 2006, Scottsdale, AZ

Workshop Participant, 1<sup>st</sup> International IMBA (Implications of Biomedicine for the Assessment of Human Health Risks) Workshop, Max-Delbruck Center for Molecular Medicine, Berlin, Germany, Oct. 12-13, 2006.

*Nanotechnology and Environmental Regulation*, Quarles & Brady National Environmental Law Practice Group Retreat, Phoenix, AZ, Oct. 20, 2006

*Genetics and Toxic Torts*, Dupont Women Lawyers National Conference, Scottsdale, Arizona, Oct. 19, 2006

*Nanotechnology Regulation: The United States Approach*, Conference on New Global Regulatory Frontiers: Evaluating What Will Work for Nanotechnology, Monash University, Melbourne, Australia, July 17-18, 2006.

*Legal Pressures and Incentives for Personalized Medicine*, Beyond Genome 2006 Conference, San Francisco, CA, June 19, 2006.

Symposium on *Nanotechnology Governance: Environmental Management from a Global Perspective*, Participant and Commentator, Environmental Law Institute and Vanderbilt Center for Environmental Management Studies, Vanderbilt University, Nashville, TN, May 19, 2006

*Legal Ethical and Policy Issues with Biomarkers*, Keystone Symposium on Emerging Genomic Biomarkers: Impact on Drug Discovery and Clinical Practice, Victoria, British Columbia, Canada, May 9, 2006.

*Property Rights and Benefit-Sharing for DNA Tissue Donors*, ABA Biotechnology Law Committee National Biotechnology Roundtable, April 27, 2006.

*Pros and Cons of Cost-Benefit Analysis; Issues in Implementing Cost-Benefit Analysis; and The Precautionary Principle: An Alternative to Cost-Benefit Analysis?*, Institute on Science in the Courts, George Mason University Law & Economics Center, Tucson, AZ, April 26-27, 2006

*The Intersection of Law & Science*, State Bar of Arizona CLE on Scientific Evidence, Phoenix, AZ, April 19, 2006

*Legal, Ethical and Policy Issues with Pharmacogenomics*, TGEN, Phoenix, AZ, April 14, 2006

Moderator, Panel on *Health Care Litigation Reforms as Transformational Tools*, National Symposium on Transforming American HealthCare Over the Next Decade, Phoenix, AZ, March 24, 2006

*Regulatory and Legal Implications of Hormesis*, Society of Toxicology Annual Meeting, San Diego, CA, March 8, 2006

*Aspirations and Limitations of the Precautionary Principle*, Society of Toxicology Annual Meeting, San Diego, CA, March 7, 2006

*Incorporating Genetic Susceptibility Data in Standard-Setting for Air Pollutants*, Society of Toxicology Annual Meeting, San Diego, CA, March 6, 2006

*Global Positioning Systems (GPS), Privacy and the Law*, Conference on Surveillance Technologies, Privacy and the Law, ASU College of Law, Tempe, AZ, Feb. 17, 2006

*Genetics and Criminal Responsibility*, ASU Adventures in Learning Lecture Series, Scottsdale, AZ, Feb. 7, 2006

*Evolution, Creation, and the Law*, MetaNexus Board Presentation, Tempe, AZ, Jan. 22, 2006

*The Problems with the Precautionary Principle*, Washington Health Legislative Conference, Seattle, WA, Dec. 6, 2005.

*Arbitrary and Capricious: The Precautionary Principle in European and Global Lawmaking*, Centre for the New Europe, Brussels, Belgium, Oct. 5, 2005.

*The Precautionary Principle in the European Union Courts*, Institute for Economic Affairs, London, UK, Oct. 4, 2005.

*Genetically Based Toxic Tort Suits*, 9<sup>th</sup> International Conference on Environmental Mutagens, San Francisco, CA, Sept. 4, 2005.

*Toxic Torts: How Genetics Can Shape the Debate Regarding Proximate cause and Damages*, National Association of Women Judges Genome Justice Pilot Project, Phoenix, April 9, 2005.

*Genetics and Toxic Torts*, Sciences for Judges V, Brooklyn Law School, New York, NY, April 1, 2005.

*Transnational Models for Regulating Nanotechnology*, Conference on Nanoethics, University of South Carolina, Columbia SC, March 4, 2005

*Labeling of GM Foods – A “No Brainer” .... Or Not?*, Western Regional Bioethics Conference, Tempe, AZ, Feb. 26, 2005

*Applications of Toxicogenomics to Environmental Regulation*, Workshop on Genomics and Environmental Regulation, ASU College of Law, January 13-14, 2004

*Incorporating Genetic Susceptibility Data Into Air Quality Standards*, Workshop on Genomics and Environmental Regulation, ASU College of Law, January 13-14, 2004

*Risk Analysis: As Others See Us, Plenary Session Respondent*, Society for Risk Analysis Annual Conference, Palm Springs, CA, Dec. 7, 2004.

