

DR. ANDREW W. TORRANCE

University of Kansas School of Law • 1535 West 15th Street, Lawrence, KS, 66045, USA
(617) 784-8152 • torrance@ku.edu

EDUCATION

- 2000 J.D., Harvard Law School, Cambridge, MA
- 1997 Ph.D. Biology, Harvard University, Cambridge, MA
Dissertation: "Evolution, Phylogeny, Biogeography, and Diversification of the Australasian Hydromyinae (Rodentia: Muridae)"
- 1994 A.M. Biology, Harvard University, Cambridge, MA
- 1991 B.Sc. Biology, Queen's University, Kingston, Ontario

TEACHING

- 2011 Intellectual Property Core, University of Washington School of Law (Co-Taught)
- 2011 Intellectual Property Innovations, University of Washington School of Law (Co-Taught)
- 2011 International Intellectual Property Law, University of Washington School of Law (Guest Lecture)
- 2011 Introduction to Legal Systems & Skills For Intellectual Property Law, University of Washington School of Law (Guest Lecture)
- 2009- Food and Drug Law, University of Kansas School of Law (latest evaluation 4.9/5.0)
- 2007- Biodiversity Law, University of Kansas School of Law (latest evaluation 5.0/5.0)
- 2006- Patent Law, University of Kansas School of Law (latest evaluation 4.8/5.0)
- 2005- Intellectual Property Law, University of Kansas School of Law (latest evaluation 4.8/5.0)
- 1999-2005 Biodiversity: Science, Policy and Law, Harvard University (no numerical evaluations, but class renewed every year based on positive student reviews)
- 2003 Conservation Biology, Harvard University (overall CUE teaching evaluation rating of 5.0/5.0: one of only two perfect CUE evaluation scores at Harvard University in the Spring term.)
- 1994-1996 Biological Diversity (Biology 20), Head Teaching Fellow, Harvard University (CUE teaching awards for all classes taught)
- 1992 Ethology (Biology 22), Teaching Fellow, Harvard University (CUE teaching award)
- 1991,1993,1996 Organismic and Evolutionary Biology (Biosciences 2), Teaching Fellow, Harvard University (CUE teaching awards for all classes taught)

EMPLOYMENT

- 2012 Visiting Scientist, Massachusetts Institute of Technology Sloan School of Management
- 2011 Visiting Professor, University of Washington School of Law
- 2011- Full Professor (With Tenure), University of Kansas School of Law

2005-2011	Associate Professor, University of Kansas School of Law
2005-2006	Consulting Patent Counsel, Inverness Medical Innovations, Inc.
2004-05	Patent Counsel, Inverness Medical Innovations, Inc.
1999-2005	Lecturer (“Tutor”), Department of Organismic and Evolutionary Biology, Harvard University
2003	Hrdy Visiting Professor in Conservation Biology, Harvard University
2003	Lecturer on Environmental Science and Public Policy, Harvard University
2000-04	Associate, Fish and Richardson PC., Boston, MA
1999	Summer Associate. Fish and Richardson P.C., Boston, MA.
1998, 1999	Summer Associate. Morrison and Foerster LLP, Washington DC.
1993-2000	Resident Tutor in Biology and Law, Eliot House, Harvard University
1993	Non-Resident Tutor in Biology, Leverett House, Harvard University

PUBLICATIONS

29. Torrance, Andrew W., 2012, “Will Innovation Thrive Without Patents? – A Natural Experiment in Biotechnology,” *In Harhoff, Dietmar, and Lakhani, Karim (Eds.), FESTSCHRIFT IN HONOR OF ERIC VON HIPPEL*, MIT Press (Invited; Forthcoming).
28. Torrance, Andrew W., 2012, “Nothing Under the Sun that is Made of Man,” *In Kesan, Jay (Ed.), DIAMOND v. CHAKRABARTY AT THIRTY*, Oxford University Press (Invited; Forthcoming).
27. Torrance, Andrew W., 2012, “The Revolution in Regulation of Genetically Modified Organisms,” *Idaho Law Review* (Invited; Forthcoming).
26. Torrance, Andrew W., 2012, “The Future of Design Patent Law,” *Georgia Intellectual Property Law Review* (Invited; Forthcoming).
25. Torrance, Andrew W., and Tomlinson, Bill, 2012, “Property Rules, Liability Rules, and Innovation – One Experimental View of the Cathedral,” *Yale Journal of Law and Technology* (Forthcoming).
24. Torrance, Andrew W., 2011, “DNA Copyright,” *Valparaiso Law Review* (Invited; Forthcoming).
23. Torrance, Wendy E.F., and Torrance, A.W., 2011, "Spinning the Green Web: Transnational Environmentalism," pages 221-235 *in GLOBAL ACTIVISM READER*, Luc Reydam (Editor), The Continuum International Publishing Group (Updated reprint of Torrance, Wendy E.F., and Torrance, A.W., 2006, "Transnational Environmentalism: Spinning the Green Web," *in TRANSNATIONAL CIVIL SOCIETY: AN INTRODUCTION*, Srilatha Batliwala and David Brown (Editors), Kumarian Press).
22. Torrance, Andrew W., 2011, “Family Law and the Genomic Revolution,” *UMKC Law Review*, Winter 2011, Volume 79, Number 2, pages 271-282 (Invited).
21. Torrance, Andrew W., 2010, Book Review: "Human Rights and the WTO: The Case of Patents and Access to Medicines," by Holger Hestermeyer, *The IP Book Law Review*, Vol. 1, No. 1 (June 2010), pp. 46-49 (Invited).
20. Torrance, Andrew W., 2010, “Synthesizing Law for Synthetic Biology,” *Minnesota Journal of Law, Science, & Technology*, Vol. 11(2), pp. 629-665 (Special “Rising Stars Symposium” Issue) (Invited).

