W. Keith Robinson

Professor of Law Associate Dean for Research and Academic Programs Faculty Director for Intellectual Property, Technology, Business, and Innovation Wake Forest University School of Law Winston-Salem, NC 27106 • 336.758.2230 • robinswk@wfu.edu

EDUCATION

Duke University School of Law, Durham, NC, J.D. Cum Laude, 2004

Duke University School of Engineering, Durham, NC. B.S.E., 1999

Independent Engineering Research Project, CORBA as a Framework for EDA Simulation in a Distributed Environment, 1998-1999

National Merit Scholar

ADMINISTRATIVE EXPERIENCE AND DEVELOPMENT

Wake Forest University School of Law

Associate Dean for Research and Academic Programs, July 2023 – Present <u>Responsibilities:</u>

- Leadership and Program Development: Oversaw faculty research and scholarship initiatives and managed academic programs. Coordinated intellectual events, including speaker series, works-in-progress sessions, and inter-school exchanges.
- Faculty Support and Resource Management: Reviewed faculty development requests, administered summer research stipends, and fostered engagement with grant-funded opportunities. Promoted mentorship for pre-tenured faculty and represented the law school on university research committees.
- Budget Oversight and Promotion: Managed budgets for student journals, faculty development, and research assistance. Collaborated with marketing to highlight faculty achievements and advanced the visibility of research through metrics and public relations.

Faculty Director for IP Technology, Business, and Innovation, Summer 2021 - Present <u>Responsibilities</u>:

- Lead efforts to expand the law school's intellectual property and technology offerings and programming.
- Developed initiatives to support the law school's mission to integrate the law school's activities with Winston-Salem's Innovation Quarter.

SMU Dedman School of Law

Founding Co-Director, SMU Dedman School of Law Tsai Center for Law, Science and Innovation (2015-2021)

Responsibilities:

- Cultivated and maintained a relationship with a major donor
- Created a budget to allocate funding for Center activities
- Provided grant funding to law school faculty to conduct research at the intersection of law, science, and technology
- Marketed the activities of the center to academic institutions and the public
- Organized academic and professional conferences
- Hired and supervised affiliated staff and students

Appointments Committee Chair (2018-2019)

Responsibilities:

- Led a team of faculty members to interview and hire tenure-track faculty
- Recruited and hired tenure-track faculty

Southern Methodist University

SMU Faculty-in-Residence, Kathy Crow Commons (2018 - 2021) <u>Responsibilities</u>:

- Served as the intellectual leader for students in the commons
- Cultivated and maintained a relationship with a major donor
- Organized student activities that build community, encourage recreation and support wellness
- Lead a team, including a Residential Commons Director, Residential Advisors, and student leaders
- Served as a liaison between the university and commons residents
- Collaborated with other student affairs professionals to implement policies to support the university's mission

ACADEMIC APPOINTMENTS

Wake Forest University School of Law

Professor of Law (Fall 2021 – Present)

Courses: Property Law Patent Law Intellectual Property Law Selected Topics in Intellectual Property: IP and Business Organizations Designing Legal Applications

American University Washington College of Law

Senior Adjunct Professor (Fall 2022)

Course(s): Patent Law

Southern Methodist University Dedman School of Law, Dallas, TX

Associate Professor of Law (Fall 2011 – Spring 2021) Spring 2016: Awarded tenure and promoted to Associate Professor

Courses: Property Law Intellectual Property Law Intellectual Property and Business Organizations Technology, Innovation, and Law - Designing Legal Apps

The George Washington University Law School, Washington, DC

Adjunct Professor (Fall 2007-2011)

Course: Scholarly Writing Program for the AIPLA Quarterly Journal

PUBLICATIONS

Books

ACING INTELLECTUAL PROPERTY: A CHECKLIST APPROACH TO SOLVING INTELLECTUAL PROPERTY PROBLEMS (2d ed. West Academic 2024).

Edward E. Chase, Jr., Julia Patterson Forrester, and W. Keith Robinson, PROPERTY LAW: CASES, MATERIALS, & QUESTIONS (3rd ed. Carolina Academic Press 2023).

ACING INTELLECTUAL PROPERTY: A CHECKLIST APPROACH TO SOLVING INTELLECTUAL PROPERTY PROBLEMS (1st ed. West Academic 2018).

Book Chapters

Accountability, Responsibility, and Transparency in AI Patents, in INCLUSIVE INNOVATION IN THE AGE OF AI AND BIG DATA, (Daryl Lim, Peter K Yu eds., Oxford Univ. Press, forthcoming 2025).

Patent Law, in THE JURISPRUDENTIAL LEGACY OF JUSTICE RUTH BADER GINSBURG, (Ryan Vacca, Ann Bartow eds., New York University Press 2023).

Articles and Other Scholarly Publications

Enabling Artificial Intelligence, 60 HOUS. L. REV. 331 (2022) (invited symposium contribution).

The Rise of Process Claims: Evidence from a Century of U.S. Patents (forthcoming) (with Bernhard Ganglmair and Michael Seeligson).

Listed on SSRN's Top Ten download list for ERPN: Patents (Sub-Topic) (June 2022), Environment for Innovation eJournal (June 2022), and ERN: Intellectual Property (Topic), IRPN: Innovation & Intellectual Property Law & Policy (Topic) (July 2022), and Innovation Areas eJournals (July 2022).

Artificial Intelligence and Access to the Patent System, 21 NEV. L.J. 729 (2021).

Listed on SSRN's Top Ten download list for Engineering Educator: Courses, Cases & Teaching eJournal, InfoSciRN: Copyright & Intellectual Property (Topic), InfoSciRN: Other Artificial Intelligence (Sub-Topic), InfoSciRN: Other Copyright & Intellectual Property (Sub-Topic) and Materials Science Educator: Courses, Cases & Teaching eJournal. (May 2020).

