BIOS

Pay on the Go
Consumers & Contactless Payment

Paula J. Bruening

Paula J. Bruening is Deputy Executive Director of The Center for Information Policy Leadership at Hunton & Williams LLP, a path-finding global privacy and information security think tank located in Washington, D.C. Ms. Bruening focuses on cyber-privacy issues. She currently serves as a member of the Commission on Cybersecurity for the 44th Presidency at the Center for Strategic and International Studies, and as a consultant to the Asia Pacific Economic Cooperation Privacy Technical Seminars. She has led a working group of business representatives, technology experts, and consumer advocates to develop privacy best practices for deployment of RFID technology, and has testified before The House Committee on Energy and Commerce, Subcommittee on Commerce, Trade, and Consumer Protection on "Radio Frequency Identification (RFID) Technology: What the Future Holds for Commerce, Security, and the Consumer." She is a frequent author and lecturer on information policy issues in the U.S. and Europe.

John Carlson

John Carlson is Senior Vice President of BITS/ Financial Services Roundtable. He manages relationships with regulatory agencies and engages experts from financial institutions on information security, operational risk, vendor management, fraud risk, and business continuity planning. BITS and its member companies (100 of the largest U.S. financial institutions) have focused on wireless security issues for many years, including a 2007 Forum on contactless cards, WiFi, and mobile banking. John also chairs the Research and Development Committee of the Financial Services Sector Coordinating Council for Critical Infrastructure Protection and Homeland Security. Prior to joining BITS, John served in a variety of leadership and technical roles at the Office of the Comptroller of the Currency, U.S. Office of Management and Budget, and Federal Reserve Bank of Boston. John holds a Master's in Public Policy from the Kennedy School of Government at Harvard University and a B.A. from the University of Maryland.

Alissa Cooper

Alissa Cooper is the Chief Computer Scientist at the Center for Democracy and Technology. Her work focuses on a range of issues including consumer privacy, spyware, digital copyright, network neutrality, and identity management. She conducts research into the inner workings of common and emerging Internet technologies, and seeks to explain complex technical concepts in understandable terms. She has appeared before the Federal Trade Commission and the National Association of Attorneys General, and writes regularly on a variety of technology policy topics. Alissa holds Bachelor's and Master's degrees in Computer Science from Stanford University.

Jean Ann Fox

Jean Ann Fox is Director of Financial Services for the Consumer Federation of America, a nonprofit association of some 300 consumer groups, established in 1968 to advance the consumer interest through research, education, and advocacy. She specializes in high-cost credit, payment devices, and financial services for the unbanked, as well as privacy and security issues. She is the author or co-author of numerous reports on high-cost credit products, including store and Internet payday lending, tax refund anticipation loans, check cashing, bank overdraft loans and car title loans. She is responsible for CFA's mini website for consumers (www.paydayloaninfo.org) and works with state and local coalitions. Ms. Fox holds a Master's of Science degree from Cornell University and a Master's of Public Administration from the University of Pittsburgh. She is a member of the Trans Atlantic Consumer Dialogue Steering Committee and its Information Society Working Group.

Kevin Fu

Kevin Fu, Ph.D., is an Assistant Professor in the Department of Computer Science at the University of Massachusetts Amherst. He directs the RFID Consortium on Security and Privacy (RFID-CUSP.org) and co-directs the Medical Device Security Center (secure-medicine.org). Dr. Fu investigates how to ensure security and privacy for systems that must defend against malicious parties. His security analysis of contactless "no swipe" credit cards contributes to the vision of safer and more effective technology for consumers. Dr. Fu received his Ph.D. in Electrical Engineering and Computer Science from MIT. He has served on numerous program committees of prestigious conferences in computer security and cryptography, and has given dozens of invited talks world-wide to industry, government, and academia on the topic of security

and privacy. His research has appeared in *The New York Times* and *The Wall Street Journal*.

Jodi Golinsky

Jodi Golinsky is Vice President, Regulatory & Public Policy Counsel for MasterCard Worldwide. She joined MasterCard in May 2003. She is responsible for U.S. regulatory affairs and public policy matters with an emphasis on regulatory and legislative issues impacting financial institutions. She has worked extensively in the areas of security, privacy, risk and payment system integrity and recently testified before two congressional committees on the subject of commercial child pornography. She is frequently sought after as an expert on regulatory and legislative topics and asked to speak at public and government forums. She is also a member of the Westchester chapter of the American Corporate Counsel Association. Ms. Golinsky graduated *magna cum laude* from Brandeis University, and received her J.D. from Brooklyn Law School, where she was Executive Articles Editor of the Brooklyn Law Review, a member of the Moot Court Honor Society, and awarded the Faculty Prize for Outstanding Scholarship.

