# Joshua A.T. Fairfield

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## EDUCATION AND ACADEMIC EMPLOYMENT

**Washington and Lee University School of Law** *Lexington, VA*

- Associate Professor of Law (with Tenure 2010) *2007-present*
- Fulbright Fellowship, Max Planck Institute (Bonn, Germany) *2012-2013*
- Director, Frances Lewis Law Center *2009-2012*
- Jessine Monaghan Faculty Fellowship for Teaching *2012*
- Technology and law commentator in national and international news media, including CNBC, Wired, Washington Post, and Financial Times
- Nationally recognized scholar on law, governance, economics, and intelligence issues within virtual worlds
- Consultations with and presentations to White House Office of Technology Policy, Homeland Security Privacy Office, CIA, DOD, ODNI, IARPA, and FTC on virtual worlds issues

**Indiana University School of Law – Bloomington** *Bloomington, IN*

- Associate Professor of Law *2005-2007*
- 2006-07 Trustees' Award for Teaching

**Columbia Law School** *New York, NY*

- Associate-in-Law *2004-2005*
- Taught multi-field course introducing LLM students to each basic common law area, as well as common-law reasoning, legal theory, and methodology

**University of Chicago Law School** *Chicago, IL*

- J.D. (2001), *Magna Cum Laude*, Order of the Coif *1998-2001*
- The University of Chicago Law Review
- Symposium Editor, The University of Chicago Legal Forum

**Swarthmore College** *Swarthmore, PA*

- B.A. (History), Degree with Distinction, Phi Beta Kappa *1992-1996*

## LAW PRACTICE

**Jones Day** *Columbus, OH*
*Associate* *2002-2004*

- Focus on commercial law and software / technology law
- Contributions to technology law cases before the Sixth Circuit Court of Appeals and the United States Supreme Court

**Honorable Danny J. Boggs, Sixth Circuit Court of Appeals** *Louisville, KY*
*Judicial Clerk* *2001-2002*

## GENERAL EMPLOYMENT

**Fairfield Language Technologies (now Rosetta Stone, Inc.)** *Harrisonburg, Virginia*
*Director of Research and Development* *1996-98*

- Headed the department of research and development for the award-winning *The Rosetta Stone Language Library*, now the leading language-teaching software program for educational institutions.

## SELECTED PUBLICATIONS

*"Do-Not-Track" as Default*, forthcoming, NORTHWESTERN JOURNAL OF TECHNOLOGY AND INTELLECTUAL PROPERTY (2013).

Do-Not-Track has the ability to change the relationship between consumers and advertisers in the information market. Everything will depend on implementation. If Do-Not-Track can be implemented as a default, automated browser feature that consumers can choose by selecting their browser, it will be effective and widely used.

The W3C standard setting body for Do-Not-Track has, however, endorsed a corrosive standard in its Tracking Preferences Expression draft. This standard requires consumers to set their privacy preference by hand. This "bespoke" standard follows in a long line of privacy preference controls that have been neutered by increased transaction costs.

This article argues that privacy controls must be firmly in consumers' hands, and must be automated and integrated to be effective. If corporations can deprive consumers of privacy through automated End User License Agreements or Terms of Service, while consumers are constrained to set their privacy preferences by hand, consumers cannot win. Worse: the TPE bespoke standard is anticompetitive. Browsers like Microsoft's Internet Explorer 10 will launch with default Do-Not-Track enabled. But the TPE bespoke standard offers advertisers a free pass to ignore the Do-Not-Track flags that will be set by IE10, thus preventing browsers from competing by offering automatic, integrated, and therefore useable privacy features.

*Big Real Problems: Emerging Issues in Ethics and Law in the Study of Social Media*, currently under submission to peer-reviewed JOURNAL OF MASS MEDIA ETHICS.

Social media research is changing. Datasets are larger, and machine learning tools are faster. The question is whether the ability to find ever smaller needles in ever larger haystacks has ethical implications for the study of social media. This article argues that it does. The ability of new tools to pick individuals out of a crowd means that data previously considered unidentifiable to an individual can now be used precisely to identify individuals even from anonymous data. The ability of machine

learning tools to pick out high-level patterns out of big, real datasets means that individual subjects may not fully understand the repercussions when they hand out their information. Subjects may not know what they are revealing when they join a study. Indeed, the nature of machine learning means that even researchers often do not know what patterns will emerge.