Using Interactive Inventions, 69 DEPAUL L. REV. 95 (2020).

Emerging Technologies Challenging Current Legal Paradigms, 19 MINN. J. L. SCI. & TECH. 355 (2018) (invited symposium contribution with Joshua T. Smith).

Listed on SSRN's Top Ten download list for CompSciRN: Artificial Intelligence (September 2018) and Machine Learning (October 2018).

PUBLICATIONS, continued

Trade Secrets, Safe Harbors, and International Trade, 20 SMU SCI. & TECH. L. REV. 177 (2017) (invited symposium contribution presented at the International Intellectual Property Conference on the Trans-Pacific Pact, December 2016).

Patent Assertion Entities, Reasonable Royalties, and a Restitution Perspective, 36 REV. LITIG. BRIEF 46 (2016) (invited symposium contribution).

Awarding Attorney Fees and Deterring "Patent Trolls", 20 LEWIS & CLARK L. REV. 281 (2016).

Only a Pawn in the Game: Rethinking Induced Patent Infringement, 32 SANTA CLARA H. TECH. L. J. 1 (Lead Article) (2015-2016).

Economic Theory, Divided Infringement, and Enforcing Interactive Patents, 67 FLORIDA L. REV. 1961 (2015).

Listed on SSRN's Top Ten download list for Firm Behavior; Transaction Costs; Property Rights (October 2014).

Patent Law Challenges for the Internet of Things, 15 WAKE FOREST J. BUS. & INTELL. PROP. L. 655 (2015) (invited symposium contribution).

Listed on SSRN's Top Ten download list for Management of Innovation (July-September 2015).

Recent Developments in Intellectual Property Law - A 2014 Retrospective, 31 SANTA CLARA H. TECH. L. J. 527 (2015) (with David O. Taylor).

Listed on SSRN's Top Ten download list for Copyright & Trademark and Intellectual Property (July-September 2015).

Protecting America's Innovators - Combating the Decline of Patents Granted to Small Entities, 88 ST. JOHN'S L. REV. 379 (2014).

No "Direction" Home: An Alternative Approach to Joint Infringement, in INTELLECTUAL PROPERTY LAW REVIEW 139 (Karen B. Tripp ed., 2013).

A Case Study of Federal of Federal Circuit Policy Making, 66 SMU L. REV. 579 (2013) (invited symposium contribution).

PUBLICATIONS, continued

No "Direction" Home: An Alternative Approach to Joint Infringement, 62 AM. U. L. REV. 59 (2012).

Cited by Judge Moore in <u>Akamai Technologies</u>, Inc. v. Limelight Networks, Inc., No. 2009-1372, 2015 WL 2216261, at *14 (Fed. Cir. May 13, 2015).

Cited in the Supreme Court Brief for the Respondents in <u>Limelight Networks</u>, Inc. v. <u>Akamai Technologies</u>, Inc., 134 S. Ct. 2111 (2014).

Selected as one of the best intellectual property articles of the year and for inclusion in the 2013 edition of the INTELLECTUAL PROPERTY LAW REVIEW, an annual publication by Thomson Reuters (West).

Ramifications of Joint Infringement Theory on Emerging Technology Patents, in PATENT LAW REVIEW 517 (Karen B. Tripp ed., 2011).

Ramifications of Joint Infringement Theory on Emerging Technology Patents, 18 TEX. INTELL. PROP. L. J. 335 (Lead Article) (2010).

Listed on SSRN's Top Ten download list for Innovation & Intellectual Property/Patent Law & Policy (June-August 2013).

Selected as one of the best patent law articles of the year and for inclusion in the 2011 edition of the PATENT LAW REVIEW, an annual publication by Thomson Reuters (West).

USPTO Issues Supplementary Examination Guidelines Explaining the Requirement for Clarity in Patent Claims, Science|Business, March 14, 2011 (with R.F. Henschel, partner Foley & Lardner LLP).

Listed on SSRN's Top Ten download list for Innovation & Industrial Organization (March-April 2013).

Current and Potential Methods to Undermine a Competitor's U.S. Patent Application, 81 PTCJ 770, (2011) (with M. Aamir Haq).

WORKS-IN-PROGRESS

Accountability, Responsibility, and Transparency in AI Patents

In recent discussions of artificial intelligence, a frequently discussed issue has centered on accountability, responsibility, and transparency of AI systems. These are especially crucial in light of the pronounced biases AI systems sometimes exhibit, particularly impacting marginalized communities such as women and racial and ethnic minorities. A novel approach to understanding this landscape is to examine AI inventions through the lens of patents.

First, to what extent do AI patents incorporate these foundational principles? While responsibility tends to be intrinsically tied to inventors—those crafting AI mechanisms—accountability seems to be more germane to patent owners or licensees, many of whom now employ measures like AI audits and de-biasing to address bias concerns. Transparency, essential for trust, is anchored in patent requirements like written descriptions and enablement.

Second, what can be done to make sure these principles are represented in future AI patents? Here, two counterarguments emerge: firstly, the primary role of the patent office is to grant inventions based on statutory guidelines, not to influence broader policy directives. Secondly, interventions grounded in patent office policy might have limited tangible impact.

This chapter will analyze AI patents through the prism of accountability, responsibility, and transparency. It will also explain how the patent office can be an effective lever in responding to the societal and technological challenges presented by AI while acknowledging the delineated boundaries and potential constraints of patent office interventions.

Enabling Artificial Intelligence

In order to obtain a patent, an inventor's patent application must enable others to make or use their invention. This rule is referred to as the enablement requirement. The enablement requirement ensures that the inventor is in possession of the invention. In addition, the enablement requirement ensures that, in exchange for a patent, the public has received a sufficient invention disclosure.