*Incorporating Genomics into Risk Assessment and Regulation*, Society for Risk Analysis Annual Conference, Palm Springs, CA, Dec. 7, 2004.

*Transnational Regulatory Models for Molecular Nanotechnology*, 1<sup>st</sup> Conference on Advanced Technology, Foresight Institute, Arlington, VA, Oct. 24, 2004

*Legal and Ethical Issues of Genomics*, Spirit of the Senses Lecture, Barrow Neurological Institute, Phoenix, AZ, September 20, 2004

*Genetic Testing: How Will It Impact Your Life in the Next Five Years?*, Gathering for the Great Minds Awesome Hearts Lecture series, Interfaith Community Care, Sun City West, AZ, Sept. 14, 2004

*Regulating Risks from Research on New Technologies*, Harrington Department of Bioengineering Seminar Series, Arizona State University, September 10, 2004.

*Genomics and Environmental Regulation*, presentation to the National Human Genome Research Institute ELSI Genetic Variation Consortium, Rockville, MD, July 12, 2004

*Regulatory Incentives and Impediments to Fuel-Celled Vehicles*, presentation to the Conference on Legal Issues in Developing Hydrogen Technologies, George Washington University Law School, Washington, D.C., June 11, 2004.

*Regulatory Applications and Acceptance of Hormesis*, presentation to the American Industrial Hygiene Conference, Expo 2004, Atlanta, Ga, May 13, 2004

*An Occupational Exposure Database for Synthetic Vitreous Fibers (SVFs)*, Society of Toxicology Annual Meeting, Baltimore, MD, March 22, 2004 (Poster presentation)

*Property Interests of Genetic Research Donors?*, Presentation to the Conference on Human Genetic Sampling: Ethical, Legal, and Social Considerations, ASU College of Law, Tempe, AZ, March 19, 2004.

*The Precautionary Principle*, Presentation to the Capstone course: Issues in Biotechnology, Arizona State University School of Life Sciences, Tempe, AZ, March 9, 2004.

*Genetics and the Law: An Introduction*, 2004 Arizona Federal District Court Conference, Phoenix, AZ, Feb. 7, 2004.

*Contagion, Risk and Fear: Lessons From SARS, Mad Cow Disease, West Nile Virus and Anthrax*, ASU President's Community Enrichment Program, Scottsdale, AZ, Feb. 3, 2004.

*Toxicogenomics: Ethical, Legal and Social Issues*, National Institute of Environmental Health Sciences (NIEHS), Division of Extramural Research and Training (DERT), Science Retreat, Southern Pines, NC, Dec. 4, 2003.

*Risk in the Republic*, Greater Phoenix Humanists Association, Tempe, AZ, Oct. 19, 2003.

*Risk in the Republic*, World Presidents Association, Phoenix, AZ, Oct. 2, 2003.

*Risk as Tort Injury?* and *Genetics and Toxic Torts*, Toxic Torts: A Seminar for Federal Judges and Law Professors, Foundation for Research on Economics and the Environment, Big Sky, Montana, Sept. 9-14, 2003.

*Genetic Susceptibility and Environmental Exposures*, Special Committee on Bioethics, ABA Annual Meeting, San Francisco, CA, August 9, 2003

*How Genomics Will Change Environmental Regulation*, EPA Region 10, Seattle, WA, July 2, 2003

*Hopes and Hypes of the Biomedical Revolution: Genetic Testing*, 9<sup>th</sup> Circuit Judicial Conference, Kaua'i, Hawaii, June 23, 2003

*Human Cloning*, presented at conference on "What Every Lawyer Should Know About Bioethics Law," Arizona State Bar, Phoenix, AZ, April 11, 2003

*Genetics and Toxic Torts*, presented at conference on Issues in Biotechnology and Genetics, co-sponsored by Eccles Institute of Human Genetics and FREE, Salt Lake City, UT, March 27, 2003

*Genomics and Environmental Regulation*, ABA Section of Environment Annual Meeting, Keystone, CO, March 15, 2003.

*Ethical and Legal Dilemmas of Genetic Testing*, Greater Phoenix Humanist Association, March 9, 2003

*The Human Genome and Beyond*, State Capital Global Law Firm Group 2003 Midwinter Meeting, Scottsdale, AZ, March 7, 2003.

*Genetics and Toxic Torts*, Federal Judicial Center, Workshop for Judges of the Ninth Circuit, Santa Barbara, Ca., Jan. 28, 2003.

