

About the Editors

Cynthia H. Cwik is currently a Distinguished Careers Institute Fellow at Stanford University. She is focusing on cutting-edge technology issues at Stanford, including cybersecurity, data protection and privacy, the digital economy, and artificial intelligence. She has practiced law at two global law firms, including serving five years as a partner with Jones Day and 15 years as a partner with Latham & Watkins. She has successfully represented major companies in complex, high-stakes, high-profile matters. She has experience with companies in various industries, including technology, energy, and manufacturing. She has been selected seven times as a California “Top Female Litigator,” and she has repeatedly been listed in Best Lawyers in America.

Ms. Cwik has been a leader with the American Bar Association (ABA) Section of Science & Technology Law, including serving as chair from 2015 to 2016. In 2016, under her leadership, the Section organized the first ABA National Institute on the Internet of Things.

She has served as a leader of several other organizations, including serving as president and chair of the Executive Committee of the Yale Law School Association. She has served on the board of directors for various organizations.

Ms. Cwik is a frequent lecturer and author about topics relating to science and technology. She has been a presenter at ABA Presidential Showcase programs regarding technology issues and at programs for the Association of General Counsel and the National Judicial College. While at Latham & Watkins, she served on the firm’s Equal Employment Opportunity Committee and Pro Bono Committee, and at Jones Day she served on the firm’s Recruiting Committee.

She received her BA from Yale College summa cum laude, Phi Beta Kappa, and her JD from Yale Law School. She was a judicial clerk for the Honorable Thomas Meskill on the Second Circuit Court of Appeals.

Christopher A. Suarez is a trial and appellate litigator at Williams & Connolly in Washington, D.C. He focuses generally on complex litigation, with an emphasis on technology, antitrust, and education matters.

Mr. Suarez's technology practice spans both electronics and the life sciences, and comprises intellectual property litigation, licensing, the Internet of Things (IoT), cybersecurity and privacy, and other technology issues. He has represented a wide range of clients in high technology industries, including leading manufacturers of smartphones, tablets, IoT devices, and semiconductors, as well as clients in the oil and gas sector. Mr. Suarez has handled IP and technology cases before several U.S. District Courts, the U.S. Court of Appeals for the Federal Circuit, and the Patent Trial and Appeal Board. He has participated in international arbitrations of patent disputes and is a registered practitioner before the U.S. Patent and Trademark Office (PTO).

Mr. Suarez is a member of the American Bar Association (ABA), the Federal Circuit Bar Association (FCBA), the American Intellectual Property Law Association, the Giles Rich American Inn of Court, and the PTAB Bar Association. Mr. Suarez was nationally recognized in the "ABA On the Rise—Top 40 Young Lawyer List" by the Young Lawyers Division. He is a Young Lawyer Fellow of the ABA Intellectual Property Law Section and serves as a committee leader in the FCBA.

Mr. Suarez is a 2011 graduate of Yale Law School, where he was active in the Information Society Project. After law school, he clerked for Judge Timothy Dyk of the U.S. Court of Appeals for the Federal Circuit and Judge Joan Gottschall of the U.S. District Court

for the Northern District of Illinois. He earned dual SB degrees in electrical engineering with computer science (EECS) and political science from the Massachusetts Institute of Technology (MIT).

Lucy L. Thomson is the founding principal of Livingston PLLC in Washington, D.C. She focuses her practice on cybersecurity, global data privacy, compliance, and risk management. Ms. Thomson assists companies and government clients nationally and internationally address complex challenges arising from new technologies and their implementations—the convergence of cyber and physical systems, industrial control systems, the Internet of Things (IoT), big data analytics and cloud computing, third-party vendor outsourcing, supply chain risk, vulnerable election systems, and digital crime.

Appointed Consumer Privacy Ombudsman in 25 federal bankruptcy cases, she evaluated the sale of “assets” consisting of sensitive personal information and has overseen the disposition of more than 250 million electronic consumer records. Her work on privacy risks in bankruptcy cases is featured in the *Norton Annual Survey of Bankruptcy Law*, 2017 edition.

Previously a senior engineer at CSC, a Fortune 200 technology company, she gained extensive hands-on experience conducting privacy and risk assessments and developing FISMA security plans on two of the government’s largest technology modernization projects. While at CSC, she was appointed an Information System Security Officer (ISSO). A career attorney at the U.S. Department of Justice, she managed and conducted complex litigation in the Criminal and Civil Rights Divisions. She is a member of the American Law Institute (ALI).