This article does not suggest starting from scratch. Rather, it proposes to extend the basic principles of human subjects research, autonomy, beneficence, and equality, as set out in the Belmont Report and as implemented by the Federal Common Rule. Current practice suffers from a lack of fit with these principles. The article proposes both theoretical advances in how ethicists should view these core principles in an era of machine learning, and practical means by which social media studies can both take advantage of the state of the art and meet their ethical obligations.

*Mixed Reality: How the Laws of Virtual Worlds Govern Everyday Life*, 27 BERKELEY TECHNOLOGY LAW JOURNAL 55 (2012).

Imagine a world in which car manufacturers can tell you which neighborhoods you can drive through, in just the same way that your cell phone provider now tells you which network you can use. Imagine a world in which your clothes are free, but carry shifting advertisements on smart fabric. Imagine a world in which you can choose to edit your ex-husband out of your existence – you can't see him, hear him, see anything he's written, hear any phone calls, nothing. This is the future of mixed reality, where virtual experiences interact side by side with our everyday walkabout life. Through mobile technology, computing has finally come out from behind a desk and into the street. At the same time, realspace is being hyperlinked, indexed, and augmented with rich virtual datasets. The laws that govern virtual experiences are thus increasingly impacting our everyday lives. Law is playing a desperate game of catch-up as Google is sued because pedestrians following Google Maps cross a street at the wrong place, or nation-states almost start a war after Google Earth shows a border in the wrong location. This article stakes out a careful path for the law as it attempts to negotiate what happens when virtual experiences enter the real world with full force.

*Avatar Experimentation: Human Subjects Research in Virtual Worlds*, 2 U.C. IRVINE LAW REVIEW 695 (2012).

Researchers love virtual worlds. They are drawn to virtual worlds because of the opportunity to study real populations and real behavior in shared simulated environments. The growing number of virtual worlds and population growth within such worlds has led to a sizeable increase in the number of human subjects experiments taking place in such worlds. Yet people within virtual worlds act much as they would in the physical world, because the experience of the virtual world is "real" to them. The very characteristics that make virtual worlds attractive to researchers complicate ethical and lawful research design.

*"Do Not Track" as Contract*, 14 VANDERBILT JOURNAL OF ENTERTAINMENT AND TECHNOLOGY LAW 545 (2012).

Support for enforcement of a do-not-track option in browsers has been gathering steam. Such an option presents a simple method for consumers to protect their privacy. The problem is how to enforce this choice. The Federal Trade Commission (FTC) could enforce a do-not-track option in a consumer browser under its Section 5 powers. The FTC, however, currently appears to lack the political will to do so. Moreover, the FTC cannot follow the model of its successful do-not-call list since the majority of Internet service providers (ISPs) assign Internet addresses dynamically—telephone numbers do not change, whereas Internet protocol (IP) addresses may vary.

This Article explores whether, as a matter of contract law, a browser do-not-track option is enforceable against a corporation, and concludes that it is. The emerging standard of online consent has been whether a party proceeds with a transaction after the counterparty informs the party of the terms of the contract. Adhesion contracts in electronic contexts have bound consumers for over a quarter century in precisely this manner. This Article argues that what applies to consumers should apply to corporations. When a consumer expresses her preference, in the very first exchange between the consumer and corporate computers, for the corporation not to track her information, the company is free to refuse the transaction if it does not wish to continue on the consumer's terms.

*Nexus Crystals: Crystallizing Limits on Contractual Control of Virtual Worlds* 38 WILLIAM MITCHELL LAW REVIEW 43 (2011).

**Top 10** *SSRN Download, Political Processes, Public Choices, Individual & Social Well-Being; Technology & Ethics.* The foundational social contract of the internet is the End User License Agreement, (EULA), not the United States Constitution. Community-governing contracts, whether website Terms of Use (TOU), or software End User License Agreements (EULAs), are the flashpoint for an ongoing discussion about whether there are limits to the control intellectual property owners can assert over their customers. For example, can a game company sue a player who cheats (which violates the EULA) for copyright infringement? This article argues that it cannot, and that there is a coalescing consensus on limits to these licenses, although the circuits differ as to method.

*Castles in the Air: F. Gregory Lastowka's* VIRTUAL JUSTICE, 51 JURIMETRICS 89 (2010).