19. Torrance, Andrew W., 2010, "Patent Law, HIPPO, and the Biodiversity Crisis," *The John Marshall Review of Intellectual Property Law*, Vol. 9, pp. 624-656 (Special "Green Patents" Issue) (Invited).
18. Torrance, Andrew W., 2009, "Neurobiology and Patenting Thought," *IDEA: The Intellectual Property Law Review*, Vol. 50, Vol. 50, pp. 27-48 (50th Anniversary Issue) (Invited).
17. Torrance, Andrew W., 2009, "Patent Rights and Civil Wrongs: The ACLU Lawsuit," *Bio-IT World*, Vol. 8, pp. 11-13 (July 2009) (Invited).
16. Torrance, Andrew W., 2009. "Gene Concepts, Gene Patents, and Gene Talk," *Minnesota Journal of Law, Science, & Technology*, Vol. 11(1), pp. 157-191.
15. Torrance, Andrew W., 2009, "Physiological Steps Doctrine," *Berkeley Technology Law Journal*, Fall 2008, Vol. 23, Issue 4, pp. 1471-1505.
14. Torrance, A.W., and Tomlinson, W.M., 2009, "Patents and the Regress of Useful Arts," *Columbia Science and Technology Law Review*, Vol. 10, pp. 130-168. (Reviewed in *BusinessWeek* (online), *Forbes* (online), *BNA Patent, Copyright & Trademark Journal*)
13. Torrance, Andrew W., 2009, "Open and Proprietary Biological Innovation in Human Genetic Enhancement," *Washington University Journal of Law and Policy*. Vol. 30, pp. 93-138. (Invited)
12. Torrance, Andrew W., 2008, "Patent Expertise and the Regress of Useful Arts", *Southern Illinois University Law Journal*. Vol. 33, pp. 239-277. (Invited)
11. Torrance, Andrew W., 2008, "Patenting Human Evolution," *Kansas Law Review*, Vol. 56, pp. 1075-1102 (Invited).
10. Torrance, Andrew W. "An Extinction Bar to Patentability". 2008. *Georgetown International Environmental Law Review*, Winter 2008, Volume XX, Issue 2, pages 237-270.
9. Torrance, Andrew W., and McLean, Thomas. "Are the Brookhill-Wilk Patents Impediments to Market Growth in Cybersurgery?". 2008. *International Journal of Medical Robotics and Computer Assisted Surgery*, March 2008, Volume 4, Issue 1, pages 3-9 (Peer Reviewed).
8. Torrance, Andrew W.. "Metaphysics and Patenting Life". 2008. *UMKC Law Review*, Winter 2007, Volume 76, Number 2, pages 363-403. (Invited)
7. Torrance, Andrew W.. 2007. "Intellectual Property as the Third Dimension of GMO Regulation", *The Kansas Journal of Law and Public Policy*, Spring 2007, Volume XVI, Number 3, pages 257-285. (Invited)
6. Torrance, Andrew W. 2007. "Patents to the Rescue – Disasters and Patent Law". *DePaul Journal of Health Care Law*, Volume 10, Number 3, Spring 2007, pages 309-358. (Invited)
5. Torrance, Wendy E.F., and Torrance, A.W.. 2006. "Transnational Environmentalism: Spinning the Green Web", pages 101-123, in *TRANSNATIONAL CIVIL SOCIETY: AN INTRODUCTION*, Srilatha Batliwala and David Brown, eds. Kumarian Press (Invited).
4. Torrance, Andrew W. 2002. "After the Generush". *Bio-IT World* Vol. 1, No. 9, pp. 80-81 (November). (Commissioned article to introduce special section on biotechnology patent law).
3. Torrance, Andrew W. 2001. "The E-Sign Act of 2000". *Technology Law Alert*. Vol. 27, No. 8, pp. 8-10 (April).
2. Torrance, Andrew W.. 2000. "Bioprospecting and the Convention on Biological Diversity". *Harvard Food and Drug Law* (electronic book).

1. "Evolution, Phylogeny, Biogeography, and Diversification of the Australasian Hydromyinae (Rodentia: Muridae)". 1997. Ph.D. Thesis, Biology, Harvard University, Cambridge, MA.

WEB PUBLISHING

- 2010- Founded "LEXVIVO" blog
- 2006- Founded, administer, and moderate the "Biolaw" listserv for professors interested in discussing issues at the intersection of law and biology
- 2006- Co-founded and co-administer the "Biolaw" and "Idealaw" blogs on Jim Chen's "Jurisdynamics" blog network

PRESENTATIONS

2011

November

"Using Social Media for Customer Co-Creation," The 2011 World Conference on Mass Customization, Personalization, and Co-Creation (MCPC 2011): Bridging Mass Customization & Open Innovation, South San Francisco, CA (Invited Panel Moderator)

"User and Collaborative Innovation – Where is the FDA Regulatory Border MIT Innovation Lab," MIT Sloan School of Management, Cambridge, MA (Invited)

Biotechnology Industry Organization Intellectual Property Corporate Counsels Committee Conference, New York City, NY (Participant)

October

"Open and Closed Innovation – Experimental Evidence to Support Open Science and Innovation," Open Science Summit 2011, Computer History Museum, Mountain View, CA (Invited)