Ms. Thomson served as chair of the ABA Section of Science & Technology Law and is a member of the House of Delegates and the Cybersecurity Legal Task Force. She is editor of the *Data Breach and Encryption Handbook*, and a contributing author to the

ABA Cybersecurity Handbook (2d ed.) and *Homeland Security and Emergency Management* (3d ed.).

Ms. Thomson received a master's degree from Rensselaer Polytechnic Institute (RPI) in 2001, earned the CISSP and CIPP/US certifications, and holds a JD degree from Georgetown University Law Center.

About the Authors

Aida Joaquin Acosta is a senior public official and an affiliate at Harvard University's Berkman Klein Center. She has more than ten years of experience advising on European regulatory and policy issues at the intersection of law, emerging technologies, and public policy. She has worked at the European Commission and the Ministries of Public Administration, Presidency, and Transport and Infrastructure of the Spanish Government.

She has been a Fulbright scholar at the University of Washington and a fellow at the Berkman Klein Center. As a Fulbright scholar, she obtained an LLM focused on robotics law and developed a methodology to help reduce uncertainty on emerging technologies, receiving an Academic Excellence Award. Her educational background includes a degree in computer engineering focused on artificial intelligence (AI) and robotics, and a law degree focused on international law.

At Harvard, Ms. Acosta researches the ethics and governance of AI and the impact of emerging technologies such as AI, autonomous vehicles (AV), and the Internet of Things in law, public policy, and society. She has developed a series of policy papers for regulators and policy makers to help them govern AV, and written for the American Bar Association and the China Computer Federation (CCF). She is part of the Ethics and Governance of AI Initiative of the Berkman Klein Center and MIT Media Lab. Ms. Acosta is interested in developing practical tools for regulators and policy makers to help them govern emerging technologies such as AI and promote innovations for the benefit of society.

Michael Aisenberg is principal cyber policy counsel at The MITRE Corp. His work involves support on legal and policy

issues in a wide range of technology matters at agencies of the federal national security and intelligence communities. In 2015, he was appointed Senior Fellow at the George Washington University Center for Cyber & Homeland Security, and in 2018, he was named a fellow of the Institute for Critical Infrastructure Technology (ICIT).

Since 2015, Mr. Aisenberg has been serving his second term as chair of the ABA Section of Science & Technology Law (SciTech) Information Security Committee. He is a past chair of the U.S. IT Sector Coordinating Council (IT SCC), a member of the Industry Executive Subcommittee of the President's National Security Telecommunications Advisory Committee (NSTAC), the State Department Advisory Committee on International Telecom Policy, and board member of the IT-ISAC on behalf of both Digital Equipment Corp. and VeriSign, Inc. He serves on the ABA SciTech Editorial Board and is assistant editor of *The Sci/Tech Lawyer*. From 2000 to 2007, Mr. Aisenberg was director of Corporate Government and International Relations for VeriSign. From 1981 to 1997, he served as Digital Equipment Corporation's director of Corporate Government Relations. His work in technology policy began as an attorney in the Office of Legislative Counsel, Federal Communications Commission (1976–81). He holds a JD from the University of Maine School of Law (1976); his undergraduate degree is from the University of Pennsylvania (BA 1973).

Ruth Hill Bro (Chicago) has focused her legal career on advising businesses on privacy and information management strategy, cybersecurity, global compliance, e-workplace, and e-business issues. She has been featured as a speaker over 170 times and has over 95 published works on these topics (including two chapters in the 2018 *ABA Cybersecurity Handbook*, ambar.org/cybersecurity).

In the American Bar Association (ABA), Ms. Bro co-chairs the Cybersecurity Legal Task Force (ambar.org/cyber) and serves on the

E-Mail Stakeholder Committee. In the Section of Science & Technology Law (SciTech), she was SciTech's 2008–09 Section chair, and currently serves as senior advisor for the Privacy, Security, and Emerging Technology Division, liaison to the Commission on Women in the Profession, and on the planning committee for the ABA Internet of Things (IoT) National Institutes (2015–19). She was Membership and Diversity Committee chair (2009–16), and E-Privacy Law Committee founder/chair (2000–05). Ms. Bro served on the Standing Committees on Technology and Information Systems (2009–12; 2012–15 as chair), Continuing Legal Education (2012–15, as liaison), Disaster Response and Preparedness (2016–17), and the Commission on the Future of Legal Services (2014–16) and the Board of Governors Communications Task Force (2017).