Historically, the impact of the enablement requirement has differed based on the technology in question. Inventions in the "predictable" arts such as engineering have required less description to meet the enablement requirement. In contrast, unpredictable inventions in areas such as biotechnology have required more detailed disclosures to satisfy the enablement requirement.

Inventions that incorporate artificial intelligence ("AI") present an interesting challenge for enablement doctrine. AI has its origins in the disciplines of math and computer science. Both disciplines are traditional examples of predictable technology. Yet, AI inventions are also perceived to produce unpredictable results. In a recent request for comments, the USPTO asked "How can patent applications for AI inventions best comply with the enablement requirement, particularly given the degree of unpredictability of certain AI systems?" This project will identify the relevant law concerning the enablement doctrine. It will discuss the rationale for enablement and critique how it is currently applied to AI inventions.

PROFESSIONAL EXPERIENCE

Foley and Lardner LLP, Washington, DC, Associate (2004 – 2011)

Counseled clients concerning strategic IP issues, including evaluating emerging technology and licensing. Drafted patent invalidity and non-infringement opinions. Drafted patent applications and prosecuted U.S. and foreign applications in electrical engineering and software technologies; specifically, in the areas of knowledge discovery, data mining, search technologies, vehicle safety systems, telecommunications, Internet applications and semiconductor device testing technologies. (Summer Associate, 2002 & 2003)

Cap Gemini Ernst & Young, McLean, VA, Technology Consultant (1999-2001)

Web Application Architecture and Development

Analyzed business organizations software packages developed for client/server technology. Made recommendations and software development estimates for the proposed architecture based on the Rational Unified Process methodology. Designed components for a thin client, browser-based version of the application using a custom solution based on the Java J2EE framework.

Web Application Security

Designed and implemented an application security architecture for a utilization and case management application of a major healthcare software vendor. The architecture provided solutions for issues such as delegated user management and implementing portals between different organizations via the web as well as items specific to a healthcare organization.

Duke University, Department of Electrical and Computer Engineering, Independent Research Project (1998-1999)

CORBA as a Framework for EDA Simulation in a Distributed Environment - Investigated the applicability of distributed object network technology, specifically Common Object Request Broker Architecture (CORBA), as a new software framework for enhancing the collaboration of non-standardized electronic design automation tools.

MEDIA MENTIONS AND APPEARANCES

Neil Marion, Who Legally Owns Art Created with Artificial Intelligence? (February 3, 2023) https://www.paceco.com/future-of-storymaking/ai-art-legal/

Lance Eliot, Prestigious Symposium on AI Lawyering Reveals Keen Insights Including The Ardent Debate On Whether To Use Generative AI In Law School Education (October 17, 2023) https://www.forbes.com/sites/lanceeliot/2023/10/17/prestigious-symposium-on-ai-lawyering-reveals-keen-insights-including-the-ardent-debate-on-whether-to-use-generative-ai-in-law-school-education/?sh=460beafc312e

W. Keith Robinson, *How We Can Bridge the Innovation Gap*, PatentlyO, (June 14, 2023) https://patentlyo.com/patent/2023/06/robinson-bridge-innovation.html

Eli Stoklos and Alex Thompson, The Great White House Merch War, Politico (December 7, 2022) https://www.politico.com/newsletters/west-wing-playbook/2022/12/07/the-great-white-house-merch-war-00072831

Brian Gordon, How an NC Company is punching back against alleged Triangle-area 'patent troll', Raleigh News & Observer (August 5, 2022) https://www.newsobserver.com/news/business/article263832712.html

ACADEMIC LECTURES, CONFERENCES, AND PRESENTATIONS

"Transparency in AI-Assisted Inventions": Speaker, Works in Progress Intellectual Property Colloquium, UNLV William S. Boyd School of Law, Las Vegas, NV (February 1, 2025.)

"Accountability, Responsibility, and Transparency in AI Patents": Speaker, Faculty Work in Progress Talk, Elon University School of Law, Greensboro, NC (November 19, 2024).

"Issues with Generative AI and Copyright, Trademark and Patent Law": Speaker, LMU Law Review Symposium, Lincoln Memorial University Duncan School of Law, Knoxville, Tennessee (November 4, 2024).

"How Artificial Intelligence will Reshape Law, Society, and Responsibility": Speaker, Lifelong Leadership Lecture, Wake Forest University, Winston-Salem, NC (October 29, 2024).

"Introduction to AI and Healthcare": Moderator, Wake Forest Journal of Law and Policy Symposium, Wake Forest University School of Law, Winston-Salem, NC (October 25, 2024).

"Artificial Intelligence and the Fluid Sealing Industry: Opportunities and Challenges": Keynote Speaker, 2024 Annual Meeting, Fluid Sealing Association, Denver, CO (October 22, 2024).

"AI Law, Policy, and Governance: Building Trust in the Age of Intelligent Machines": Panelist, 2024 Law and Technology Symposium and Summit, North Carolina Central University School of Law, Durham, NC (October 11, 2024).

"AI-Assisted Inventions and the USPTO Technology Transfer": Speaker, International Conference on Emerging Issues in IP Law, Paris Lodron Universität Salzburg, Salzburg, Austria (October 4, 2024).

"Balancing Artificial Intelligence Advancements and ESG Goals: Intellectual Property Perspectives": Speaker, Multidisciplinary Summer School on Corporate Sustainability: ESG is Here to Stay, Università degli Studi di Padova, Padova, Italy (September 25, 2024).

"Diversity In Innovation: What We've Learned, What We Need to Know, and Where We're Headed": Panelist, 2nd Innovator Diversity Pilots Initiative Conference, Emory University Law School, Atlanta, GA (September 20, 2024).