This review in the #1 peer-reviewed journal of law, science, and technology critically examines Gregory Lastowka's new book from Yale University Press, VIRTUAL JUSTICE. The review concludes that VIRTUAL JUSTICE stands apart from prior efforts in the field because it recognizes that the study of law in virtual worlds is not a niche, but is instead a compelling example of how communities produce law through their encounter with novel technologies. The review therefore applauds Lastowka's core premise: that virtual worlds are cultural spaces that generate law. Lastowka's insights reach beyond the technology to produce a narrative about the common law itself.

Technology cases, he notes, are by definition common law cases, because they present novel questions, often fall outside statutes, and invite reasoning by analogy. Thus, development of law online tracks the path of the common law elsewhere. Communities generate norms, which are adopted by judges, and finally codified by legislatures. Lastowka's book offers a compelling and foundational narrative of how law is currently being formed at the very edge of cyberspace.

*The End of the (Virtual)* World, 112 WEST VIRGINIA LAW REVIEW 53 (2009) (*Digital Entrepreneurship* symposium contribution).

***Top 10*** *SSRN Commercial Law Download; Top 10 SSRN Bankruptcy Law Download.* This article attempts to take the lessons learned in the early-millennium dot-com bubble burst and apply them to the shakedown currently underway in virtual worlds. Specifically, the article argues that during the dot-com burst, creditors learned ways to get money out of intangible assets, because thinly-capitalized dot-coms had no other assets of value. The article extends this trend to virtual worlds. Assets in virtual worlds are often treated by the markets as personal property – for example, digital objects are bought and sold for real dollars. Therefore, such assets can in some cases be used as the basis for secured lending, and can form the basis for a creditor recovery in bankruptcy.

*Virtual Parentalism*, 66 WASHINGTON & LEE LAW REVIEW 1215 (2009) (*Protecting Virtual Playgrounds* symposium contribution).

***Cited by Federal Trade Commission Report:*** **VIRTUAL WORLDS AND KIDS: MAPPING THE RISKS.** Parents, not laws, ultimately protect children both online and offline. If legislation places adult virtual world users at legal risk due to the risk of being overheard by children in virtual worlds, adults will exit those worlds, and children will be isolated into separate spaces. This will not improve safety for children. Instead, this article suggests that Congress enact measures that encourage filtering technology and parental tools that will both protect children in virtual worlds, and protect free speech online.

*The Cost of Consent: Optimal Standardization in the Law of* Contract, 58 EMORY LAW JOURNAL 1401 (2009).

This article argues that informed consent to contract terms is not a good to be maximized, but is rather an information cost that courts should minimize. Contract law therefore ought to minimize the cost-sum of information costs and contractual surprise. The article applies information cost theory to show that information-forcing rules are often inefficient at both the micro- and macroeconomic levels. Such rules also impose greater costs on third parties than the benefits they create for the contracting parties. When one consumer creates an idiosyncratic deal, the information-savings benefits of standardization are reduced for all other potential consumers. The article demonstrates that in some cases courts are already abandoning a rigid view of contractual consent where consent is too costly; but that under other doctrines courts insist on an inefficient level of informed contractual consent.

*The God Paradox,* 89 BOSTON UNIVERSITY LAW REVIEW 1017 (2009).

Virtual worlds combine social networking technologies with state-of-the-art game graphics. The result is a three-dimensional social software interface: the internet in three dimensions. The companies that run virtual worlds—self-proclaimed "game gods"— exercise significant power over the environments that they create and the people who use them. Game gods believe that they must retain ownership of and control over every aspect of their creations because they fear liability. But their attempts will backfire.

This is the "God Paradox": the more control a game god keeps in order to avoid liability, the more responsibility it will bear. The article details the current types of control currently exercised by game gods; how that control can and will increase the risk of liability; and finally proposes several practicable solutions to the problem.

*The Magic Circle*, 11 VANDERBILT JOURNAL OF ENTERTAINMENT & TECHNOLOGY LAW 823 (2009) (symposium contribution).

This article examines the concept of the "magic circle," the metaphorical barrier that supposedly excludes real-world law from virtual worlds. The author argues that this metaphor fails because there is no "real" world as distinguished from "virtual" worlds. Instead of a magic circle, this article advocates a rule of consent: actions in a virtual world give rise to legal liability if they exceed the scope of consent given by other players within the game. The article concludes that although real-world law cannot reasonably be excluded from virtual worlds, game-gods and players can control the interface between law and virtual worlds through their agreements, customs, and practices.