"Biolaw 5.0 – Law at the Frontiers of Biology," 5th Annual Biolaw Conference, University of Kansas School of Law, Lawrence, KS (Organizer, Host, and Speaker)

"Property Rules, Liability Rules, and Innovation – One Experimental View of the Cathedral," Presentation to the Faculty, Emory Law School, Atlanta, GA (Invited)

September

"Tempest-Tost – Genomics in the Legal Storm," *Optimizing the Impact of Genomics Research*, Genome Canada, Ottawa, Ontario, Canada (Invited Keynote Address)

"Beauty in the Eye of the Judicial Beholder – The Decline of Attractiveness as a Design Patent Requirement," Canadian Law and Economics Association Annual Conference, University of Toronto Faculty of Law, Toronto, Ontario, Canada (Competitively Selected)

"Biotechnology Patent Law," 2011 Law & Bioscience Conference, Overland Park, KS (Invited)

August

"Beauty in the Eye of the Judicial Beholder – The Decline of Attractiveness as a Design Patent Requirement," Intellectual Property Scholars Conference, DePaul Law School, Chicago, IL (Competitively Selected)

June

MIT Innovation Lab, NASA Johnson Space Center, Houston, TX (Invited Participant)

“Experimental Approaches to Intellectual Property,” Law and Society Annual Conference, San Francisco, CA (Competitively Selected; Panel Organizer and Moderator, Speaker)

May

"Patents and Progress of Useful Arts," Gruter Institute Annual Conference on Innovation and Economic Growth: Exploring the Origins and Effects of Innovative Behavior, Gruter Institute, Squaw Valley, CA (Invited)

"Beauty in the Eye of the Judicial Beholder," Gruter Institute Annual Conference on Law, Institutions, and Human Behavior, Gruter Institute, Squaw Valley, CA (Invited)

“Lions and Tigers and Brains, MRI!,” Gruter Institute Annual Conference on Law, Institutions, and Human Behavior, Gruter Institute, Squaw Valley, CA (Invited)

“Patenting Human Evolution,” Guest lecture in *Evolution and Human Affairs* Honors Program class (Prof. Patricia Hawley), University of Kansas, Lawrence, KS (Invited).

Meeting of the Planning Committee, AALS 2012 Midyear Conference, American Association of Law Schools Headquarters, Washington, D.C. (Invited).

April

Participant, Innovation Policy, Intellectual Property, and Entrepreneurship, Research Roundtable, Searle Center, Northwestern Law School, Chicago, IL (Invited).

“Is Beauty in the Eye of the Judicial Beholder?,” Science on Tap (co-sponsored by the Biodiversity Institute and Free State Brewery), Lawrence, KS (Invited).

Biotechnology Industry Organization Intellectual Property Corporate Counsels Committee Conference, Seattle, WA. (Invited academic attendee).

“Design Beauty in the Eye of the Judicial Beholder,” The Patent Conference, University of Kansas School of Law, Lawrence, KS (Co-host and Co-organizer).

March

“Open Biological Innovation – From Patents to Commons to Copyright to Open Source,” Law Review Symposium on Bioethics, Law, and Synthetic Biology, Valparaiso University School of Law, Valparaiso, IN (Invited).

“Synthetic Biology – Regulation as Food, Drug, Cosmetic, or Device,” PhytoMetaSyn and Synthetic Biology GE3LS Workshop (“Nature Redesigned – PhytoMetaSyn & Synthetic Biology”), Hosted by the University of Calgary Faculty of Law and Funded by Genome Canada, Banff, Alberta, Canada (Invited).

“Innovation and Law – Regulation or Strangulation?,” MIT Innovation Lab, Ford Motor Company, Dearborn, MI (Invited).

February

“The Rise and Fall and Rise of Gene Patents,” Conference on “The Emergence of Personalized Medicine: Legal, Social and Ethical Implications,” Cumberland School of Law, Samford University, Birmingham, AL (Invited).

“Beauty is in the Adaptations of the Judicial Beholder,” Society for the Evolutionary Analysis of Law (SEAL) Annual Conference, Loyola Law School, Los Angeles, CA (Competitively Selected).

"Nothing Under the Sun that is Made of Man," Law and Biosciences (class), Stanford Law School, Palo Alto, CA (Invited).

January

"You've Come a Long Way, Baby! - Genomics, Personalized Medicine, and Reproductive Law," American Association of Law Schools Annual Meeting, San Francisco, CA (Invited).

"Synthetic Biology Meets the Law," American Association of Law Schools Annual Meeting, San Francisco, CA (Moderator).

2010

December

"Anything Under The Sun Except Man," Greater KC Society of Healthcare Attorneys, Kansas City, MO (Invited)

November

Participant, Research Roundtable on Empirical Studies of Patent Litigation, Searle Center on Law, Regulation, and Economic Growth, Northwestern Law School, Chicago, IL (Invited).

"Property Rules, Liability Rules, Patents, and Innovation: One Experimental View of the Cathedral," Conference on Experimental Legal Studies, Yale Law School, New Haven, CT (Competitively selected poster presentation).

Participant, MIT Innovation Lab, MIT Sloan School of Management, Massachusetts Institute of Technology, Cambridge, MA (Invited).

"Biodiversity and Patent Law," NSF Climate Change IGERT Class, University of Kansas, Lawrence, KS (Invited).

