**PRIVACY, SECURITY, & EMERGING TECHNOLOGY DIVISION**

**Big Data**
“Big data” is a term used colloquially to identify the challenges created by the exponential increases in electronic data that occurs in very short periods of time. Big data is more technically defined as data of sufficient volume or complexity that exceeds the capability of conventional software, hardware or methodology to process or analyze it in conventional ways. To help meet the challenges, a multi-disciplinary area of study called “data analytics” is used to pick up where conventional types of data analysis leave off. Data analytics is composed of many verticals, and each vertical includes tools derived from well-tested scientific methods and technologies.

For the legal profession to squarely address the challenges posed by big data, legal professionals must understand the uses and best practices of analytics, not only within subject-matter and analytic verticals, but across each of these verticals as well.

**Cloud Computing**
The Internet Relationships and Cloud Computing Committee addresses (i) web-based communities, social-networking, and blogs on the Internet; and (ii) cloud computing, the newest paradigm to virtualize and distribute interoperable, collaborative information services on the Internet.

**E-Filing**
This committee considers the improved efficiencies and privacy implications occasioned by the use of electronic processes to enable information transfers between private persons or entities and public repositories, whether they are conducted to facilitate official decision-making, to establish personal jurisdiction over corporations and registered agents, or to effectuate significant commercial and private transactions. The current focus of the committee is upon court and administrative filings in state and federal proceedings, electronic voting, authentication and identification of persons and official roles, including electronic notarizations of electronic documents, and tamper-evident protective seals to protect official electronic data from unauthorized modifications. Articulation of best technology practices can assist in a review and meaningful revision of official policies, statutes and rules, and the development of interoperable standards to achieve compatibility in technology solutions across jurisdictional boundaries.

**E-Privacy Law**
This committee is a forum for sharing information concerning cutting-edge legal developments with respect to information privacy, both domestically and globally. It provides opportunities for networking with colleagues in the same field, discussing a wide range of privacy issues, commenting on developing practices and guidelines regarding privacy, participating in the development of publications, taking positions on policy issues. The Committee features a listserv, offers periodic meetings, teleconferences and publications.

**Homeland Security**
This committee focuses on legal and policy issues related to the role of science and technology in the nation's homeland security efforts. The committee tackles issues surrounding the development and utilization of innovative and emerging technologies as solutions for securing the homeland, and related legislation and scientific and technological resources for protecting the homeland.
Information Security
This Committee is comprised of a diverse group of lawyers, security experts, technologists, auditors and other professionals, whose focus includes the examination and analysis of legal, business, and technical aspects of securing the confidentiality, integrity and availability of information.

The ISC has been the focal point of diverse secure electronic commerce law initiatives since 1992, and its body of published work includes globally influential documents relating to electronic authentication, digital signatures, and public key infrastructures. The ISC’s list serve is recognized as a leading on-line forum for the robust debate on the spectrum of views from its members and other SMEs on these emerging issues of law and policy in the network infrastructure security arena.

Insurance Technology & Risk
The Insurance Technology Committee has a dual focus on the role of insurance in technology innovations, and the role of technology innovations in insurance. As technologies continue to develop and transform business and society, and law as well, insurance and other methods of managing risk provide the underpinnings that support and encourage innovation. Through the insurance application and underwriting process, insurers also can help ensure the implementation of best practices that will help manage risk. Seen in this way, insurance and risk management are key components of the innovation process.

In addition, insurers increasingly are SciTech innovators in their own right. The "insurtech" movement represents an increasing realization that the future of insurance will be tied to technology advances, including, for instance, use of innovative delivery platforms, use of AI in modeling and underwriting, and implementation of blockchain and similar technologies in data flow for insurance and reinsurance transactions. Customer experience, insurance and reinsurance contracting and back-office functions in the insurance industry all will be transformed with new technology.

The Insurance Technology Committee serves as a forum for ABA Science and Technology Section members who are interested in these topics to exchange ideas and learn about advances in the field.