*Escape Into the Panopticon: Virtual Worlds and the Surveillance Society*, 118 YALE LAW JOURNAL POCKET PART 131 (2009).

The irony of virtual worlds is that populations seeking to build new lives away from the public eye are moving into virtual worlds that are subject to constant surveillance. Virtual worlds follow the model of Jeremy Bentham's Panopticon Prison: all of the inhabitants of a virtual world can be monitored by the game god. Virtual worlds are gigantic cameras, and the recordings can be handed over to police or the intelligence community. This short essay encourages government to protect personal privacy in virtual worlds by taking constitutional restraints on surveillance seriously.

*Anti-Social Contracts: The Contractual Governance of Virtual Worlds*, 53 MCGILL LAW JOURNAL 427 (2008).

***Top 10*** *SSRN Law & Society Download; Top 10 Private Law Download; Top Ten Public Law & Legal Theory Download; Top 10 Law School Research Papers—Legal Studies.* By 2011, researchers predict that a majority of internet users will work or play in virtual worlds. World of Warcraft and Second Life have seized the imagination of millions. These and many other online communities are ruled nearly exclusively by contract law: End User License Agreements, Terms of Service, or

Codes of Conduct. But all is not well. Contracts are private law. Communities need public law. Contracts are a critical means of helping two (or a few) people negotiate their preferences. But online communities are made up of enormous and shifting populations that have no time or ability to negotiate agreements with every other community member. Thus, although contracts are important, the use of contracts – alone – to govern communities of millions of people threatens investment in online communities, as well as their creative output. The article further demonstrates that contracts cannot, by their very nature, provide for every legal need of large and shifting online communities. The article finally shows how courts can use basic common law principles to provide online communities with the private property, dignitary and personal protections, and freedom of speech that communities need to thrive.

*The Search Interest in Contract*, 92 IOWA LAW REVIEW 1237 (2007).

Parties often do not negotiate for contract terms. Instead, parties search for the products, terms, and contractual counterparties they desire. The traditional negotiation centered view of contract continues to lead courts to try to construe the meaning of the parties where no meaning was negotiated, and to waste time determining the benefits of bargains that were never struck. Further, while courts have ample tools to validate specifically negotiated contract terms, courts lack the tools to respond to searched-for terms. Although the law and literature have long recognized that there is a disconnect between the legal fictions of negotiation and the reality of contracting practice, no theory has emerged to replace fictional negotiation. Therefore, this article develops a new search-oriented theory of contract, and shows that search theory can explain contracting behavior where the fictions of negotiation fail. The article then applies this theory to the common law of contract, the Uniform Commercial Code, and the growing world of internet searches and electronic contracting.

*Virtual Property*, 85 BOSTON UNIVERSITY LAW REVIEW 1047 (2005).

***Top 10*** *SSRN Overall Quarterly Download.* The article explores three new concepts in property law. First, the article defines an emergent property form – virtual property – that is not intellectual property, but would more efficiently govern rivalrous, persistent, and interconnected online resources. Second, the article demonstrates that the threat to high-value uses of internet resources is not the traditional tragedy of the commons that results in overuse. Rather, the naturally layered nature of the internet leads to overlapping rights of exclusion that cause *under*use of internet resources: a tragedy of the anticommons. And finally, the article shows that property law should act to limit the costs of an internet anticommons.

*Cracks in the Foundation: The New Internet Regulation's Hidden Threat to Privacy and Commerce*, 36 ARIZONA STATE LAW JOURNAL 1193 (2004).

Scholarship to date has focused on the legal significance of the novelty of the internet. This scholarship does not describe or predict actual internet legislation. Instead of asking whether the internet is so new as to merit new law, legislators and

academics should re-evaluate the role of government in orchestrating collective action, and change the relative weight of enforcement, deterrence, and incentives in internet regulations. A perfect example of the need for this new approach is the recent CAN-SPAM Act of 2003, which was intended to protect personal privacy and legitimate businesses. However, the statute threatens both of these interests, because it does not recognize either the limits of enforceability, or the enhanced possibilities for incentives offered by the decentralized architecture of the internet.