After earning a BA degree (and seven years as a major-gifts fundraiser) at Northwestern and a JD degree at the University of Chicago, Ms. Bro started her legal career at McBride Baker & Coles (now Holland & Knight) and spent nearly a decade at Baker & McKenzie (Chicago office partner; founding North American member of the Global Privacy Steering Committee).

John Buchanan of Covington & Burling LLP in Washington, D.C., has represented insurance policyholders for over three decades. He contributed to one of the earliest publications on cyber insurance in 2001. Starting with the TJX network intrusion in 2006, he has represented multiple policyholders seeking coverage for historically major data breaches. He also advises policyholders in purchasing coverage for cyber- and IoT-related risks.

Mr. Buchanan teaches a graduate course on Insurance Litigation at the University of Connecticut Law School's Insurance Law Center. He speaks and writes frequently on topics related to insurance, litigation and alternative dispute resolution, including insurance issues arising from the Internet of Things, artificial intelligence, autonomous vehicles, blockchain, drones, and spoofing fraud.

He has been an advisor to the American Law Institute's *Restatement of the Law of Liability Insurance* and serves on the members' consultative group for ALI's Compliance, Enforcement, and Risk Management Principles project. Among other bar activities, he co-chairs the Cyber Risks and Data Privacy Subcommittee of the ABA Litigation Section's Insurance Coverage Litigation Committee, as well as the Cyber & Computer Crime Committee of the American College of Coverage Counsel, of which he is an elected fellow.

Mr. Buchanan is a graduate of Princeton, Oxford, and Harvard Law School; he clerked on the Third Circuit before joining Covington. *Chambers USA* ranks him Band 1, both in D.C. and nationally; Best Lawyers has named him DC Lawyer of the Year for Insurance; and he appears in *Best of the Best USA* and other peer-reviewed lawyer listings.

Katherine Campbell is a Senior Assistant Attorney General at the Oregon Department of Justice, where she enforces Oregon's consumer protection laws. As part of her consumer protection work, Ms. Campbell handles data privacy matters on various subjects. Ms. Campbell also regularly informs businesses and organizations about their duty to provide reasonable security for Oregonians' data. Prior to joining the Oregon Department of Justice, she worked at the Federal Trade Commission in the Bureau of Consumer Protection. Ms. Campbell holds a JD degree from Northeastern University School of Law, an MPH from Tufts University School of Medicine, and a BA from Lewis and Clark College.

Michael Chertoff was Secretary of the U.S. Department of Homeland Security (DHS) from 2005 to 2009, where he led the country in blocking would-be terrorists from crossing our borders or implementing their plans if they were already in the country. He also transformed FEMA into an effective organization following

Hurricane Katrina. His greatest successes have earned few headlines—because the important news is what didn't happen.

At Chertoff Group, Mr. Chertoff provides high-level strategic counsel to corporate and government leaders on a broad range of security issues, from risk identification and prevention to preparedness, response, and recovery. “Risk management has become the CEO’s concern,” he says. “We help our clients develop comprehensive strategies to manage risk without building barriers that get in the way of carrying on their business.”

Before heading DHS, Mr. Chertoff served as a federal judge on the U.S. Court of Appeals for the Third Circuit. Earlier, during more than a decade as a federal prosecutor, he investigated and prosecuted cases of political corruption, organized crime, corporate fraud and terrorism—including the investigation of the 9/11 terrorist attacks.

Mr. Chertoff is a magna cum laude graduate of Harvard College (1975) and Harvard Law School (1978). From 1979 to 1980 he served as a clerk to Supreme Court Justice William Brennan, Jr. In addition to his role at Chertoff Group, Mr. Chertoff is also senior of counsel at Covington & Burling LLP and a member of the firm’s White Collar Defense and Investigations practice group.

Dustin Cho of Covington & Burling LLP in Washington, D.C., is a litigator who focuses on representing policyholders in coverage disputes with their insurers. He has helped policyholders recover more than \$100 million in insurance for a wide variety of claims, including data security breaches. He frequently advises on disputes that intersect with technology, from spectrum interference disputes to property rights in video games.

Mr. Cho received a BA and MA from Yale University in 2008 and a JD from Harvard Law School in 2011. At Harvard, he chaired the articles committee of the *Harvard Law Review* and was a finalist in the Ames Moot Court Competition. He served as a law clerk

for Judge Debra Ann Livingston of the U.S. Court of Appeals for the Second Circuit from 2011 to 2012.