Internet of Things
The Internet of Things (IoT) is the interconnection of uniquely identifiable embedded computing devices within the existing Internet infrastructure. Typically, IoT is expected to offer advanced connectivity of devices, systems, and services that goes beyond machine-to-machine communications (M2M) and covers a variety of protocols, domains, and applications. The interconnection of these embedded devices (including smart objects), is expected to usher in automation in nearly all fields, while also enabling advanced applications like a Smart Grid. The Federal Trade Commission estimates that more than 25 billion connected devices and objects are expected to be online by 2020.

This Internet of Things Committee (IoT) addresses emerging legal issues raised by the proliferation of these devices and objects. Our committee invites both lawyers and non-lawyers (e.g., technologists, etc.) to join and take part in this exciting new area. The section has hosted an annual Internet of Things National Institute each spring in Washington D.C., since 2016.
Open Source Software
This committee identifies and analyzes the legal issues raised by commercial development and distribution of products using software and tools licensed under an Open Source model. In particular, the committee serves as a neutral forum for discussion and interpretation of many of the principal variations in open source licenses and potential legal effects of attempting to enforce the terms of these licenses. The Committee also concentrates on producing written resource materials to remedy a notable lack of existing authoritative resources discussing legal issues unique to open source software projects.

Privacy and Computer Crime
This committee focuses on privacy, cybercrime and cybersecurity issues. Its work is international in scope. The committee takes a multidisciplinary approach to a broad range of issues and participants in project work including attorneys, technical experts, academia, government personnel, non-profit organizations, and representatives from industry and standards bodies around the globe. The committee encourages public-private cooperation in its work and has personnel from many participating organizations working on its projects. The Committee worked with participants from over 15 countries to produce the ITU Toolkit for Cybercrime Legislation which is intended to serve as sample legislation for countries around to globe and promote a harmonized global framework for cybercrime. The committee also has authored seven books. The committee has held numerous continuing legal education and outreach programs regarding the nexus between privacy, security, and cybercrime and the development of enterprise security programs that integrate technical, legal, managerial, and organizational considerations surrounding these three issues. The Committee interacts with leading associations, academia, government entities, and non-profit organizations to promote sound principles and best practices toward privacy, security, and cybercrime.

LIFE SCIENCES DIVISION

Behavioral and Neuroscience Law
This committee addresses the full range of legal issues that concern psychiatry, psychology, and related behavioral sciences. A particular emphasis has included the "jurisprudent science" approach to psycho-legal analysis, in which mental health science, mental health practice, and mental health roles are explored in terms of their contributions to principles of justice in both criminal and civil contexts.

Biotechnology, Healthcare Technology, and Medical Devices
The Biotechnology, Healthcare Technology and Medical Devices Committee addresses the full array of legal, public policy, and ethical issues at the forefront of the fields of biotechnology, healthcare technology, and medical devices. It aims to provide a forum and resource for its members in a dynamic environment in which technological and scientific advancements continue to test and expand the boundaries of existing legal and regulatory frameworks.

Food, Cosmetics and Nutraceuticals
The mission of this committee is to keep its members educated and informed on legal issues relating to the burgeoning industries of foods, dietary supplements, nutraceuticals, medical foods, and cosmetics. Nutraceuticals is a marketing term, not a regulatory one, and includes food and supplement products that claim to provide health benefits beyond their basic nutritional value. Medical food is a distinct category of food products that are administered under the supervision of a physician, and which are intended for the specific dietary management of a disease or condition. The FDA and federal laws regulate the food, dietary supplement, and medical food categories quite differently, posing traps for unwary clients and their lawyers. Cosmetics fall under a different regulatory scheme, with "cosmeceuticals," yet another marketing derived category, inhabiting the murky regulatory line between cosmetics and drugs. Beyond FDA, relevant considerations include FTC's substantiation rules, the Lanham Act, state laws, and potential class actions.
Precision Medicine
The Precision Medicine Committee (PMC) examines legal issues affecting the rapidly emerging field of precision medicine (a.k.a. “personalized medicine”). Precision medicine utilizes information on an individual's genetics and biomarkers, and environmental and lifestyle factors, to inform decisions on disease prevention and treatment. The PMC Committee's focus includes such diverse topics as drug and device development and regulation, payment and reimbursement, health IT, data privacy, ethical issues, intellectual property and business and investment, as they relate to precision medicine.