*To Err is Human: The Judicial Conundrum of Curing Apprendi Error*, 55 BAYLOR LAW REVIEW 891 (2003).

*Cited in Wyoming Supreme Court opinion* Brown v. State, *99 P.3d 489, 494 (Wyo. 2004).* Under new Supreme Court precedent, courts of appeals may disregard a trial court's failure to submit an essential element of a crime to the jury if the evidence establishing that point is "uncontroverted" and "overwhelming." Unfortunately, courts are using this standard primarily to affirm conceded error without examining whether the evidence is truly uncontroverted or overwhelming. A proper application of the standard would lead to a different result in certain cases.

*ERISA Preemption and the Case for a Federal Common Law of Agency Governing Employer-Administrators*, Comment, 68 UNIVERSITY OF CHICAGO LAW REVIEW 223 (2001).

When employers act as plan administrators on behalf of insurers, state laws often deem them agents of the insurers. Preempting these state laws creates a void where employees who have paid their premiums are left without health insurance if the employer fails to pass the premiums on to the insurer. Precedent and legislative history establish that federal courts have the authority to develop a federal common law under ERISA under precisely these conditions. Federal courts should exercise this authority to hold that employers who act as administrators are the agents of the insurers, not the insured.

## SELECTED PRESENTATIONS

- *"Big Real Problems: Growing Challenges in Human Subjects Research in Virtual Worlds,"* featured panel presentation, Second Annual International Symposium on Digital Ethics, Chicago (2012)

- *"Big Brother is Watching Because Little Brother Has Opened the Door,"* featured workshop presentation, Max Planck Institute for Research on Collective Goods, Bonn, Germany (2012)

- *"Avatar Experimentation Evolved: Emerging Ethical Issues in the Study of Virtual Worlds,"* Panel Presentation, White House Office of Science and Technology Policy, Washington D.C. (2012)

- *"Panopticon Plus: Privacy and Modern Surveillance,"* Panel Presentation, Department of Homeland Security Privacy Office, Washington D.C. (2012)

- *"Gamer Privacy After Sony,"* Featured Presentation, Privacy Coalition, Electronic Privacy Information Center (EPIC) (2011)

- *EMA v. Brown: Violence, Videogames, and the First Amendment,* Panel Discussion, ACS, Washington & Lee School of Law (2011)

- *"Virtually Social: Virtual Worlds, Social Networks, and the New System,*" Panel Presentation, Telecommunications Policy Research Conference (2011)

- *"Avatar Experimentation: Human Subjects Research in Virtual Worlds,"* Panel Presentation, Ethical Inquiry through Video Game Play and Design Conference, DePauw University (2011)

- *"Virtually Social: Virtual Worlds, Social Networks, and the New System,"* Panel Presentation, Governance of Social Media Conference (2011)

- *"Avatar Experimentation: Human Subjects Research in Virtual Worlds,"* Protecting Online Privacy: First-Level and Second-Level Privacy Issues Panel, SEALS Annual Conference (2011)

- *"Avatar Experimentation: Human Subjects Research in Virtual Worlds"* Presentation at the University of California, School of Law, Irvine, *Governing the Magic Circle: Regulation of Virtual Worlds* Irvine, California (2011)

- *"Privacy in Governmental Development Contracts,"* Panel Discussion, Games & Business Conference (2011)

- *"Mobile Mayhem: Designing an E-Commerce Regime to Regulate Dangerous Behavior in Mobile Markets,"* presentation to representatives of the Federal Trade Commission, the World Bank, and member representatives of the African Dialogue on Consumer Protection, Tanzania (2010)

- *"Law and Mixed Reality,"* presentation at Human Autonomy, Law and Technology Conference, Second Life, sponsored by Queens College, Canada (2010)

- *"Avatar Experimentation: Human Subjects Research in Virtual Worlds,"* presentation at *Governance in Virtual Worlds* conference, Second Life, sponsored by Arizona State University (2010)

- *"Escape Into the Panopticon: Virtual Worlds and the Surveillance Society,"* Presentation for Lebanon Valley College, *Wired Colloquium*, Lebanon, Pennsylvania (2009)

- *"Anti-Social Contracts,"* Virtual World Seminar Series, National University of Singapore, Singapore (2009)

- *"Efficient Breach in Supply Chains,"* Southeastern Association of Law Schools panel on Disgorgement and Efficient Breach (2009)