Susan Grant

Susan Grant is Director of Consumer Protection for the Consumer Federation of America, a nonprofit association of some 300 consumer groups, established in 1968 to advance the consumer interest through research, education, and advocacy. Ms. Grant works specifically in the areas of privacy, deceptive marketing, online safety and security, fraud, electronic and mobile commerce, and general consumer protection issues. Ms. Grant is also involved in global consumer protection issues through her work in the Trans Atlantic Consumer Dialogue

and her participation in the U.S. government delegation to the Committee on Consumer Policy at the Organization for Economic Cooperation and Development. In 1993, Ms. Grant became Executive Director of the National Association of Consumer Agency Administrators, a professional organization for the heads of government consumer protection agencies. From 1996 to 2007, she served as Vice President of Public Policy and Director of the Fraud Center at the National Consumers League before joining the CFA staff in 2008.

J. Dax Hansen

J. Dax Hansen is a Partner in the law firm Perkins Coie LLP, focuses his practice on IT, payments and international business transactions, including m-commerce, online business, software and technology licensing, and Asian business transactions. Mr. Hansen advises clients regarding a wide range of electronic financial services matters, including mobile banking, mobile payments, emerging payment systems, money transmission, payment cards, loyalty programs, unclaimed property, Payment Card Industry (PCI) data security standards, the Gramm-Leach-Bliley Act, Anti-Money Laundering compliance, and related matters. Mr. Hansen works with wireless carriers, physical and online retailers, payment service providers, online service providers, application developers, and other clients. He has provided regulatory compliance, contract negotiation and other legal support for Near Field Communication (NFC) mobile payment trials involving mobile wallets, credit and stored value "softcards," automatic top ups, and NFC smart tag service discovery.

Peter Ho

Peter Ho is a Vice President and Product Manager at Wells Fargo Card Services. His primary responsibilities include exploring new technology opportunities in the consumer payments space where contactless payments is a current focus. He joined Wells Fargo in 2003 and has worked on a number of product initiatives since that time. With over 17 years experience in the Financial Services sector, Peter has held a number of different positions in both line and support areas. Before joining Wells Fargo Bank, he was an independent strategic consultant to financial services industry leaders such as Wells Fargo Bank and Egg. Previously, he was at IBM Business Consulting Services in the e-business Strategy and Change channel and a Relationship Manager supporting Small Business Banking at Citibank's Global Consumer Bank. Peter holds an M.B.A. from the Tepper School of Business at Carnegie Mellon University in Pittsburgh, Pennsylvania.

Dan Johnson

Dan Johnson is Director of Information Technology at Tully's Coffee Corporation. Mr. Johnson provides senior leadership for the strategic use of information technology resources at Tully's Coffee. These responsibilities include the management of Tully's payment platforms and their alignment with retail operations. Prior to his 7-year tenure at Tully's, Dan worked at Intel and holds a B.S. in Electrical Engineering from the University of Washington.

Jennifer King

Jennifer King is a social technologist who draws upon her training in the social sciences and human-computer interaction to investigate the issues that arise when technology and society collide. As a

researcher at the Samuelson Law, Technology, & Public Policy Clinic at UC Berkeley's School of Law, Ms. King focuses on privacy and security in sensor networks, the internet, and ubiquitous computing environments (including RFID and video surveillance technologies), as well as usable security. Ms. King received her Master's degree in Information Science from UC Berkeley's School of Information. Prior to joining the Samuelson Clinic, Ms. King spent nearly a decade in Internet application development. At the Internet search company Yahoo!, Ms. King specialized in security, Internet crime, and online communities. In 2007, Ms. King published a case study (co-authored with UC Berkeley law professor Deirdre Mulligan and engineering Ph.D. student Marci Meingast) of the adoption process of the United States' RFID enabled e-Passport. She is currently investigating usability and privacy issues with RFID-based identity cards and consumer products.