"A.I. in the Law": Keynote Presentation: Cordage Institute & Eurocord 6th Joint Conference, Hilton Head Island, SC (June 18, 2024).

"Artificial Intelligence and Inventorship": Panelist, Machine Learning: What does it change and why does it matter? Wake Forest University, Winston-Salem, NC (February 27, 2024)

"The Past and the Future of IP Law": Panelist, The 20th Symposium on Emerging Intellectual Property Issues: Intellectual Property and Texas, SMU Dedman School of Law, Dallas, TX (February 16, 2024).

"Written Description, the Enablement Requirement, and Machine Learning Patents": Presenter, Works in Progress in IP Conference, Santa Clara University School of Law, Santa Clara, CA (February 3, 2024).

"High Tech Roundtable": Invited Participant, George Mason University Antonin Scalia Law School, Center for Intellectual Property x Innovation Policy, Arlington, VA (December 8, 2023).

"AI as a tool to promote fair access to the patent system": Invited Panelist, AI as an Inventing tool—Its Implications for Patent Law and Policy, UC Berkeley School of Law (November 15, 2023).

Invited Speaker, *Artificial Intelligence and Access to the Patent System*, AI'S CONSTITUTIONAL MOMENT: RIGHTS, SEPARATION OF POWERS, AND FEDERALISM, Washburn Law School, Topeka Kansas (November 2, 2023).

Co-organizer & Moderator, *A.I. in Legal Education: Charting the Future Landscape*, AI LAWYERING: ADAPTING TO THE ERA OF CHATGPT AND LARGE LANGUAGE MODELS, SMU Dedman School of Law, Dallas, TX (October 13, 2023).

Invited Speaker, *Patent Law*, The Jurisprudential Legacy of Justice Ruth Bader Ginsburg, University of New Hampshire Franklin Pierce School of Law, Concord, NH (September 22, 2023).

Invited Speaker, Inclusive Innovation, AI, and Big Data, The Pennsylvania State University Dickinson Law School, Carlisle, PA (August 10, 2023).

Invited Panelist, *AI in Legal Education and Practice: Enhancing Efficiency and Advancing Ethics*, NORTH CAROLINA BAR ASSOCIATION (June 15, 2023).

- 2022 -

Invited Presenter, *Innovator Diversity Pilots Conference*, SANTA CLARA UNIVERSITY SCHOOL OF LAW, SANTA CLARA, CA (November 18, 2022).

Invited Panelist, *Happy Birthday to You (AIPLA) - Year in Review: Patent Law*, AIPLA ANNUAL MEETING, Washington, DC (October 29, 2022).

Invited Panelist, *Technology That Tracks from Ring and Fitbit to GPS and Typing Keystrokes: Knowing the Legal Ramifications of Such Usage*, NCCU TECHNOLOGY LAW & POLICY CENTER INAUGURAL LAW & TECHNOLOGY SUMMIT, NCCU Law School, Durham, NC (October 14, 2022).

Invited Lecturer, *Innovation and ESG*, MULTIDISCIPLINARY SUMMER SCHOOL, CORPORATE SUSTAINABILITY: FROM CSR TO ESG, Università degli Studi di Padova, Padova, Italy (September 28, 2022).

Moderator, *Intellectual Property and Web3*, SOUTHEAST ASSOCIATION OF LAW SCHOOLS ANNUAL CONFERENCE, Miramar Beach, FL (July 31, 2022).

Invited Presenter, *Enabling Artificial Intelligence*, INSTITUTE FOR INTELLECTUAL PROPERTY & INFORMATION LAW 2022 NATIONAL CONFERENCE, University of Houston Law Center (June 11, 2002).

Presenter, *The Rise of Process Claims: Evidence from a Century of U.S. Patents*, PATCON 10, Boston College Law School (April 1-2, 2022)

Presenter, *The Rise of Process Claims: Evidence from a Century of U.S. Patents*, WORKS IN PROGRESS FOR INTELLECTUAL PROPERTY SCHOLARS COLLOQUIUM, St. Louis University School of Law (February 18-19, 2022)

- 2021 -

Invited Panelist, IP INSTITUTE 2021 ANNUAL SYMPOSIUM, EXPLORING THE BOUNDARIES OF STATUTORY SUBJECT MATTER, Mitchell Hamline School of Law (April 15, 2021).

Invited Speaker, *Artificial Intelligence and Access to the Patent System*, ST. JOHN'S INTELLECTUAL PROPERTY LAW CENTER 2021 INTELLECTUAL PROPERTY COLLOQUIUM (February 22, 2021).

Invited Speaker, *Artificial Intelligence and Access to the Patent System*, CHICAGO-KENT AND LOYOLA INTELLECTUAL PROPERTY COLLOQUIUM (January 26, 2021).

-2020 -

Invited Speaker, *Artificial Intelligence and Access to the Patent System*, EXAMINING INSTITUTIONAL STRUCTURES: RACE, BUSINESS, the University of Iowa College of Law, Innovation, Business & Law Center (September 10, 2020).

Invited Panelist, Inter Partes Review hosted by the Coalition Against Patent Abuse (July 23, 2020).

Invited Panelist, *What Should Law Schools be Doing Now?* 5TH ANNUAL TI:GER INNOVATION CONFERENCE—FUTURE OF THE LEGAL INDUSTRY: HOW INNOVATION CAN ENHANCE ACCESS TO JUSTICE, Emory University Law School, Atlanta, GA (January 30, 2020).

Invited Speaker, *Using Interactive Inventions*, W&L FACULTY WORKSHOP, Washington and Lee University School of Law, Lexington, VA (January 27, 2020).

- 2019 -

Invited Presenter, *Access to the Patent System*, 8TH ANNUAL SCHOLARS ROUNDTABLE, University of New Hampshire Franklin Pierce School of Law, Concord, NH (October 11, 2019).