- Contributing Author, OFFICE OF DIRECTOR OF NATIONAL INTELLIGENCE Summer Hard Problem, *"Mixed Reality: When Virtual Plus Real Equals One."* Prepared analytic product for use by the intelligence community (2009)

- *"The End of the (Virtual) World, or What the End of Worlds Can Tell Us About Their Beginnings*," presented for the West Virginia Law Review *Digital Entrepreneurship* Symposium, Morgantown (2009)

- *"The Magic Circle,"* presented for the Vanderbilt Intellectual Property Roundtable, Nashville (2008)

- *"Order Without Law(yers): Law and Norms in Virtual Worlds*, presented for Washington & Lee Law Review *Protecting Virtual Playgrounds: Children, Law, and Play Online* Symposium, Lexington, Virginia (2008)

- Contributing Author, OFFICE OF DIRECTOR OF NATIONAL INTELLIGENCE Summer Hard Problem Program, *"3D Cyber Space Spillover: Where Virtual Worlds Get Real.*" Prepared analytic product for use by the intelligence community (2008)

- *"The God Paradox,"* presented for the Hans-Bredow-Institut and Freidrich-Ebert-Stiftung (Foundation) at Virtual Worlds and Law conference, Berlin (2008)

- *"End User License Agreements: Pitfalls and Best Practices,"* panel presentation, VirtualWorlds08 Conference, New York (2008)

- *"The God Paradox,*" presented at virtual worlds roundtable, Arizona State University (2008)

- *"Anti-Social Contracts: The Contractual Governance of Virtual Worlds*," Communications Law Section Panel, American Association of Law Schools (2008)

- *"Virtually Hidden: Illicit Activities in Virtual Worlds,"* "Veni, Vidi, Vegas: Enclosed Influence Environments and Mobile Entertainment and Gaming," sponsored by Department of Defense / Central Intelligence Agency, Las Vegas (2007)

- *"The Magic Circle Reborn*," Canadian I-Tech Law Society, Vancouver (2007)

- *"Anti-Social Contracts in Virtual Worlds,"* Cornell / Metanomics Presentation in Second Life (2007)

- *"Anti-Social Contracts,"* Digital Governance Panel, State of Play V, Singapore (2007)
- *"Anti-Social Contracts,"* Big 10 UnTENured Conference (2007)
- Virtual Tax Panel, SEALS Annual Conference (2007)
- *"The Magic Circle,"* Chicago I-Techlaw Society (2007)
- *"Virtual Worlds and Digital Governance,"* Digital Government Society Annual Meeting (2007)
- *"Social Contracts,"* Law and Virtual Worlds Panel, State of Play: Terra Nova (2006)
- *"The Search Interest in Contract,"* Big 10 UnTENured Conference (2006)
- *"The Search Interest in Contract,"* Midwest Law and Economics Association Annual Meeting (2006)
- *"Virtual Property, Electronic Contract,"* American Association for the Advancement of Science, Annual Meeting (2006)
- *"The Search Interest in Contract,"* University of Illinois Faculty Workshop (2006)
- *"Expanded Rationality,"* Games & Learning Conference (2006)
- *"Virtual Worlds as Academic Research Testbeds,"* Keynote Speaker, EDUCAUSE EDUCAR (2005)
- State of Play II Conference, *"Digital Property,"* co-chair, New York (2005)
- *"What is Real in a Virtual World?"* Algotek Department of Defense Colloquium (2005)

## TEACHING

Awards:

- 2012-13 Jessine Monaghan Faculty Fellowship for Teaching, Washington & Lee University School of Law, Lexington
- 2006-7 Trustees' Award for Teaching, Indiana University School of Law, Bloomington

Courses:

- Electronic Commerce Practicum
    - New Course Preparation: Progressive iterations of an in-class simulation on the question of digital resale of music files.
    - Integrated social network and user-generated content systems (e.g., creative commons or wikis) directly into class format.
    - Introduced IWSs (ideas worth sharing), short, creative, cross-disciplinary student presentations based on famous TED talk format.
    - Innovative focus on risk management in the entrepreneurship context.
    - Included real-world practice components, including:
        - drafting of a major new intellectual property policy for a Silicon Valley startup,
        - preparing presentations on consumer safety over mobile networks for United States Embassy in Burkina Faso (with Robin Wilson)