INTERDISCIPLINARY DIVISION

Artificial Intelligence and Robotics
Artificial Intelligence (AI) and Robotics are no longer topics of the distant future. AI software now is used in businesses from "high-frequency" stock trading to discovering new breakthrough pharmaceuticals. Our military flies drone planes like the Predator; you can buy a Lexus that will parallel park for you or a Roomba to vacuum your floors. The Committee addresses the legal issues that are and will arise from such technologies as well as ways in which these technologies are enhancing the field of law.

CleanTech and Climate Change
The Clean Technology and Climate Change Committee (CTC3) raises awareness to law, policy, science, and technology issues related to climate change and sustainability; strengthens the capacity for effective legal, technical and market-based responses to mitigate greenhouse gases, ease adaptation, drive innovation, assure compliance, and preserve environmental integrity; and, as appropriate, assists with the development and implementation of domestic and international laws. CTC3 draws upon the expertise of public and private sector members from a wide range of practice areas and coordinates with other committees within the ABA Section on Science and Technology Law and in other Sections.

Nanotechnology Law
Nanotechnology is at the convergence of multiple fields of science, including biology, physics, chemistry, materials science, computer science, mechanical engineering and electrical engineering. A variety of tools are being invented to allow nanoscale manufacturing. The Nanotechnology committee will explore the novel legal issues associated with nanotechnology research and development, distribution, licensing, and intellectual property protection. What kinds of patents are possible? What licensing structures are used? The committee will attempt to understand the potential dangers of this technology, and create a platform for discussions between scientists, lawyers and legislators about the ethical implications of some discoveries.
The Rights and Responsibilities of Scientists
This committee serves as a primary informational and advocacy resource for those interested in the legal representation, professional autonomy, and regulatory obligations of researchers, teachers, and practitioners in all areas of scientific endeavor and strives to address not only the legal aspects, but also ethical issues confronting all facets of medicine and science. A major focus of this Committee involves conflict of interests in medicine and science, the protection of the integrity of scientific research and the protection of the objectivity of medical and scientific professionals.

Science and Technology for Public Good Committee
This committee seeks to connect members with ideas, information, opportunities, and dialogues about the use of science and technology for public good. Because of their professional connections with scientists and engineers, SciTech Law Section members are especially well-situated to foster innovative applications of science and technology in ways that prevent and respond to mass atrocities, protect human rights, address inequities, and improve humanitarian efforts domestically and internationally. At the same time, as lawyers we recognize that applications of science and technology that have social impact must be implemented with great care and responsibility. The committee will identify and share existing resources to support efforts to advance social good through science and technology, and where needs are identified, create new educational resources, guidelines, and practical tools.

Scientific Evidence
This committee addresses the legal and evidentiary issues arising from the use of scientific evidence and experts.

Space Law
The space industry is in a period of transition. With the retirement of the Space Shuttle, private companies are preparing to assume many of the missions traditionally undertaken by government agencies and to open new markets in outer space. With this transition, space companies and government agencies will face many new challenges. To help the legal community meet these challenges, the Section of Science & Technology Law has formed the Space Law Committee, with the mission of providing educational resources to the legal community about the unique legal, business and technical challenges presented by space operations.

Technical Standardization
This committee seeks to improve the development of solutions to policy issues having a mixture of legal and technical factors. As we encounter situations involving a high degree of interaction between people, institutions and technology more frequently, proposed and achieved solutions increasingly rely on technical standards in addition to or as a substitute for legal standards or regulation. The committee will develop principles and practical guides towards better solutions generally. These may include policy approaches to finding the right balance or changes in the law applicable to standards development and use to support more effective solutions.