Presenter, *Access to the Patent System*, TEXAS A&M INTELLECTUAL PROPERTY SCHOLARS ROUNDTABLE, Texas A&M University Law School, Fort Worth, TX (September 27, 2019).

Presenter, *Intellectual Property for Entrepreneurs*, BLACK COMMUNITIES: A CONFERENCE FOR COLLABORATION, Durham, NC (September 11, 2019).

Invited Panelist, *The Law and Policy of the Internet of Things*, SOUTHEASTERN ASSOCIATION OF LAW SCHOOLS, Boca Raton, FL (August 2, 2019).

Invited Panelist, *Access to the Patent System*, 4TH NATIONAL PEOPLE OF COLOR LEGAL SCHOLARSHIP CONFERENCE, American University Washington College of Law, Washington, DC (March 23, 2019).

Presenter, *Using Interactive Inventions*, WORKS IN PROGRESS INTELLECTUAL PROPERTY CONFERENCE, University of Houston Law Center, Houston, TX (February 8, 2019).

-2018 -

Invited Panelist, *Used Inventions*, Fourth Annual TEXAS A&M INTELLECTUAL PROPERTY SCHOLARS ROUNDTABLE, Texas A&M Law School, Fort Worth, TX (October 5-6, 2018).

Invited Speaker, *Emerging Technologies Challenging Current Legal Paradigms*, FACULTY DEVELOPMENT TALK, Wake Forest University, Wake Forest, NC (March 29, 2018).

Presenter, Register Right: The ABCs of Protecting Your IP, SXSW STARTUP & TECH SECTORS TRACK, Austin, TX (March 13, 2018)

Invited Panelist, *The Legal Landscape of the Internet of Things*, MINNESOTA JOURNAL OF LAW, SCIENCE & TECHNOLOGY SYMPOSIUM, Minneapolis, MN (March 2, 2018).

Invited Panelist, *Strategies and Support for Persons of Color in New Law Teaching*, 2018 AALS ANNUAL MEETING, San Diego, CA (January 4, 2018).

- 2017 -

Presenter, *Emerging Technologies Challenging Current Legal Paradigms*, INTERNATIONAL CONFERENCE ON NEW PARADIGMS IN LAW, National Chengchi University College of Law, Taiwan (December 4-5, 2017).

Presenter, *Patent Quality and Claim Clarity*, INTELLECTUAL PROPERTY SCHOLARS CONFERENCE, Benjamin N. Cardozo School of Law (August 11, 2017).

Presenter, Access to the Patent System, RACE + IP, Boston College, Boston, MA (April 21, 2017).

Presenter, *Process and Product Patents: New Data & Results*, PatCon 7, Northwestern Pritzker School of Law, Chicago, IL (April 7, 2017).

Presenter, *Patent Quality and Patent Enforcement*, JUNIOR INTELLECTUAL PROPERTY SCHOLARS ASSOCIATION SEMI-ANNUAL WORKSHOP, Michael E. Moritz College of Law, The Ohio State University, Columbus, OH (January 21, 2017).

- 2016 -

Invited Speaker, *Trade Secrets, Safe Harbors, and International Trade*, INTELLECTUAL PROPERTY TRANSPACIFIC CONFERENCE, Vietnam National University, University of Economics and Law, Ho Chi Minh City, Vietnam (December 7, 2016).

Moderator, Are Patent Agents Privileged: In re Queen University (Fed. Cir. 2016) v. In re Silver (2016) 54th ANNUAL CONFERENCE ON INTELLECTUAL PROPERTY LAW, Plano, TX (November 15, 2016).

Invited Speaker, *Recent Developments in Intellectual Property Law*, 24TH ANNUAL CORPORATE COUNSEL SYMPOSIUM, SMU Dedman School of Law, Dallas, TX (October 28, 2016).

Co-Chair, *Intellectual Property and Social Justice*, 13TH ANNUAL SYMPOSIUM ON EMERGING INTELLECTUAL PROPERTY ISSUES, SMU Dedman School of Law, Dallas, TX (September 30, 2016).

Invited Commentator, *A Restitution Perspective on Reasonable Royalties*, THE CONFERENCE ON PATENT DAMAGES, The University of Texas Law School, Austin, TX (June 9-10, 2016)

Commentator, *Dividing the Spoils: Fair Division and Intellectual Property Law*, PATCON 6, Boston College Law School, Newton Centre, MA (April 8, 2016).

- 2015 -

Commentator, INAUGURAL TEXAS A&M INTELLECTUAL PROPERTY SCHOLARS ROUNDTABLE, Texas A&M Law School, Fort Worth, TX (October 9-10, 2015).

Commentator and Presenter, *Rethinking Induced Patent Infringement*, TEXAS LEGAL SCHOLARS WORKSHOP, University of Houston Law Center, Houston, TX (August 28-29, 2015).

Presenter, *Patent Quality and Claim Clarity*, INTELLECTUAL PROPERTY SCHOLARS CONFERENCE, DePaul University College of Law (August 6, 2015).

Invited Speaker, *Divided Infringement*, AIPLA ELECTRONIC & COMPUTER LAW PATENT SUMMIT, Dallas, TX (June 16, 2015).

Presenter, *Attorney Fees after Octane Fitness and Highmark*, DRAKE IP SCHOLARS ROUNDTABLE, Drake University Law School, Des Moines, Iowa (March 28, 2015).

Invited Speaker, *Disruptive Technologies and the Law*, CENTER FOR INTELLECTUAL PROPERTY LAW AND INNOVATION EVENT, Indiana University Robert H. McKinney School of Law, Indianapolis, Indiana (February 17, 2015)

Invited Faculty, *Inducement*, 3rd ANNUAL NAPLES MIDWINTER PATENT LAW EXPERTS CONFERENCE, The University of Akron School of Law Naples, FL (February 9-10, 2015).