Jodi Daniel is a partner in Crowell & Moring's Health Care Group and a director at C&M International (CMI), an international policy consulting affiliate. She leads the firm's Digital Health Practice and provides strategic, legal, and policy advice to health care and technology clients navigating the dynamic regulatory environment to help them achieve their business goals.

Prior to joining Crowell & Moring, Ms. Daniel was the founding director of the Office of Policy in the Office of the National Coordinator for Health Information Technology (ONC), U.S. Department of Health and Human Services (HHS), where she led the agency's federal advisory committees, building consensus on health IT standards and policy, and established national health IT policy on privacy, security, consumer e-health, and health IT safety and oversight. Ms. Daniel established ONC's regulatory capacity, led the development of health IT standards and certification regulations, and advised CMS on health IT incentive programs.

At HHS's Office of General Counsel, Ms. Daniel was a key drafter of the original HIPAA Privacy and Enforcement Rules. She served as the first senior counsel for health IT at HHS, where she developed the foundational legal strategies, established and chaired the health IT practice group within OGC, and worked closely with CMS in the development of e-prescribing regulations and related Stark and anti-kickback rules.

Ms. Daniel received her BA in economics and community health from Tufts University, her master's degree in Public Health from Johns Hopkins School of Public Health, and her JD from Georgetown University Law Center.

Peter Gillespie is a partner with Laner Muchin, Ltd. in Chicago, one of the oldest and most highly regarded law firms in the country

dedicated exclusively to the practice of labor and employment law. He represents and counsels management on a wide array of employment law-related issues, including workplace safety and health, wage and hour laws, covenants not to compete, discrimination and harassment, wrongful discharge, whistleblower claims, class actions, hiring, discipline, promotion and dismissal decision making, workplace privacy, and statutory compliance.

Mr. Gillespie handles litigation in both federal and state courts, as well as claims pending with state and federal agencies, including the Occupational Safety and Health Administration (OSHA), the Equal Employment Opportunity Commission (EEOC), the U.S. Department of Labor (DOL), the Illinois Department of Human Rights (IDHR), and the Illinois Department of Labor (IDOL). He is the author of the *Illinois Human Resources Manual* and has served in a number of leadership capacities within the ABA Section of Science & Technology Law. Mr. Gillespie received a BA from Northwestern University, where he attended as a Chick Evans Scholar, and received his JD from Georgetown University Law Center.

Melissa Goldman is an associate at Baker Donelson in the Fort Lauderdale office, advising clients on health care regulatory compliance with particular attention to telehealth, digital health, and health care technology. Ms. Goldman anticipates potential issues, providing practical and strategic counsel to health care providers and technology companies on innovative relationships, business models, and reimbursement opportunities that address regulatory requirements while effectively and efficiently meeting clients' business objectives. She is also a member of the Government Enforcement and Investigations Practice.

As former associate general counsel and interim Chief Compliance Officer at one of the United States' largest telehealth companies, Ms. Goldman has a depth of experience advising on a broad range of health care technology issues, including federal

and state fraud and abuse issues, federal and state privacy and security issues, Medicare, Medicaid and third-party billing and compliance requirements, state licensure, credentialing and accreditation matters, and structuring arrangements with third parties (such arrangements include billing, management, consulting, vendor, and provider services; managed care contracts; credentialing delegations; and technology licensing).

Cheryl Hiemstra is the Deputy Legislative Director and an Assistant Attorney General at the Oregon Department of Justice. She develops policy at the state level on consumer protection, data security, and privacy. She also works on consumer protection cases, enforcing the Oregon Unlawful Trade Practices Act. Ms. Hiemstra earned a BA from Dordt College and a JD from Willamette University College of Law.

Matthew Henshon is a founding partner of Henshon Klein. His practice encompasses a wide range of issues affecting corporations, including governance, intellectual property and technology licensing, and mergers and acquisitions. His experience includes representation of all sides of the privately held, emerging company: founders, investors, and employees.

During 1999–2000, he served as special assistant and senior advisor to Senator Bill Bradley. During Senator Bradley’s presidential campaign, Mr. Henshon served as “traveling chief-of-staff.” He has written multiple law- and business-related articles in legal and business publications, and his political analysis has appeared on the *New York Times* op-ed page.

Mr. Henshon is a leader with the ABA Section of Science & Technology Law, and since 2007 he has served as chair of the Artificial Intelligence and Robotics Committee.

For the four years preceding the Bradley Campaign, Mr. Henshon worked at the Boston law firm of Hill & Barlow, P.C.