October

"The Evolution and Development of Biolaw" and "DNA Copyright", Biolaw 4.0: Law at the Frontiers of Biology, Lawrence, KS. (Host and speaker)

"Open Access and Closed Law", Open Access Week, University of Kansas Libraries, Lawrence, KS. (Invited)

Biotechnology Industry Organization Intellectual Property Corporate Counsels Committee Conference, Boston, MA. (Invited academic attendee)

"Property Rules, Liability Rules, Patents, and Innovation: One Experimental View of the Cathedral," DePaul University School of Law, Chicago, IL. (Invited as a 2010 Edward D. Manzo Scholar in Patent Law)

"The Patent Game", University of Missouri Kansas City School of Law, Kansas City, MO. (Invited)

September

"Property Rules, Liability Rules, Patents, and Innovation: One Experimental View of the Cathedral," Canadian Law and Economics Association Annual Conference, University of Toronto Faculty of Law, Toronto, Ontario, Canada. (Competitively selected)

"Open Biological Innovation – From Patents to Commons to Copyright to Open Source", Berkeley Open Innovation Forum, Berkeley Law School, Berkeley, CA. (Invited)

“Anything Under the Sun Except for Man”, Patenting in the Biotechnology Industry: 30 Years After *Diamond v. Chakrabarty*, University of Illinois at Urbana-Champaign College of Law, Urbana-Champaign, IL. (Invited)

August

“The Patent Game: Experiments in the Cathedral of Law,” Google Tech Talk, Google, Inc., Mountain View, CA. (Invited).

“Property Rules, Liability Rules, Patents, and Innovation: One Experimental View of the Cathedral,” Intellectual Property Scholars Conference, Berkeley Law School, Berkeley, CA. (Competitively selected)

“Property Rules, Liability Rules, Patents, and Innovation: One Experimental View of the Cathedral,” User and Open Innovation Conference, MIT Sloan School of Management, Cambridge, MA. (Competitively Selected)

July

“Double Description”, SEALS Annual Conference, Palm Beach, FL. (Invited)

June

Participant, Research Symposium on the Law and Economics of Internet Search, Searle Center on Law, Regulation, and Economic Growth, Northwestern Law School, Chicago, IL (Invited)

“Myriad Reproductive Options,” When Worlds Collide: Tensions in Family Law, The Midwest Family Law Consortium & North American Regional Meeting of the International Society of Family Law, UMKC School of Law, Kansas City, MO. (Invited)

May

"Opening Innovation in Intellectual Property Law," User and Open Innovation and Intellectual Property Workshop, co-sponsored by Berkeley Law School and the New York University Law School, Saint Helena, Calif. (co-organizer and speaker)

"The Evolution of Biolaw," Gruter Institute Annual Conference on Law, Mind, and Brain, Gruter Institute, Squaw Valley, Calif. (Invited)

Participant, MIT Innovation Lab, MIT Sloan School of Management, Massachusetts Institute of Technology, Google Inc., Mountain View, Calif. (Invited)

April

“Patent Pools: Navigating a Course for Access to Biotechnology Innovations,” Biotechnology Industry Organization Intellectual Property Corporate Counsels Committee Conference, New Orleans, LA. (Invited panelist)

“Having Your Cake and Eating It, Too—Conflicts Between Inherency and Infringement Analyses for Drug Metabolites,” (panel discussion focusing on Torrance, Andrew W., 2009, "Physiological Steps Doctrine," *Berkeley Technology Law Journal*, Fall 2008, Vol. 23, Issue 4, pp. 1471-1505), Biotechnology Industry Organization Intellectual Property Corporate Counsels Committee Conference, New Orleans, LA. (Invited panelist)

“Patent Law, HIPPO, and the Biodiversity Crisis,” Review of Intellectual Property Law “Green Issue” Symposium, John Marshall School of Law, Chicago, IL. (Invited keynote speaker)

“Neurobiology and Patenting Thought,” 11th Annual SEAL Conference, Williamsburg, VA. (Competitively selected)

March

Participant, MIT Innovation Lab, MIT Sloan School of Management, Massachusetts Institute of Technology, Cambridge, MA. (Invited)

Searle-Kauffman Fellows Meeting, Searle-Kauffman Institute on Law, Innovation, and Growth, Chapman University School of Law, Orange, CA. (Competitively selected).

February

Chairman, First Annual Patent Olympics, University of Kansas School of Law, Lawrence, KS.

January

Searle-Kauffman Fellows Meeting, Searle-Kauffman Institute on Law, Innovation, and Growth, Captiva Island, FL. (Competitively selected).

"Intellectual Property and Entrepreneurship," Kauffman Global Scholars Program & Kauffman Global Faculty Program, Kauffman Foundation, Kansas City, MO. (Invited)

"An Extinction Bar to Patentability," Biodiversity Institute, Biodiversity Science Seminar Series, University of Kansas, Lawrence, KS. (Invited)

Moderator and Speaker, "Biology Invading and Transforming Law," American Association of Law Schools (AALS) annual meeting, New Orleans, LA.

2009

November

"Biology as the Future of Law", Biolaw 3.0: Law at the Frontiers of Biology Conference, University of Kansas School of Law, Lawrence, KS. (Host and presenter)

Participant, Research Roundtable on Empirical Studies of Patent Litigation, Searle Center on Law, Regulation, and Economic Growth, Northwestern Law School, Chicago, IL (Invited)

"The Legal Possibilities of Synthetic Biology", MIT Innovation Lab, MIT Sloan School of Management, Massachusetts Institute of Technology, Cambridge, MA. (Invited)

October

"Patents and the Regress of Useful Arts", University of Iowa College of Law, Iowa City, IA. (Invited)

"Patenting People - Human Embryos, Genes, Thought, and Physiology as Intellectual Property", Seventh Annual Intellectual Property Law Scholars Conference, Seton Hall School of Law, Newark, NJ.