Invited Panelist, *Patent Law in an Increasingly Digital World*, IP STRATEGY IN THE DIGITAL AGE: A DISCUSSION ON PATENTS, TRADEMARKS, COPYRIGHTS & GOVERNMENT IP REGULATIONS IN AN ONLINE WORLD, Wake Forest University School of Law, Winston Salem, NC (February 6, 2015).

- 2014 -

Invited Presenter, The Impact of U.S. Patent Law on Disruptive Technology, ANNUAL INTERNATIONAL INTELLECTUAL PROPERTY CONFERENCE: EXPLORING THE LATEST THEORIES AND

PRACTICES IN INTELLECTUAL PROPERTY FROM COMPARATIVE PERSPECTIVES, Shanghai University of Finance & Economics, School of Law, Shanghai, China (December 15-16, 2014).

Presenter, Progressive Intellectual Property Scholarship, FIRST ANNUAL MOSAIC CONFERENCE, Marquette University Law School, Milwaukee, Wisconsin (November 15, 2014).

Invited Speaker, *Recent Developments in Intellectual Property Law*, 22ND ANNUAL CORPORATE COUNSEL SYMPOSIUM, SMU Dedman School of Law, Dallas, TX (October 31, 2014).

Co-Organizer and Moderator, *The Future of Patent Law: Understanding the Challenges Ahead*, 11TH ANNUAL SYMPOSIUM ON EMERGING INTELLECTUAL PROPERTY ISSUES, SMU Dedman School of Law, Dallas, TX (October 3, 2014).

Panel Organizer and Panelist, 2020: An IP Odyssey, SOUTHEASTERN ASSOCIATION OF LAW SCHOOLS – WORKSHOP ON INTELLECTUAL PROPERTY LAW, Amelia Island, FL (August 5, 2014).

Invited Presenter, *Economic Theory, Divided Infringement and Enforcing Interactive Patents*, JOHN MERCER LANGSTON BLACK MALE LAW FACULTY WRITING WORKSHOP, William S. Boyd School of Law, UNLV, Las Vegas, NV (July 11, 2014).

Presenter, *The War on Induced Infringement*, DRAKE IP SCHOLARS ROUNDTABLE, Drake University Law School, Des Moines, Iowa (March 29, 2014).

Invited Speaker, *Recent Developments in Patent Law*, The Eleventh Annual Institute for Intellectual Property and Social Justice Seminar, U.S. Space and Rocket Center (NASA), Huntsville, AL (March 14, 2014).

Identified as a Rising Scholar and Invited Speaker, NAPLES MIDWINTER PATENT LAW EXPERTS CONFERENCE, Naples, FL (February 11, 2014).

- 2013 -

Invited Presenter, *Theoretical Perspectives on Joint Infringement*, FIRST MONDAY FACULTY SERIES, University of Georgia Law School, Athens, GA (December 2, 2013).

Invited Panelist, Game Law Panel, BIG DESIGN 2013, Dallas, TX (October 19, 2013).

Panelist, *The Aftermath of Akamai*, POLITICS OF INTELLECTUAL PROPERTY AND CULTURE, LATCRIT Chicago, IL (October 5, 2013).

Presenter, *Theoretical Perspectives on Recent Doctrinal Changes to the Federal Circuit's Joint Infringement Standard*, INTELLECTUAL PROPERTY SCHOLARS CONFERENCE, Benjamin N. Cardozo School of Law, New York, NY (August 8, 2013).

Panel Organizer and Panelist, *Patentable Subject Matter: What's Patentable Today May Not Be Patentable Tomorrow*, SOUTHEASTERN ASSOCIATION OF LAW SCHOOLS – WORKSHOP ON INTELLECTUAL PROPERTY LAW, Palm Beach, FL (August 5, 2013).

Participant, Law and Economics Center Economics Institute for Law Professors, George Mason University School of Law, Beaver Creek, CO (July 7-19, 2013).

Invited Participant, *Inaugural Intellectual Property Academics' Boot Camp*, University of New Hampshire School of Law, Holderness, NH (June 6, 2013).

Participant, Law and Economics Center Empirical Workshop for Law Professors, George Mason University School of Law, Arlington, VA (May 20-24, 2013).

Presenter, *Theoretical Perspectives on Joint Infringement*, DRAKE IP SCHOLARS ROUNDTABLE, Drake University Law School, Des Moines, Iowa (April 13, 2013).

Moderator, *Innovation, Disruptive Technologies and the Federal Circuit*, 10TH ANNUAL SYMPOSIUM ON EMERGING INTELLECTUAL PROPERTY ISSUES, SMU Dedman School of Law, Dallas, TX (March 22, 2013).

Invited Speaker, *The Aftermath of Akamai and the Future of Joint Infringement*, COMPUTER LAW SECTION, DALLAS BAR, Dallas, TX (February 25, 2013).

Invited Panelist, *Portfolio Development after the AIA*, 14TH ANNUAL INTELLECTUAL PROPERTY SYMPOSIUM, University of Texas Law School, Austin, TX (February 22, 2013).

Moderator, *Law and the Future of Gaming*, GAME::BUSINESS::LAW – INTERNATIONAL SUMMIT ON THE LAW AND BUSINESS OF VIDEO GAMES, SMU DEDMAN SCHOOL OF LAW, THE GUILDHALL AT SMU, THE CENTER FOR AMERICAN AND INTERNATIONAL LAW, Dallas, TX (January 24-25, 2013).

- 2012 -

Invited Speaker, *Claim Construction*, CONFERENCE ON U.S. PATENT LITIGATION PROCEDURES, Southwest University of Political Science and Law, Chongqing, China (December 3, 2012) (with Wei Wei Jeang, Partner, Andrews Kurth LLP).