Mr. Henshon graduated from Princeton University in 1991 with an AB cum laude from its Wilson School of Public and International Affairs. He graduated from Harvard Law School cum laude in 1995. While at Princeton, he was a starter at forward for Princeton's Ivy League champion basketball team (ranked Top 25 in the country). In 1990, he played in the then-most-watched men's college basketball game in the history of ESPN (Princeton vs. Arkansas, NCAA First Round), a record that lasted for 16 years. He was recently featured in an ESPN 30-for-30 Short entitled "The Billion Dollar Game," about the 1989 Princeton–Georgetown tournament game.

Adam Isles is a principal at the Chertoff Group, where he helps clients build programs to manage security risk. Mr. Isles works with Fortune 500 clients in financial services, technology, electric utilities, retail, consumer packaged goods, transportation, and other sectors. He led the process for obtaining DHS SAFETY Act approval for the Chertoff Group's Security Risk Management Methodology. Prior to joining the Chertoff Group, Mr. Isles worked at Raytheon Company where he was the director of Strategy and Policy Consulting for Homeland Security. He is a certified Raytheon Six Sigma specialist.

Previously, Mr. Isles served as deputy chief of staff at the U.S. Department of Homeland Security (DHS) (2007–09). Before joining DHS, Mr. Isles served at the U.S. Department of Justice, where he began his legal career as a trial attorney in the Criminal Division in 1997. Among other roles, he served as counsel to the Assistant Attorney General, Criminal Division, from 2004–2005. He was detailed to the National Security Council staff from 2002 to 2003 to help manage multilateral security policy and served as secretary of the G-8 High Tech Crime Experts Group from 1998 to 2001.

Mr. Isles holds a JD from Harvard Law School and a BA in history from Yale University. He is a Certified Information Systems Security Professional (CISSP).

Thomas Jarvis is chair of the ITC practice at Winston & Strawn LLP in Washington, D.C. He litigates patent and other unfair competition cases at the U.S. International Trade Commission (ITC). Mr. Jarvis has a top-tier rating for his ITC representation of an “array of technology sector clients” (Chambers USA), including designers and manufacturers of telecommunications equipment, smartphones, microprocessors, digital signal processors, memory devices, networking equipment, semiconductor fabrication processes and packaging, and various operating systems and application software. His cases extend to diverse technologies such as medical devices, industrial equipment, design automation tools, alkaline batteries, and a variety of consumer products.

At Winston, Mr. Jarvis has led two Ericsson ITC cases against Apple that included a trial resulting in a settlement, two Taiwanese semiconductor company cases against Spansion that settled favorably after trial in the ITC, and defended Ericsson in the ITC against Adaptix/Acacia. Previously, Mr. Jarvis led the defense of Research In Motion (BlackBerry) that invalidated a Kodak patent. He also led multiple HTC, S3 Graphics, and VIA Technologies cases through trial against Apple.

Mr. Jarvis was a senior investigative attorney at the ITC where he litigated patent cases for ten years in the Office of Unfair Import Investigations. He is former president of the ITC Trial Lawyers Association and former chairman of ABA Subcommittee on ITC Practice. Mr. Jarvis received his BA in chemistry and communications from the University of North Carolina, Chapel Hill (1978) and his JD from the University of North Carolina Law School (1985).

Richard Johnson is a partner at Jones Day and a former federal prosecutor with over 15 years of government and law firm experience in litigation, investigations, and regulatory compliance. Having previously tried a number of cases to juries in federal court, Mr. Johnson represents companies facing complex litigation and

advises on regulatory compliance measures, with an emphasis on data privacy, cybersecurity, and white collar issues. He also co-founded and serves as lead partner editor of Jones Day's *Global Privacy & Cybersecurity Update*, a regular publication produced by a 30-attorney team.

Prior to joining Jones Day, Mr. Johnson was an Assistant U.S. Attorney in the Eastern District of Texas and the district-wide coordinator for computer hacking and intellectual property issues. In that capacity, he guided the district's preparation for and response to cyber and IP crime and counseled prosecutors on collecting electronic evidence. He also led numerous trial and investigations teams involving fraud, identity theft, and other federal crimes. He received the Justice Department Director's Award for Superior Performance as lead trial counsel in the prosecution of a large-scale mortgage fraud scheme.

Mr. Johnson is an adjunct faculty member of the SMU Dedman School of Law where he teaches data privacy and cybersecurity. He also serves on the Leadership Council of the ABA Section of Science & Technology Law and is vice chair of the board of directors for the Boys & Girls Clubs of Greater Dallas.