Searle-Kauffman Fellows Meeting, Searle-Kauffman Institute on Law, Innovation, and Growth, Searle Center, Northwestern Law School, Chicago, IL. (Competitively selected).

September

"The Patent Game - An Online Interactive Simulation of the Patent System," UMKC School of Law, Kansas City, MO. (Invited guest lecture)

"Patenting People and other Biotechnology Law Conundra," Tennessee Biotechnology Association, Annual Conference, Nashville, TN. (Invited)

August

“Patenting People - Human Embryos, Genes, Thought, and Physiology as Intellectual Property”, Second Annual Innovation and Communication Law Conference, Louisville, KY. (Invited)

“Patenting People - Human Embryos, Genes, Thought, and Physiology as Intellectual Property”, Intellectual Property Scholars Conference, Cardozo Law School, New York City, NY. (Competitively selected)

“Patenting People - Human Embryos, Genes, Thought, and Physiology as Intellectual Property”, SEALS Annual Conference, Palm Beach, FL. (Invited)

June

“Commonalities between Intellectual Property and User, Collaborative, and Open Innovation”, 7th Annual International Open and User Innovation Workshop, Hamburg University of Technology (TUHH) and Kühne School of Logistics, Hamburg, Germany. (Invited commentary)

“Economics of Infant Commons” (with Prof. Eric von Hippel, MIT Sloan School of Management), 7th Annual International Open and User Innovation Workshop, Hamburg University of Technology (TUHH) and Kühne School of Logistics, Hamburg, Germany. (Invited)

“Synthesizing Law for Synthetic Biology”, Biotech Summer Institute at Drake University and Pioneer Hi-Bred, Des Moines, IA. (Invited)

May

“Neurobiology and Patenting Thought”, Gruter Institute Annual Conference on Law, Mind, and Brain, Gruter Institute, Squaw Valley, CA. (Invited)

“Foundations of Intellectual Property” (Introductory lecture to all participants, with Prof. Katherine Strandburg, NYU Law School) and “Patents and the Regress of Useful Arts”, Workshop on Impacts of Open and User Innovation on Intellectual Property Law, Sponsored by The MIT Innovation Lab, MIT Sloan School of Management, Massachusetts Institute of Technology, and The Berkman Center for Internet and Society, Harvard Law School, Cambridge, MA. (Invited cohost and presenter)

“Synthesizing Law for Synthetic Biology”, OECD (Organisation for Economic Cooperation and Development) Collaborative Mechanisms for Intellectual Property Management Workshop, OECD Headquarters, Paris, France. (Invited)

April

“Patenting People – Human Embryos, Genes, Thought, and Physiology as Intellectual Property”, Baby Markets Roundtable, George Washington University Law School, Washington, DC. (Invited)

“Metaphysics and Patenting Life”, 2009 SEAL (The Society for Evolutionary Analysis in Law) Conference, Vanderbilt University Law School, Nashville, TN. (Competitively selected).

“Protecting and Promoting Biotechnology Innovation”, Life Science Business, University of Kansas School of Business, Overland Park, KS. (Invited guest lecture).

March

“Patents and the Regress of Useful Arts”, Governance of New Technologies: The Transformation of Medicine, Information Technology and Intellectual Property, University of Edinburgh, Edinburgh, Scotland, United Kingdom. (Competitively selected)

“Climate Change and the Changing Legal Climate”, Spencer Museum of Art, Lawrence, KS. (Invited)

“Synthetic Biology – Law and the Next Open Source Hardware”, MIT Innovation Lab, MIT Sloan School of Management, Massachusetts Institute of Technology, Cambridge, MA. (Invited)

“The Patent Game”, Fish & Richardson P.C., Firm-wide Thursday Forum, Boston, MA. (Invited)

February

“Patent Expertise and the Regress of Useful Arts”, Intellectual Property Scholars Roundtable, Drake Law School, Des Moines, IA. (Invited)

“Biotechnology Patents and the Regress of Useful Arts”, Stanford Law School, BioLaw and Health Policy Society, Palo Alto, CA. (Invited)

“Patents and the Regress of Useful Arts”, Washington University School of Law Junior Faculty Regional Workshop, Saint Louis, MO. (Invited)

January

“Intellectual Property and Entrepreneurship”, Kauffman Global Scholars Program, Kauffman Foundation, Kansas City, MO. (Invited)

Introduction to “The Two Halves of Biolaw” panel, Association of American Law Schools Annual Meeting, San Diego, CA.

2008

December

“The Patent Game”, Polsinelli Shughart PC, Kansas City, MO. (Invited)

November

“Synthesizing Law for Synthetic Biology”, Biolaw 2.0: Law at the Frontiers of Biology Conference, University of Kansas School of Law, Lawrence, KS. (Host and presenter)

“The Law of Biodiversity and Climate Change,” NSF Climate Change IGERT Class, University of Kansas, Lawrence, KS (Invited).

October

“Patents and Regress in the Useful Arts”, Central States Law Schools Association, University of Southern Illinois School of Law, Carbondale, Ill.

“Patents and Regress in the Useful Arts”, University of Ottawa Faculty of Law, Ottawa, Ontario, Canada. (Invited)

“Patents and Regress in the Useful Arts”, University of Louisville School of Law, Louisville, KY. (Invited)

“Patents and Regress in the Useful Arts”, Works In Progress In Intellectual Property 2008 Conference, Tulane University School of Law, New Orleans, LA. (Invited)

“Patents and Regress in the Useful Arts”, Midwest Law and Economics Association Annual Conference, Northwestern University School of Law, Chicago, IL. (Competitively selected)

September

“Patents and Regress in the Useful Arts”, University of Oregon School of Law, Eugene, OR. (Invited)

“Patents and Regress in the Useful Arts”, Midwest Law & Society Conference, University of Wisconsin, Madison, WI.