- E-Commerce Seminar
- Contracts (new course preparation)
- Intellectual Property (new course preparation)
- Introduction to American Law
- Sales
- Secured Transactions

Thesis Advisees, Note Advisees, and Independent Studies:

- Garrett Ledgerwood, Note, *Virtually Liable*, published in the WASHINGTON & LEE LAW REVIEW
- Erica Knott, Note, *The Decline of Linguistic Plurality: Bottom-Up Solutions to Protect Languages in the United States*, published in the JOURNAL OF CIVIL RIGHTS AND SOCIAL JUSTICE
- Shani Else, Note, *Courts Must Welcome the Reality of the Modern World: Cyberspace is a Place Under Title III of the Americans with Disabilities Act*, published in the WASHINGTON & LEE LAW REVIEW
- Sarah Hess, Note, *Protecting Paris: The Right of Publicity in Virtual Worlds*
- Michael Lombardino, Independent Study, *Clamoring for Credit: Virtual Property and the Failure of General Intangibles*
- Michael Ott, Note, *Delaware Strikes Back: Newcastle Partners and the Fight for State Corporate Autonomy*, published in the INDIANA LAW REVIEW
- Matthew Lawless, Article, *The Third Party Doctrine Redux: Internet Search Records and the Case for a "Crazy Quilt" of Fourth Amendment Protection*, published in the UCLA JOURNAL OF LAW & TECHNOLOGY
- Douglas Hass, Article, *The Never-Was-Neutral Net and Why Informed End Users Can End the Net Neutrality Debates,* National Competition winner and published in the BERKELEY TECHNOLOGY LAW JOURNAL
- Hsin-An Yao, LL.M Thesis, Comparative Study of US and Chinese File-Sharing Law

## SERVICE

### PROFESSIONAL

Professional Contributions and Consultations:

- Privacy and Civil Liberties Consultant, INTELLIGENCE ADVANCED RESEARCH PROJECTS ACTIVITY (2009-2012)
    - Served as privacy and civil liberties consultant overseeing federally funded studies in virtual worlds
    - Drafted and presented contributions regarding legal and ethical experimental design based on specific virtual world affordances
- Consultations with and Contribution to ABA Treatise on Electronic Contracts in Video Games (2012)
- Consultation with FEDERAL TRADE COMMISSION on children in virtual worlds (July 2009)
- Contributing Author, OFFICE OF DIRECTOR OF NATIONAL INTELLIGENCE Summer Hard Problem Program 2009, *"Mixed Reality: When Virtual Plus Real Equals One."*
- *"Property Rights in Web 2.0: What are the Legal Rules Regarding YouTube, MySpace, Social Networking, and Virtual Worlds?"* ABA SECTION OF LITIGATION Annual Conference, Atlanta (2009)
- Contributing Author, OFFICE OF DIRECTOR OF NATIONAL INTELLIGENCE Summer Hard Problem Program 2008, *"3D Cyber Space Spillover: Where Virtual Worlds Get Real.*"
- *"End User License Agreements: Pitfalls and Best Practices,"* panel presentation, VirtualWorlds08 Conference, New York (2008)
- *"The Magic Circle,"* Chicago I-Techlaw Society (2007)
- *"The Magic Circle Reborn,"* Canadian I-Techlaw Society (2007)
- *"Virtual Worlds and Digital Governance,"* Digital Government Society Annual Meeting (2007)
- Participation in Enlightening Games Group, inter-departmental faculty group focused on games and learning.
- Promoted *Arden Project* (a virtual world funded through MACARTHUR FOUNDATION grants) through national and international print, radio, and television interviews
- Contributions to TERRA NOVA weblog, the leading blog focused on the academic study of virtual worlds

Peer Review and Professional Monographs:

- *Peer review, Yale University Press*
- *Peer review, University of New South Wales Law Journal*
- *Peer review, Journal for Virtual Worlds Research*
- *Peer review, New Media and Society*
- Co-Author, End User License Agreement Section of 2008 ABA *Virtual Worlds* monograph, review and advisory role for 2012 update.