Laura Kim of Covington & Burling LLP in Washington, D.C., is vice chair of the firm's Advertising and Consumer Protection Practice Group and a member of the Internet of Things (IoT) Initiative. Ms. Kim rejoined Covington after a 12-year tenure at the FTC, where she served as assistant director in two divisions of the Bureau of Consumer Protection (BCP), as well as BCP chief of staff.

Jennifer Johnson, co-chair of Covington's IoT initiative, represents and advises content distributors, broadcast companies, trade associations, and other media and technology entities on a wide range of issues. On IoT issues, she collaborates with Covington's

global, multidisciplinary team to assist companies navigating the complex legal and regulatory constructs surrounding this evolving area.

Covington builds strong cross-disciplinary teams that create comprehensive legal solutions for the firm's clients' IoT issues such as product safety, including autonomous vehicles; privacy and cybersecurity; procurement; connectivity and spectrum; banking; the electricity grid; Federal Aviation Administration regulation and drones; and state regulation of the IoT.

Laura Kim and **Jennifer Johnson** led the effort to prepare Chapter 6, which includes contributions from **Sarah Wilson** and **Brandon Johnson** (product safety); **Wade Ackerman**, **Elizabeth Guo**, **Christopher Hanson**, and **Christina Kuhn** (medical device regulation); **Laura Kim** and **Lindsay Brewer** (privacy and cybersecurity); **Susan Cassidy** (procurement); **Matthew DelNero** and **Thom Parisi** (connectivity and spectrum); **Michael Nonaka** (financial services regulation); **Jack Schenendorf** (drones); **Mark Perlis** (energy); and **Jake Levine** (state regulatory trends).

Richard Martinez is a partner with Jones Day and a member of the firm's Cybersecurity, Privacy, and Data Protection practice. He focuses on all aspects of technology-related licensing, compliance, and litigation. Mr. Martinez has extensive U.S. and global experience in cybersecurity, data privacy, information law, and intellectual property. He represents clients in complex privacy and cybersecurity matters, including disputes relating to the ownership of data. Mr. Martinez also represents clients in ensuing investigations, enforcement actions, and litigation by state attorney generals, federal regulators, and private litigants. He provides practical, seasoned advice to in-house counsel, executives, and directors.

Rob Maier is an intellectual property and patent trial lawyer at Baker Botts. Recognized for his depth of skills and experience

in all phases of litigation, Mr. Maier regularly handles Markman hearings and complex patent trial work in high profile disputes.

His practice also extends beyond litigation into patent preparation and prosecution, counseling on IP and big data issues, licensing, IP asset evaluation, and due diligence in connection with mergers and acquisitions. Multinational clients involved in patent disputes and other matters across a broad spectrum of technologies, from smartphones and display technologies to drink packaging and stem cells, rely on Mr. Maier's extensive experience. He has been recognized as a New York Super Lawyer—Rising Star by Thomas Reuters, as a Rising Star by the *New York Law Journal*, recommended in *The Legal 500 U.S.*, and recognized by Intellectual Asset Management's IAM Patent 1000 as one of The World's Leading Patent Practitioners.

Mr. Maier is also the bi-monthly patent and trademark columnist for the *New York Law Journal*, where he writes on current hot topics in IP law. From 2012 to 2017, Mr. Maier taught patent litigation as an adjunct associate professor of law at Brooklyn Law School.

Mr. Maier received his BS degree from George Washington University in computer engineering, and his JD from Fordham University School of Law. After earning his undergraduate degree, Mr. Maier worked as a software engineer at a mobile telecom company, where he was responsible for the design and implementation of test systems.

Joseph Masullo of Winston & Strawn LLP in Washington, D.C., focuses his practice on patent litigation in federal district courts as well as in section 337 proceedings before the U.S. International Trade Commission (ITC). He uses his technical background to provide technical analysis on patent litigations, and he also works closely with technical expert witnesses to develop infringement and invalidity positions.

Mr. Masullo's patent experience involves a range of technologies, including semiconductor devices, medical devices,

electronics, telematics devices, processors and memory devices, mobile devices, authentication systems, computer software and algorithms, and computer systems generally. He has worked for a variety of companies on complex litigation matters in the automotive, cable, telecommunications, semiconductor, and medical device industries. He has also worked on matters before the PTO, including challenges and defenses to patent validity based on inter parties review petitions.