August

“Patents and Regress in the Useful Arts”, Harvard Business School-MIT User and Open Innovation Conference, Harvard Business School, Allston, MA. (Invited)

July

“Patents and Regress in the Useful Arts”, Conference on Innovation and Communications Law, Turku University School of Law, Turku, Finland. (Invited)

June

“PatentSim™ for Chemical Engineers”, American Institute of Chemical Engineers 2008 Process Development Symposium, The Berkshires, Hancock, MA. (Invited)

May

“Patents and Disasters”, 2008 Joint Annual Meetings of Law and Society Association and Canadian Law and Society Association, Montreal, Canada. (Invited)

“The Third Face of GM Regulation”, Biotech Summer Institute at Drake University and Pioneer Hi-Bred, Des Moines, IA. (Invited)

“Gene Patents and Gene Concepts”, STS and IP Law, Cosponsored by Stanford Law School and Berkeley Law School, Saint Helena, CA. (Invited)

April

“Climate Change and the Changing Legal Climate”, University Lecture Series at the Commons, Hall Center, University of Kansas, Lawrence, KS. (Invited)

“Mental Steps and Physiological Steps”, Junior Scholars Workshop on Neuroscience and Law, Stanford Law School, Palo Alto, CA. (Invited)

“Open Source Biology as an Antidote to Proprietary Human Evolution”, Conference on Open-Source and Proprietary Models of Innovation, Washington University School of Law, Saint Louis, MO. (Invited)

March

“Protecting and Promoting Biotechnology Innovation” (guest lecture), Life Science Business, University of Kansas School of Business, Lawrence, KS. (Invited guest lecture)

“An Extinction Bar to Patentability”, Boston College School of Law, Boston, MA. (Invited)

February

“Metaphysics and Patenting Life”, Intellectual Property Scholars Roundtable, Drake University School of Law, Des Moines, IA. (Invited)

“Physiological Steps Doctrine”, 2007 MSU IP & Communication Law Scholars Workshop, Michigan State University School of Law, East Lansing, MI. (Competitively-selected)

“Tribal Sovereign Immunity from Patent and Copyright Infringement”, 12th Annual Tribal Law and Government Conference, Tribal Law Center, University of Kansas School of Law, Lawrence, KS. (Invited)

January

“PatentSim™ and Entrepreneurship”, Kauffman Global Scholars Program, Kauffman Foundation, Kansas City, MO. (Invited)

“Intellectual Property and Biodiversity Conservation”, 2008 American Association of Law Schools Annual Meeting, New York, NY. (Moderator and presenter)

2007

November

“Patent Our Future”, Biolaw – Law at the Frontiers of Biology, University of Kansas School of Law, Lawrence, KS. (Host and presenter)

“Intellectual Property in Taiwan”, Intercollegiate Taiwanese American Students Association (ITASA) 2007 East Coast Conference, Harvard University, Cambridge, MA. (Invited)

October

“Patenting Human Evolution”, Law, Ethics, and the Life Sciences, Louisville University School of Law, Louisville, KY. (Invited)

“Patent Law Reform” (panelist with Profs. Mark Lemley and Christopher Holman), Hot Topics in Intellectual Property Law, UMKC School of Law. (Invited)

“Endangered Species and Climate Change – Aiming the Law at Moving Targets”, Facts, Ideas, and U.S. Climate Change Policy: A Conference on Climate Change, Center for Progressive Reform and University of Kansas School of Law, Lawrence, KS. (Invited)

“Protecting and Promoting Biotechnology Innovation”, Life Science Business, University of Kansas School of Business, Overland Park, KS. (Invited guest lecture)

September

“An Interactive Patent System Simulation (PatentSim™): Initial Empirical Results”, 2007 Works In Progress In Intellectual Property 2007, American University School of Law, Washington, D.C..

August

“An Interactive Patent System Simulation (PatentSim™)”, 2007 Intellectual Property Scholars Conference, DePaul University College of Law, Chicago, IL. (Competitively-selected plenary presentation)

April

“Patent Law Update 2007”, 2007 Intellectual Property CLE, Kansas Bar Association, Overland Park, KS. (Invited)

March

Conference Fellow, 2007 What If? In Intellectual Property Conference, Michigan State University School of Law, East Lansing, MI. (Invited)

February

"Intellectual Property, Conservation, and Sustainability", American Association for the Advancement of Science (AAAS) 2007 Annual Meeting, San Francisco, CA. (Moderator and presenter)

"Patent and Copyright Law" University of Kansas Libraries Intellectual Property Symposium, University of Kansas, Lawrence, KS. (Invited)

January

"Tribal Sovereign Immunity from Patent Infringement", 2007 Intellectual Property Scholars Roundtable, Michigan State University School of Law, East Lansing, MI.

2006

October

"Enabling Biodiversity Conservation", 2006 Midwest Law and Economics Conference, University of Kansas School of Law, Lawrence, KS.

"Intellectual Property and Bioterrorism", Greater Kansas City Hospitals Association, Kansas City, MO. (Invited)

"Engineering Human Life", 26th Annual Meeting of the Association for Politics and the Life Sciences, Indiana University, Bloomington, IN.

"An Extinction Bar to Patentability", 2006 Works In Progress in Intellectual Property Conference, University of Pittsburgh School of Law, Pittsburgh, PA.