*Genetic Susceptibility: Regulatory Issues*, Annual Meeting of the Society for Risk Analysis, New Orleans, Dec. 8, 2002

*Potential Public Consultation and Participation Mechanisms*, Conference on Confidence Building Measures for Genetically Modified Foods, ASU College of Law, Tempe, AZ, Dec. 6, 2002

*Genomics and the Law*, presentation to the National Academy of Science's conference entitled "Toxicogenomics: The 'New Biology' Revolution in Environmental Health Sciences," Washington, D.C., Nov. 4, 2002

*Genetics and Toxic Torts*, Maricopa County Superior Court Judicial Education Day, Phoenix, AZ, Nov. 1, 2002

*Ethical and Legal Dilemmas of Genetic Testing*, ASU President's Community Enrichment Program, Scottsdale, AZ, Oct. 29, 2002

*Non-Linear Dose Response: Legal Standards for the Admission of Novel Scientific Theories in Regulatory Decision-Making*, presentation to International Conference on Non-Linear Dose-Response Relationships in Biology, Toxicology and Medicine, University of Massachusetts, Amherst, June 2002

*The Role of the Federal Government in Environmental Regulation*, Presentation to State Bar of Arizona Environmental and Natural Resources Law Section Conference, *Who Are Your Environmental Regulators?*, Phoenix, AZ, May 9, 2002

*Biotechnology and Public Confidence: Legal & Policy Issues*, Presentation to Arizona Bioindustry Cluster, Phoenix, AZ, April 29, 2002

*Genetic Biomarkers in Civil Litigation*, Presentation to the American Bar Association Section of Litigation Annual Meeting, Boston, MA April 26, 2002

*Ten Ways Genomics Could Change Environmental Regulation*, Presentation to the Seton Hall Law School Faculty Colloquium, March 8, 2002

*Ten Ways Genomics Could Change Environmental Regulation*, Presentation to the Wilson Center, Washington, D.C., March 7, 2002

*Ten Ways Genomics Could Change Environmental Regulation*, Presentation to the Environmental Law Institute, Washington, D.C., March 7, 2002

*Some Legal Implications of the Beryllium Lymphocyte Proliferation Test (BLPT)*, Presentation to the Beryllium Lymphocyte Proliferation Test Panel, Menlo Park, CA, Feb. 28, 2002

*Risk in the Republic: The Struggle to Define a Rational Risk Policy*, ASU's President's Community Enrichments Programs, Feb. 5, 2002

*Frankenfoods or Better Foods? The GM Foods Controversy*, Presentation to ASU College of Law Alumni, Yuma, AZ, January 16, 2002.

*Legal Implications of Toxicogenomics for Environmental Regulation and Toxic Torts*, National Institutes of Health/National Institute of Environmental Health Sciences, Symposium on Gene Expression and Proteomics in Environmental Health Research, Dec. 3-4, 2001, Bethesda, MD.

*Legal Aspects of Genetic Testing*, Capstone Course in Biotechnology, Arizona State University, November 19, 2001

*Bioterrorism: The Threat and Legal Consequences*, Arizona State University College of Law, November 15, 2001

*Risk in the Republic*, Presentation to the Motorola Science Advisory Board, Mesa, Az, Sept. 27, 2001.

Presentations on the precautionary principle, cost-benefit analysis, and genetically modified foods, to *Innovations in Environmental Economics & Policy Analysis: A Seminar for Law Professors*, Bozeman, MT, July 10-15, 2001 (Foundation for Research on Economics & the Environment).

*Economics and Environmental Policy*, presentation to Economics 591, ASU, June 11, 2001.

*Institutionalizing Science and Economics in the Regulatory Process*, Commentator at *The Role of Science and Economics in Setting Environmental Standards*, A Kennedy School Policy Workshop, Washington, D.C., May 31, 2001.

*The Precautionary Principle*, presentation to the Goldwater Institute, May 18, 2001, Phoenix, AZ.

*Risk Is a Four-Letter Word*, presentation to the Law Society Dinner, Arizona State University College of Law, Tempe, Az, May 15, 2001

*Genetic Biomarkers and Tort Litigation*, presentation to the National Institute of Environmental Health Sciences, Research Triangle Park, N.C., May 10, 2001.

*Legal Criteria, Obstacles and Precedents for Considering Hormesis in Regulation*, Issues and Applications in Toxicology and Risk Assessment, Conference sponsored by the U.S. Environmental Protection Agency, et al., Dayton, Ohio, April 25, 2001.

*Risk, Uncertainty and the Precautionary Principle*, presentation to the University of Colorado School of Law, Faculty Colloquium, Boulder, Co., April 6, 2001.

*Genetic Biomarkers and Toxic Torts*, presentation to the American Bar Association, Appellate Judges Seminar, Phoenix, AZ, March 20, 2001

*Genetic Biomarkers and Toxic Torts*, presentation to the American Association of Law Schools Annual Meeting, Session on “Genetics and the Courtroom,” San Francisco, Ca, January 5, 2001.

*The Precautionary Principle: The Wrong Answer to the Right Question*, presentation to International Conference on Biotechnology in the Global Economy: Science and the Precautionary Principle, Kennedy School of Government, Harvard University, Sept. 22-23, 2000

*Biotech Materials and Medical Devices in the New Millennium*, The Third Annual Technology Symposium, Boston University School of Law, February 18, 2000

*Legal Rules vs. Scientific Judgment in Risk Assessment*, Society for Risk Analysis Annual Meeting, New Orleans, LA, Dec. 10, 1996