Panelist, *New Regional Patent Office in Dallas and What You Should Do to Prepare for the IP Job Market*, Southern Methodist University Dedman School of Law, Dallas, TX (September 6, 2012).

Panelist, *Apple v. Samsung: Perspectives on New IP Litigation Strategies*, Southern Methodist University Dedman School of Law, Dallas, TX (August 28, 2012).

Presenter, *Protecting America's Innovators: Combating the Decline of Patents Granted to Small Entities*, INTELLECTUAL PROPERTY SCHOLARS CONFERENCE, Stanford University Law School, Palo Alto, CA (August 9, 2012).

Presenter, *Protecting America's Innovators: Combating the Decline of Patents Granted to Small Entities*, SOUTHEASTERN ASSOCIATION OF LAW SCHOOLS – NEW SCHOLARS WORKSHOP, Amelia Island, FL (August 2, 2012).

Commentator, JOHN MERCER LANGSTON LAW FACULTY WRITING WORKSHOP, Suffolk University Law School, Boston, MA (June 30, 2012).

Moderator, *The America Invents Act, Strategic Perspectives*, SYMPOSIUM ON EMERGING INTELLECTUAL PROPERTY ISSUES, Southern Methodist University Dedman School of Law, Dallas, TX (April 20, 2012).

Invited Speaker, *Joint Infringement, Past, Present, Future*, DALLAS BAR ASSOCIATION, COMPUTER LAW SECTION, Dallas, TX (March 26, 2012).

Panelist, *Representing Start-ups and Tech Companies*, Southern Methodist University Dedman School of Law, Dallas, TX (March 5, 2012).

Moderator, *Minority Attorneys in Intellectual Property Law*, Southern Methodist University Dedman School of Law, Dallas, TX (February 27, 2012).

Presenter, *Joint Infringement and the Future of Interactive Method Claims*, WORKS-IN-PROGRESS INTELLECTUAL PROPERTY (WIPIP) COLLOQUIUM, University of Houston Law School, Houston, TX (February 10, 2012).

Speaker, *The Year in Video Game Law*, GAME::BUSINESS::LAW – INTERNATIONAL SUMMIT ON THE LAW AND BUSINESS OF VIDEO GAMES, SMU Dedman School of Law, The Guildhall at SMU, The Center for American and International Law, Dallas, TX (January 26, 2012).

- 2011-2007 -

Panelist, *Professional Perspectives in IP Law*, Southern Methodist University Dedman School of Law, Dallas, TX (September 8, 2011).

Panelist, *Leahy-Smith America Invents Act, Insights and Implications for Small Businesses*, Southern Methodist University Dedman School of Law, Dallas, TX (September 20, 2011).

Presenter, *Joint Infringement and the Future of Interactive Method Claims*, INTELLECTUAL PROPERTY SCHOLARS CONFERENCE, DePaul University Law School, Chicago, IL (August 12, 2011).

Speaker, Implications of Bilski v. Kappos, FOLEY & LARDNER LLP, Washington, DC (July 1, 2010).

Speaker, *Joint Infringement: Recent Developments*, FOLEY & LARDNER LLP, Washington, DC (October 1, 2009).

HONORS AND RECOGNITION

Elected to the American Law Institute (September 2023).

George Mason University, Antonin Scalia Law School, Center for Intellectual Property x Innovation Policy, Senior Scholar (Present).

Member, National Conference of Bar Examiners, Real Property Drafting Committee (2022-present).

The Rise of Process Claims: Evidence from a Century of U.S. Patents (forthcoming) (with Bernhard Ganglmair and Michael Seeligson).

Listed on SSRN's Top Ten download list for ERPN: Patents (Sub-Topic) (June 2022), Environment for Innovation eJournal (June 2022), and ERN: Intellectual Property (Topic), IRPN: Innovation & Intellectual Property Law & Policy (Topic) (July 2022), and Innovation Areas eJournals (July 2022).

Invited Presenter, *Enabling Artificial Intelligence*, INSTITUTE FOR INTELLECTUAL PROPERTY & INFORMATION LAW 2022 NATIONAL CONFERENCE, University of Houston Law Center (June 11, 2022).

Invited Speaker, *Artificial Intelligence and Access to the Patent System*, ST. JOHN'S INTELLECTUAL PROPERTY LAW CENTER 2021 INTELLECTUAL PROPERTY COLLOQUIUM (February 22, 2021).

Invited Speaker, *Artificial Intelligence and Access to the Patent System*, CHICAGO-KENT AND LOYOLA INTELLECTUAL PROPERTY COLLOQUIUM (January 26, 2021).

Recipient of an Innovation, Business & Law Center Prize from the University of Iowa College of Law. Recipients of the Prize received \$1500 to develop and present a 30-minute live talk as part of a fall 2020 speaker series entitled "Examining Institutional Structures: Race, Business, and the Law."

Artificial Intelligence and Access to the Patent System, 21 Nevada L.J. 720 (2021).

Listed on SSRN's Top Ten download list for Engineering Educator: Courses, Cases & Teaching eJournal, InfoSciRN: Copyright & Intellectual Property (Topic), InfoSciRN: Other Artificial Intelligence (Sub-Topic), InfoSciRN: Other Copyright & Intellectual Property (Sub-Topic) and Materials Science Educator: Courses, Cases & Teaching eJournal. (May 2020).

Directed Research Student Awarded the 2019 Don M. Smart Directed Research Award

Awarded a Center for the Protection of Intellectual Property Thomas Edison Innovation Fellowship for 2018-2019

Appointed as a Faculty-in-Residence at Southern Methodist University in 2018

HONORS AND RECOGNITION, continued

2017-19 Altshuler Distinguished Teaching Professor Award Winner, Southern Methodist University

Emerging Technologies Challenging Current Legal Paradigms, 19 MINN. J. L. SCI. & TECH. 355 (2018) (invited symposium contribution).