Tadayoshi Kohno

Tadayoshi Kohno, Ph.D., is an Assistant Professor of Computer Science and Engineering at the University of Washington. His research focuses on assessing and improving the security and privacy properties of current and future technologies. Kohno is the recipient of a 2008 Alfred P. Sloan Research Fellowship and in 2007 was recognized by MIT's Technology Review magazine as one of the world's top innovators under the age of 35. Kohno's analysis of a common pacemaker and implantable cardiac defibrillator sparked widespread discussion on the security and privacy of wireless medical devices. He has presented his 2003 analysis of the Diebold AccuVote-TS electronic voting machine to the U.S. House of Representatives and has been cited in media outlets ranging from *The New York Times* to *CNN Headline News*. He has received

numerous awards for his research, including the Best Paper Award at the IEEE Symposium on Security and Privacy. Kohno received his Ph.D. in Computer Science from the University of California at San Diego.

Daniel A. Littman

Dan Littman is an economist in the Federal Reserve Bank of Cleveland's Payments Research Group, which engages in applied research on payments methods and instruments in the U.S. Dan's research focuses on check, cash, ACH, and emerging payments instruments. He has 15 years of applied payments experience, helping to manage the Cleveland bank's product line and, later, the Federal Reserve System's check service. Dan joined the bank in 1981 and has worked in the marketing, planning, credit, and research areas. Prior to his work at the Bank, he was employed by an economic development agency in Maine, served as a consultant to the U.S. Department of Housing & Urban Development, and as an advisor to the National Economic Planning Agency of Ecuador. Dan earned a Bachelor's degree from Brandeis University and a Master's degree from Boston University.

Mark MacCarthy

Mark MacCarthy is Senior Vice President for Global Public Policy for Visa Inc and is responsible for global government relations strategies and initiatives affecting electronic commerce, technology policy, information security, privacy, risk management, credit, debit and prepaid payment cards, and innovative products such as payWave and Visa's mobile telephone platform. Prior to joining Visa, Mr. MacCarthy was a principal and senior director with the Wexler-Walker Group, Vice President

of Government Relations for Capital Cities/ ABC and a professional staff member on the U.S. House of Representatives' Committee on Energy and Commerce. Mr. MacCarthy has a Ph.D. in philosophy from Indiana University and a Master's in Economics from the University of Notre Dame. He is an adjunct faculty member at Georgetown University, where he teaches courses on economics and policy for network industries in the Communication, Culture, and Technology Program and courses in political philosophy in the Department of Philosophy.

Tom McAndrew

Tom McAndrew is the Director of IT Governance and Compliance Services for Coalfire Systems. Mr. McAndrew has extensive experience with payment card requirements, digital forensics, emerging technologies, and information security requirements. He has worked in a variety of settings, including financial institutions, retailers, federal and local government, universities, and hospitals throughout the country. As a Qualified Security Assessor for the Payment Card Industry (PCI), he has assisted clients through the requirements as established by the various card brands. This includes large retailers, merchants, service providers, and software/hardware vendors. He also has worked with certification and accreditation efforts as an Information Systems Security Officer in the U.S. Navy. He holds a Master's degree in Business Administration, Master's degree in Information Technology, and is a graduate of the U.S. Naval Academy. He has numerous certifications including CISM, CISA, CISSP and other vendor-specific certifications.

Leslie Michelassi

Leslie Michelassi is the Washington State chairperson for CASPIAN, a U.S.-based privacy organization with members in over 30 countries. In addition, Ms. Michelassi is a partner in Global Payments Experts, llc, a California-based company focused on the banking, global processor and private sector markets working in the payments, risk, privacy and fraud space. She brings to both the payments consulting venture and her leadership in CASPIAN over 30 years in executive management experience in retail banking, information systems, global payment processors and start-up ventures. Working with CASPIAN, Ms. Michelassi assists legislators throughout the U.S. to protect data privacy and to block forcible human micro-chip implants. Most recently, Ms. Michelassi has spent time supporting privacy legislation in Washington State and co-authored model legislation against forced chipping of humans. Her most recent publication, "Ban RFID Technology for Human Identification" can be found in the July 2008 issue of *Republic Magazine*.

David Moorman

David Moorman is the Director of Retail Technology for The PCMS Group, a leading global provider of point-of-sale software and related systems. He is also a member of the Technical Committee of the Association for Retail Technology Standards (ARTS), a division of the National Retail Federation. Originally an accountant and financial auditor, he is now a 20-year veteran of technologies varying from mainframe to e-commerce to highly distributed retail store systems. His primary role at PCMS is to provide executive management with industry research and corporate strategy insight from a combined commercial and technical perspective. His current projects include PCI and PA-DSS as well

as constructing a world-class training and eLearning program to support worldwide expansion of their software and services offerings.