Professional Associations:

- Member, Committee 712, Committee on Computer Games and Virtual Worlds, ABA IP Section
- Member, American Bar Association
- Contributing Author, TERRA NOVA blog

**UNIVERSITY**

Committees:

- Chair, Law Center Committee, 2009-2012
- Educational Planning and Curriculum Committee 2010-12
- Board of Trustees Faculty Representative 2010-2011
- Chair, Employee Benefits Committee (university), 2010-2011
- Employee Benefits Committee, 2010-2012
- University Investment Committee (university) (ex officio) 2010-2011
- Tenure Committee (Johanna Bond) 2010-2011
- Library Committee 2009-2012
- Clerkship Committee 2008-2010
- Technology Committee 2008-2011
- Clerkship Committee, IUB, 2006-2007
- Global Programs Committee, IUB, 2005-2006

Positions:

- Director, Frances Lewis Law Center, 2009-2012
    - Signature achievements (with Law Center Committee):
        - Expanded access to Center resources.
        - Expanded availability of research grants to all tenure-track faculty.
        - Reduced expenditures, while expanding partnership options, to support important events on low recession budgets.

- Brought top-ranked scholars, at the suggestion of faculty sponsors, to speak in successful workshop series or public lectures. Selected speakers and topics are included in the Appendix.

- Center sponsored or co-sponsored successful high-profile academic events and symposia. Innovated system of outside funding and partnerships to bring high-quality events to W&L. This system of seeking outside funding permitted expanded programming during the Great Recession, of which high-profile events include:

  - VIOLENCE ON CAMPUS: STUDENTS WHO ARE A DANGER TO SELF OR OTHERS AND APPROPRIATE INSTITUTIONAL RESPONSES, WASHINGTON & LEE SCHOOL OF LAW SYMPOSIUM 2009

  Faculty Sponsor: Ann Massie. This symposium, joint sponsored by the Journal for Civil Rights and Social Justice, explored questions of campus violence through a range of approaches, including legal, psychological, and medical.

  - W&L & UN COUNCIL ON TRADE AND DEVELOPMENT JOINT SYMPOSIUM: INTERNATIONAL INVESTMENT LAW AND ALTERNATIVE DISPUTE RESOLUTION, WASHINGTON & LEE SCHOOL OF LAW SYMPOSIUM 2010

  Faculty Sponsor: Susan Franck. This symposium gathered top scholars and officials from around the world to discuss best practices for managing investment treaty conflict and disputes. UNCTAD co-sponsored the event, and permitted leading officials from numerous member states to attend.

  - PROSECUTORIAL POWER: A TRANSNATIONAL SYMPOSIUM, WASHINGTON & LEE LAW REVIEW SYMPOSIUM 2010

  Faculty Sponsor: Erik Luna. This symposium explored prosecutorial power across a range of prosecutorial contexts. The event gathered over 30 internationally renowned scholars to discuss the extent and evolution of prosecutorial power in both civil and common law contexts.

  - RESTITUTION ROLLOUT: THE RESTATEMENT (THIRD) OF RESTITUTION AND UNJUST ENRICHMENT, WASHINGTON & LEE LAW REVIEW SYMPOSIUM 2011

Faculty Sponsor: Doug Rendleman. Co-sponsored with the American Law Institute. This symposium featured the leading voices on restitution and unjust enrichment on the occasion of the rollout of the Restatement (Third) of Restitution.

- REGULATION IN THE FRINGE ECONOMY, WASHINGTON & LEE LAW REVIEW SYMPOSIUM, 2011

Faculty Sponsor: Margaret Howard. Co-sponsored with the American Bankruptcy Institute. This symposium explored fringe economy lending practices, including payday lending, auto title loans, or for-profit college loans. The symposium included leading voices from the perspective of both consumer protection and the lending industry.

- Faculty Sponsor, PROTECTING VIRTUAL PLAYGROUNDS: CHILDREN, LAW, AND PLAY ONLINE, Washington & Lee Law Review Symposium 2008

- Faculty Advisor, Federal Communications Law Journal, 2005-2007

    - Secured renewal of publication agreement with Federal Communications Bar Association that permitted the Journal to remain at IUB School of Law
    - Negotiated contract amendments with Federal Communications Bar Association that limited Law School's obligations to refund payments due to changes in FCBA membership
    - Oversaw development of Online Forum for Federal Communications Law Journal

**OTHER**

- Council Vice-Chair, Southern District Virginia Mennonite Conference, 2010-12
- Peace Advocate, Springdale Mennonite Church