Mr. Masullo received his BA in economics from New York University in 2003 and an MS in computer science in 2009 from the George Washington University School of Engineering and Applied Science. He received his JD from George Washington University Law School in 2009. During law school, he interned at the U.S. Department of Justice, Civil Rights Division and the New York City Law Department Summer Honors Program.

Mauricio Paez is a partner with Jones Day and a member of the firm's Cybersecurity, Privacy, and Data Protection practice. He has over 20 years of experience advising companies on legal issues with digital transformations, space-based data services, global e-commerce, digital marketing, data protection and privacy, cybersecurity, cyber governance, and global technology sourcing transactions.

His clients are in a variety of industries such as Internet, technology, retail, financial services, health care, utilities, automotive, aviation, satellite, manufacturing, communications, and marketing. He is a leading attorney in emerging technology legal issues, and advises clients on industrial internet applications, consumer and industrial IoT, cloud services, big data, artificial intelligence and cognitive, autonomous machines, space-based data services, global privacy, cybersecurity breach response and investigations, and related global compliance.

Mr. Paez has represented some of the world's leading companies to develop and implement worldwide digital strategies,

compliance programs to address new legal risks, safeguarding digital assets, cross-border transfers of data, and cybersecurity oversight and management. He also supports technology commercial and corporate transactions, such as mergers and acquisitions.

His clients have included Abbott Laboratories, Adobe, Aireon, Apple, Bunge, Cardinal Health, Chevron, Citgo, Cooper Tire, Experian, General Electric, General Motors, Goldman Sachs, Google, Groupon, Iridium Satellite, Nokia, SAP, The Internet Corporation of Assigned Names and Numbers, and other leading institutions.

Mr. Paez is an author and a frequent speaker and was recognized as a leading cybersecurity and privacy lawyer by Legal500. He was also named a Cybersecurity & Data Privacy Trailblazer by the *National Law Journal*.

Jill Rhodes is vice president and chief information security officer (CISO) for Option Care Enterprises, Ltd, a national health care company based in Chicago.

Prior to joining the private sector, Ms. Rhodes spent more than 20 years working in and with the federal government, including the Office of the Director of National Intelligence, Central Intelligence Agency, Department of Homeland Security, and the Department of Defense. She was a foreign service officer with the State Department, stationed in Bolivia and Russia.

Ms. Rhodes has written, published, and spoken on information security and national security law topics. Most recently, she was co-editor of *The ABA Cybersecurity Handbook: A Resource for Attorneys, Law Firms, and Business Professionals* (2018, 2d ed). She also co-edited the first edition (2013) and edited the book *National Security Law, Fifty Years of Transformation: An Anthology* (2012), sponsored by the ABA Standing Committee on Law and National Security.

Ms. Rhodes is a graduate of the University of Illinois at Urbana-Champaign, the University of Cincinnati College of Law (JD), and

the George Washington University College of Law (LLM). She is a certified information security manager (CISM), certified information privacy professional/IT (CIPP/IT), and a certified project management professional (PMP).

Ellen Rosenblum A former federal prosecutor and state trial and appellate judge, Ellen Rosenblum was first elected to a four-year term as Oregon's 17th Attorney General in 2012 and was re-elected to a second term in November 2016. She is the first woman to serve as Oregon Attorney General.

Attorney General Rosenblum has been active in local and national organizations of lawyers, judges, and attorneys in general. She has served on the Executive Committee of the National Association of Attorneys General (NAAG) and she is a past chair of the Conference of Western Attorneys General. She served as secretary of the American Bar Association and as chair of the ABA Section of State & Local Government Law.

Ashley Southerland is counsel in the Washington, D.C., office of Crowell & Moring where she practices in the firm's Health Care group and is a member of the Digital Health Practice. Ms. Southerland advises health care clients on matters involving digital health and health information technology (health IT), health care regulatory compliance investigations, and litigation risk management.

In her digital health practice, Ms. Southerland provides strategic, policy, and regulatory advice to a range of organizations, including hospital systems, plans, health care consortiums, start-up companies, and large technology companies. Her digital health practice spans several areas, including interoperability and information blocking compliance, telehealth, health IT reimbursement, health IT vendor contracting, e-prescribing and prescription drug monitoring program (PDMP) compliance, FDA safety (software as a medical device and IoT), HIPAA compliance, and emerging

technologies in health care (artificial intelligence, blockchain, and 3-D printing). Ms. Southerland's work on blockchain and health care has been published in Bloomberg BNA's Health IT Law & Industry Report and spotlighted in FierceHealthcare.