Siva G. Narendra

Siva G. Narendra, Ph.D., is co-founder and Chief Technology Officer of Tyfone USA responsible for its product architecture, roadmap, and IP. Before his current responsibility, he was with Intel Laboratories specializing in energy and yield-aware designs. He has authored over 60 technical papers in peer-reviewed conferences and journals, and frequently lectures on technology forums. He also has over 100 issued/pending patents and holds 5 divisional recognition awards from Intel and an award in 2003 for having 19 issued patents in that year. He is a co-author and editor of *Leakage in Nanometer CMOS Technologies* (Springer). Siva has a Ph.D. in Electrical Engineering from the Massachusetts Institute of Technology.

Kathryn D. Ratté

Kathryn D. Ratté is a senior attorney with the Division of Privacy and Identity Protection in the Federal Trade Commission's Bureau of Consumer Protection. Ms. Ratté investigates and prosecutes violations of U.S. federal laws governing the privacy and security of consumer information, and recently completed a detail as counsel for international consumer protection in the FTC's Office of International Affairs. She brought the Federal Trade Commission's first enforcement actions under the Gramm-Leach-Bliley Safeguards Rule, as well as the Commission's case against the data broker ChoicePoint, which resulted in the highest civil penalty the agency had ever collected in a consumer protection matter. She also represents the FTC on the U.S. RFID Intra-Government Working Group and serves as co-chair of its Privacy and Security Subcommittee. Before joining the Federal Trade Commission, Ms. Ratté was an associate with a private law firm in Washington, D.C. She is a *magna cum laude* graduate of Harvard College and Duke Law School.

Etona Ueda

Etona Ueda is Assistant Manager of the Financial Business Consulting Department of the Nomura Research Institute, Ltd. (NRI). Mr. Ueda is responsible for both the financial sector, and the information and communication technology sectors at NRI, one of the biggest consulting firms and think tanks in Japan. Mr. Ueda is known as an expert in CRM and marketing strategy using data from payment services, including e-Money, and customer loyalty programs. He regularly advices Japanese government offices and leading corporations, and is a member of the Information Network Law Association. He has published several articles on the areas of e-Money and database marketing, with a particular focus on the legal framework of such afore-mentioned systems.

Randy Vanderhoof

Randy Vanderhoof is the Executive Director of the Smart Card Alliance. The Smart Card Alliance is a not-for-profit, multi-industry association of over 180 member firms working to accelerate the widespread acceptance of smart card technology in North America and Latin America. He was named Executive Director in August, 2002. Prior to joining the Smart Card Alliance, Randy was Senior Project Manager and Solutions Sales Manager for IBM Global Smart Card Solutions, an international product group supporting IBM's smart card services to its global banking, healthcare, and government

industry vertical teams. He was also Vice President of Business Development with First Access, Inc., a developer of contactless smart card technology for network access security and authentication, and he worked at Schlumberger (now Gemalto) as Market Segment Manager, Campus Solutions, supporting the development and marketing of smart card-based identification and payment systems. Randy received his M.B.A. from Rider University in Lawrenceville, New Jersey.

András Vilmos

András Vilmos is Managing Director of SafePay Systems Ltd. and Project Manager of StoLPaN, and has pursued a long career in corporate finance. A few years ago, Mr. Vilmos launched his own company, which is active in business and financial consulting. In the past few years, Mr. Vilmos was actively involved in the development of mobile payment solutions, and the introduction of mobile banking. As Project Manager of StoLPaN, Mr. Vilmos coordinates the research and development activity of the 23-member European consortium to establish an open platform mobile NFC application for the support of a range of contactless services like payment, ticketing, and loyalty programs. Mr. Vilmos holds patents related to electronic transactions and is the author of a number of publications on the topic of e- and m-payments.

Peter Wakim

Peter Wakim is Director of Business Development & Strategy for Nokia Inc. Joining the Finnish headquarters of Nokia in 2000, Wakim led new business venture development in the area of RFID technology, which ultimately resulted in the world's first commercial RFID-reading cell phone. Two years later, Wakim established the Nokia Ventures Organization in the U.S. to further investigate new growth technologies and businesses. In 2007, Wakim relocated to the Seattle area to explore mobile service opportunities between Nokia and T-Mobile. Wakim serves on the Advisory Board of the University of Washington's Master of Communication in Digital Media and is a multiple-patent holder in RFID technology. A native Australian, with 20 years of international work experience in the People's Republic of China, Finland, and the United States, Wakim earned an International Master's of Business Administration in Technology Management from Deakin University and a Bachelor's of Engineering in Electronic Engineering from the University of South Australia.

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