September

"Intellectual Property and Biotechnology", School of Veterinary Medicine, Kansas State University, Manhattan, KS. (Invited)

"A Whirlwind Tour of the Patent System", Rotary Club, Lawrence, KS. (Invited)

August

"Protecting and Promoting Scientific Innovation", Inaugural Self Lecture, University of Kansas Self Fellowship Program, Lawrence, KS. (Invited)

"Physiological Steps Doctrine", 2006 Intellectual Property Scholars Conference, Berkeley Law School, Berkeley, CA.

June

"An Extinction Bar to Patentability", Jurisgenesis Conference, Washington University School of Law, Saint Louis, MO.

April

"United States Patent Reform", 2006 Intellectual Property CLE, Kansas Bar Association, Overland Park, KS. (Invited)

March

“Patents to the Rescue – Disasters and Patent Law”, Shaping a New Direction for Law and Medicine: An International Debate on Culture, Disaster, Biotechnology & Public Health, DePaul University College of Law, Chicago, IL. (Invited)

“Consistency is the Hobgoblin of Small Countries - Comparative Legal Regulation of Genetically Modified Organisms at the Domestic and International Levels by Canada and the United States”, 2006 American Society of International Law Annual Meeting, Washington, D.C.. (Invited)

February

“Environmental Law and Ethics”, Hall Center for the Humanities, University of Kansas, Lawrence, KS. (Invited guest lecture)

2005

October

“An Extinction Bar to Patentability”, informal presentation at Green College, Oxford University, UK.

“Introduction to Intellectual Property Protection”, Stirling Medical Innovations, Stirling, Scotland, United Kingdom.

2003

October

“Conservation Science, Conservation Law”, Conservation Biology Symposium, Harvard University, Cambridge, MA. (Invited)

July

“The Upside Down World of Mammals Down Under”, Stone Zoo, Zoo New England, Stoneham, MA. (Invited)

2002

May

“The Ethics of Biotechnology”, Harvard Business School Conference On Leadership, Values, and Spirituality in Business, Harvard Business School, Allston, MA. (Invited)

2001

July

“The Natural History and Conservation of Australian Mammals”, Franklin Park Zoo, Zoo New England, Boston, MA. (Invited)

MEDIA

October 2011 *Seattle Times*, “Patents emerge as significant tech strategy” (October 22, 2011)

May 2010 *NPR* (interview on “*KC Currents*,” KCUR 89.3 FM), "Legal Roadblocks to Copyrighting Natural Remedies”

Chicago Lawyer, "Bringing Predictability to the Patent World"

- March 2010 *San Francisco Chronicle*, "Patents' growing role in battle of mobile"
- February 2010 *Kansas City Star* (February 8, 2010), Kansas City, MO, "Patent lawyers give your big idea an edge"
- May 2009 *Salina Journal* (May 22, 2009), Salina, KS, "K-State: Farmers' seed use is illegal"
- November 2008 NPR (KPR), *The New Frontier of Biolaw* (with Prof. Lee M. Silver)
- August 2008 WREK, *Inside the Black Box*, "The Patent Game"
- May 2007 *ABC Television News* (Topeka, KS), Topic: Defenses to copyright infringement
- March 2007 *Kansas City Star*, Topic: Legal blogging
- January 2004 *Radio One*, United States Virgin Islands, Topic: Biodiversity conservation priorities in the United States Virgin Islands
- December 2003 *Harvard Political Review*, December 2003. By Luke Appling for *Under the Boardwalk: U.S. cities are significantly contributing to the destruction of tropical rainforests.*

HONOURS, GRANTS, AND PEER REVIEW

- 2012 Appointed Visiting Scientist at the Massachusetts Institute of Technology
- 2011 Elected President of the University of Kansas Faculty
- 2011 Appointed a Gruter Fellow at the Gruter Institute, Portola Valley, CA
- 2011 Invited by Genome Canada to deliver the keynote address at the *Optimizing the Impact of Genomics Research* Conference in Ottawa, Ontario, Canada
- 2011 Appointed member of the American Association of Law Schools ("AALS") Planning Committee for the 2012 AALS Midyear Conference
- 2011 Appointed Visiting Professor at the University of Washington School of Law
- 2010 Edward D. Manzo Scholar in Patent Law, DePaul University College of Law
- 2010 Selected to participate in the "Rising Stars" symposium sponsored by the University of Minnesota School of Law's *Minnesota Journal of Law, Science, & Technology*
- 2010 Invited to serve as a peer reviewer for Stanford Law Review
- 2010 Invited keynote speaker for Review of Intellectual Property Law "Green Issue" Symposium, John Marshall School of Law, Chicago, IL.
- 2009 Invited to serve as a peer reviewer for University of Chicago Press
- 2009 Docking Faculty Scholar (university-wide program established with a gift from the late Mrs. Meredith Docking to honor University of Kansas faculty members who have distinguished themselves in their early careers)
- 2009 Invited to become an editor of *MAKARA*, the national journal of the Universitas Indonesia (University of Indonesia)