Before joining Crowell & Moring, Ms. Southerland served as a law clerk to the Honorable Charles Wilson of the U.S. Court of Appeals for the Eleventh Circuit. Immediately prior, she served as a law clerk to the Honorable Jillyn Schulze, Magistrate Judge of the U.S. District Court for the District of Maryland.

Ms. Southerland received her JD from Cornell Law School and her AB in sociology, with distinction in the major, from Duke University.

Brian Subirana is director of the MIT Auto-ID lab and also teaches at Harvard University. His Harvard class on artificial intelligence (AI) is the first MIT-run nonresidential online class to offer academic credit. His MIT Sloan class was the first course to offer a recorded lecture on MIT open courseware. Before becoming an academic, he worked at The Boston Consulting Group.

His research centers on the Internet of Things and AI (blockchain, electric vehicles, supply chain) and on developing a Mathematical Theory for Deep Learning with Forgetting (Conversational Commerce and Digital Learning).

Professor Subirana obtained his PhD in computer science at the MIT Artificial Intelligence Laboratory (now CSAIL) and his MBA at the MIT Sloan School of Management. He has founded three start-ups and has been affiliated with MIT for over 20 years in various capacities, including visiting professor at the MIT Sloan School.

Kerianne Tobitsch is an attorney at Jones Day and focuses her practice on data privacy, cybersecurity, and complex commercial litigation and transactions for institutional clients in the financial

services, technology, consumer reporting, and health care sectors. She advises clients on U.S. and international data privacy and cybersecurity compliance and governance issues, data use, management of digital assets, technology transactions, cross-border data transfer arrangements, and cybersecurity incident response. Ms. Tobitsch helps clients develop and implement strategies and compliance programs to address legal and operational issues for emerging technologies, including the consumer and industrial Internet of Things, connected vehicles, drones, and big data.

Ms. Tobitsch is editor in chief of Jones Day's *Global Privacy & Cybersecurity Update*, a bimonthly publication produced by a global 30-attorney team. She received her JD from Columbia Law School and a bachelor's degree from Northwestern University.

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Ms. Uppaluru has a track record of helping technologists successfully navigate complex regulations to achieve their design and product goals. She worked directly with engineers, data scientists, designers, and product managers on the launch of the All of Us Research Program at the National Institutes of Health. She also worked with the Centers for Medicare and Medicaid Services (CMS) to improve data sharing with physicians participating in the Quality Payment Program, and transition Medicare from

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In 2003, Mr. Whitley was appointed by President George W. Bush as the first General Counsel of the U.S. Department of Homeland Security (DHS), the highest-ranking legal official at DHS. He held that position for two years, working for DHS Secretaries Tom Ridge and Michael Chertoff, before returning to private practice.

Mr. Whitley has had a wide-ranging career in the Department of Justice (DOJ). During the Ronald Reagan and George H.W. Bush administrations, he served as acting Associate Attorney General, the third-ranking position at Main Justice. He was appointed by Presidents Reagan and Bush, respectively, to serve as the U.S. Attorney in the Middle and Northern Districts of Georgia. Throughout his career, Mr. Whitley has served under five U.S. attorneys general and four presidents in a number of key operational and policy positions. Earlier in his career, Mr. Whitley served as an assistant district attorney in the Chattahoochee Judicial Circuit in Columbus, Georgia. Mr. Whitley maintains strong professional relationships with the state and federal law enforcement community.

Stephen Wu is a shareholder with Silicon Valley Law Group in San Jose, California. He advises clients on compliance, liability,

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Mr. Wu served as the 2010–11 chair of the ABA Section of Science & Technology Law (SciTech). In 2007, he helped found the Section’s Artificial Intelligence and Robotics Committee. He later helped create section committees on the Internet of Things and big data. From 2001 to 2004, he was co-chair of the section’s Information Security Committee.

Mr. Wu graduated from Harvard Law School in 1988 and was VeriSign’s second in-house attorney. Before VeriSign, he practiced with two international law firms in the areas of product liability, intellectual property, commercial and general litigation, as well as technology licensing and transactions. Mr. Wu has written books and made frequent presentations on artificial intelligence, robotics, Internet of Things, big data, and information security at numerous continuing legal education programs and AI, robotics, and information security industry conferences.

The ABA Section of Science & Technology Law published his seventh book, *A Guide to HIPAA Security and the Law*, second edition, in 2016.