Listed on SSRN's Top Ten download list for CompSciRN: Artificial Intelligence (September 2018) and Machine Learning (October 2018).

Patent Law Challenges for the Internet of Things, 15 WAKE FOREST J. BUS. & INTELL. PROP. L. 655 (2015) (invited symposium contribution)

Listed on SSRN's Top Ten download list for Management of Innovation (July-September 2015).

Recent Developments in Intellectual Property Law-A 2014 Retrospective, 31 SANTA CLARA H. TECH. L. J. 527 (2015) (with David O. Taylor).

Listed on SSRN's Top Ten download list for Copyright & Trademark and Intellectual Property (July-September 2015).

Economic Theory, Divided Infringement and Enforcing Interactive Patents, 67 FLORIDA L. REV. 1961 (2015).

Listed on SSRN's Top Ten download list for Firm Behavior; Transaction Costs; Property Rights (October 2014).

Identified as a Rising Scholar and Invited Speaker, NAPLES MIDWINTER PATENT LAW EXPERTS CONFERENCE, Naples, FL (February 11, 2014).

Article, *No "Direction" Home: An Alternative Approach to Joint Infringement*, 62 AM. U. L. REV. 59 (2012).

Cited by Judge Moore in <u>Akamai Technologies, Inc. v. Limelight Networks, Inc.</u>, 786 F.3d 899, at 918 (Fed. Cir. May 13, 2015).

Cited in the Supreme Court Brief for the Respondents in <u>Limelight Networks</u>, Inc. v. <u>Akamai Technologies</u>, Inc., 572 U.S. 915 (2014).

Selected as one of the best intellectual property articles of the year, and for inclusion in the 2013 edition of the *Intellectual Property Law Review*, an annual publication by Thomson Reuters (West), 2013.

HONORS AND RECOGNITION, continued

Article, *Ramifications of Joint Infringement Theory on Emerging Technology Patents*, 18 TEX. INTELL. PROP. L. J. 335 (2010).

Listed on SSRN's Top Ten download list for Innovation & Intellectual Property/Patent Law & Policy (June-July 2013).

Selected as one of the best patent law articles of the year and for inclusion in the 2011 edition of the *Patent Law Review*, an annual publication by Thomson Reuters (West), 2011.

Article, USPTO Issues Supplementary Examination Guidelines Explaining the Requirement for Clarity in Patent Claims, Science|Business, March 14, 2011 (with R.F. Henschel, partner Foley & Lardner LLP).

Listed on SSRN's Top Ten download list for Innovation & Industrial Organization (March-April, 2013).

Selected to participate in the 2016 SMU Emerging Leaders Seminar Series

Selected to participate in the 2015-2016 Law and Statistics Fellows Seminar sponsored by the SMU Dedman College Interdisciplinary Institute.

Summer Research Grant Recipient, SMU Dedman School of Law, 2011, 2012, 2013, 2014 & 2015, 2019, 2020.

UNIVERSITY SERVICE

Associate Dean for Research and Academic Programs, Wake Forest University School of Law (2023-Present)

Faculty Director for IP Technology, Business, and Innovation, Wake Forest University School of Law (2021 - Present)

Wake Forest University School of Law Committees: Appointments Committee (2024-25) Dean Search Committee (2022-23), Faculty Evaluation Committee (2021-22), Law School Programs and Innovative Education Committee Chair (2021-22)

Member, Wake Forest University Department Engineering Advisory Council (2022 – Present)

Co-Director, SMU Dedman School of Law Tsai Center for Law, Science and Innovation (2015-21)

SMU Faculty-in-Residence (2018-21)

Conference Co-Chair, Annual Symposium on Emerging Intellectual Property Issues (2014-21)

Participant, SMU Emerging Leaders Seminar Series (2016)

SMU Law and Statistics Fellow and Seminar Participant—sponsored by the SMU Dedman College Interdisciplinary Institute (2015-16)

SMU Dedman School of Law Committees: Admissions Committee Chair (2020-21), Diversity Issues Committee Chair (2020-21), Appointments Committee Chair (2018-19), Appointments Committee (2016-19), Graduate Committee (2017-18), Executive Committee (2015-17), Curriculum Committee (2015-16), Career Services Committee (2011-14)

Southern Methodist University Committees: Faculty Senate Student Policies Committee Chair (2020-21), SMU Community Action Network (2020-21), SMU's Entrepreneurship and Innovation Advisory Board (2017-21), Intellectual Property Committee (2014-21), All University Finance Committee (2016-19), Committee of Inquiry Assessing Evidence of Research Misconduct (2016)

One L Faculty Mentor (2012-14)

Conference Chair, 5th International Summit on the Law and Business of Video Games (2013)

Lecturer, SMU Dedman School of Law Annual Minority Pre-Law Symposium (2013-16)

Lecturer, SMU Dedman School of Law Pre-Law Scholars Program (2012-13)

PROFESSIONAL AFFILIATIONS

Member, American Law Institute (present)

Member, The Kara Farnandez Stoll American Inn of Court (present)

Member, MBE Real Property Drafting Committee, National Conference of Bar Examiners (present)

Member, Southeastern Association of Law Schools (SEALS) Scholarly Research Committee (2018-present)

Honorary Member, The Honorable Barbara M.G. Lynn Inn of Court (2016-2021)

Chairman, Science and Technology Law Section of the Dallas Bar Association (2017)

BAR ADMISSIONS

Admitted to practice in the Commonwealth of Virginia, the District of Columbia, and before the United States Patent and Trademark Office.