- 2009 Named 2009/2010 Searle-Kauffman Fellow on Law, Innovation, and Growth
- 2009 Invited faculty referee for Empirical Studies of Patent Litigation research roundtable, Searle Center on Law, Regulation, and Economic Growth, Northwestern University Law School
- 2009 Invited by the Organisation for Economic Co-operation and Development (“OECD”), the economic policy organization of industrialized countries, to brief them on intellectual property and synthetic biology at their headquarters in Paris, France
- 2008 Law School Marshall, University of Kansas School of Law December Commencement Ceremony (elected by KU Law School Fall graduating class)
- 2008 Invited member of Technology, Media, and Telecommunications (“TMT”) Committee of the Barack Obama Presidential Campaign
- 2008 Invited to serve as a peer reviewer for the *University of Illinois Journal of Law, Technology & Policy*
- 2003-05 Awarded Harvard University Center for the Environment Grants for Field Trips to the U.S. Virgin Islands
- 2003 Placed first in national faculty search for Assistant Professor of Environmental Policy and Law at University of Alaska (Declined Offer)
- 2002-05 Awarded Harvard University Course Improvement Grants for Field Trip to the U.S. Virgin Islands
- 1998 Alan and Arlene Grimes Heimert Outstanding Tutor Award, Eliot House, Harvard University
- 1991-97 Graduate Student Fellowship, Harvard University
- 1993-97 Graduate Student Research Grant, Harvard University
- 1994 Putnam Expeditionary Fund Grant, Department of Organismic and Evolutionary Biology, Harvard
- 1993-95 National Science and Engineering Research Council of Canada Doctoral Fellowship
- 1991-96 Certificates of Distinction in Teaching (all courses taught as Teaching Fellow, Harvard University)
- 1990-91 Glendenning Scholarship for top student in Biology, Queen’s University
- 1990-91, 88-89 Colonel Rattray Scholarship in Science, Queen’s University
- 1989-90, 87-88 Dean’s Honours List, Queen’s University

SERVICE

- 2011 Nominated and elected President of the University of Kansas Faculty
- 2010 Appointed to Provost’s Working Group on Engaging Scholarship for Public Impact
- 2010 Appointed to University of Kansas School of Law Faculty Hiring Committee
- 2010- Nominated and elected to University of Kansas Student Appeals Board
- 2010- Nominated and elected to University of Kansas University Senate and University Senate Executive Committee

- 2010- Nominated and elected to University of Kansas Faculty Senate and Faculty Senate Executive Committee
- 2010 Elected Chairperson of American Association of Law Schools (AALS) Biolaw Section
- 2009/2010 Member, University of Kansas Open Access Implementation Taskforce
- 2009 OECD (Organisation for Economic Cooperation and Development); invited briefing on “Synthesizing Law for Synthetic Biology” at OECD Headquarters, Paris, France
- 2009 University of Kansas Taskforce on Open Access
- 2009-present Eastern Wind Power; member, board of directors
- 2009 “The Patent Game”, Fish & Richardson P.C., firm-wide Thursday Forum, Boston, MA
- 2008 Barack Obama Campaign for President; member of Technology, Media, and Telecommunications (“TMT”) committee
- 2008-present Co-organizer and co-founder of American Association of Law Schools Section on Biolaw with Profs. June Carbone and Chris Holman
- 2008 Invited Speaker, “The Patent Game”, Polsinelli Shughart PC, Kansas City, MO.
- 2007-present Invited Speaker on “Patent Law Update 2007” at the Kansas Bar Association Continuing Legal Education Meeting
- 2007- present Founder, “Biolaw – Law and the Frontiers of Biology”, an annual academic conference featuring scholars who present the best national and international biolaw scholarship, University of Kansas School of Law
- 2006-07 Member, Bioethics Faculty Position Search Committee, Philosophy Department, University of Kansas
- 2006 Environmental policy advisor to Senator Adlah “Foncie” Donastorg in his campaign to become Governor of the United States Virgin Islands in the summer and autumn of 2006
- 2006 Invited Speaker on “Coming Reforms to the United States Patent System” at the Kansas Bar Association Continuing Legal Education Meeting
- 2006 Invited Speaker on "Intellectual Property and Bioterrorism", Greater Kansas City Hospitals Association, (CLE credit)
- 2005-06 Member, Classified Research Policy Review Committee, University of Kansas
- 2005-06 Member, Bioethics Faculty Position Search Committee, Philosophy Department, University of Kansas
- 2003-present Chairman, Scientific Advisory Board, The Darwin Project, Boston
- 2004-2005 Member, board of directors, Garden Under Glass (Organization charged by Massachusetts Turnpike Authority with building major new botanical gardens and conservation center in downtown Boston)
- 2002-2003 *Pro Bono* Legal Counsel, Environmental Association of Saint Thomas and Saint John, USVI

- 1996-2000 Founder and Organizer, “Rite of Spring”, annual biodiversity charity concert, Harvard University
- 1992-1996 Co-founder and Chair, Biodiversity Seminar Series, Department of Organismic and Evolutionary Biology, Harvard University
- 1993-2000 Resident Tutor, Eliot House, Harvard University
- 1993-1994 Graduate Student Representative, Department of Organismic and Evolutionary Biology, Harvard University

BAR ADMISSIONS

Commonwealth of Massachusetts

Registered to practice before the United States Patent and Trademark Office

PATENTS

Sheard, P., M. Reay, and A.W. Torrance, Monitoring Method and Apparatus, European Patent No. 1,698,058

Torrance, Andrew W., and Bill Tomlinson, *Interactive Simulation*, U.S. Patent Application No. 12/189,770

Torrance, Andrew W., and Bill Tomlinson, “Polling Systems, Methods, and Computer Programs”, U.S. Provisional Patent Application No. 60/259,848

Torrance, Andrew W., and Bill Tomlinson, “Collecting User Responses Over a Network”, U.S. 2002/0107726 A1

LANGUAGES

Native English speaker

Good knowledge of spoken and written French and German, and of written Latin and Classical Greek