Participant Biographies

Jeffrey Boksiner

Jeffrey Boksiner is the Chief Engineer for the Antennas and Spectrum Analysis Division at the US Army Communications-Electronics Research, Development and Engineering Center (CERDEC) Space & Terrestrial Communications Directorate (S&TCD). For CERDEC, he leads efforts on spectrum efficiency and effectiveness, including the work on Policy-Based Radio (PBR), Dynamic Spectrum Access (DSA) technologies, interference and propagation modeling, and the Spectrum Supportability Risk Assessments (SSRAs). Also, he carries out basic research on metamaterials and their application to antenna systems for tactical communications.

Dr. Boksiner holds a PhD in Physics from Rutgers University and a MS and BS in Electrical Engineering from Polytechnic Institute of NYU. Prior to joining CERDEC, he was with Telcordia Technologies specializing in Spectrum Management, Electromagnetic Compatibility (EMC), and electrical and RF safety. He has also held leadership positions in various standards activities including ITU, IEC, IEEE, and NFPA.

Mary Brown

Mary L. Brown joined Cisco's Government Affairs office in 2004, where she serves as Managing Director. She covers a wide range of public policy issues for Cisco related to IP-based technologies, wireless and networking.

During her career, she has worked as a consultant, as in-house regulatory counsel for a major carrier, and for approximately 10 years as a staff lawyer and manager at the Federal Communications Commission. In addition to telecommunications issues, she has substantial experience in Internet law and policy.

Ms. Brown holds a J.D. with honors from the Syracuse College of Law, and a Master of Science in Telecommunications from the S.I. Newhouse School of Public Communications at Syracuse. She is a Phi Beta Kappa graduate of the University of Massachusetts at Amherst.

Timothy Brown

Timothy X Brown is a Professor in Electrical, Computer, and Energy Engineering and Director of the Interdisciplinary Telecommunications Program at the University of Colorado, Boulder. He received his B.S. in physics from Pennsylvania State University and his Ph.D. in electrical engineering from California Institute of Technology in 1990. His research interests include adaptive network control, machine learning, and wireless communication systems. His current

research funding includes NSF, FAA, DOE, and industry. Projects include the role of mobility in network control of unmanned aircraft, denial of service vulnerabilities in wireless protocols, spectrum policy frameworks for cognitive radios, and indoor wireless network performance. He is a recipient of the NSF CAREER Award, and the GWEC Wireless Educator of the Year Award.

Milind Buddhikot

Milind M. Buddhikot is a Distinguished Member of Technical Staff in the Emerging Computing Technologies (ECT) at Alcatel-Lucent Bell Labs, Murray Hill, NJ. Milind holds a Doctor of Science (D. Sc.) in computer science (July 1998) from Washington University in St. Louis, and a Master of Technology (M.Tech.) in communication engineering (December 1988) from the Indian Institute of Technology (I.I.T), Bombay.

His current research interests are in the areas of systems, protocols, algorithms, and security and end-to-end applications in three main areas: Dynamic spectrum access (DSA) and Cognitive Wireless networks, Green Wireless, and Network Virtualization and sharing.

Milind has served as an Associate Editor of IEEE/ACM Transactions on Networking and Elsevier's Computer Networks Journal and is a co-founder of IEEE DySPAN conference. Milind holds nine patents and has authored over 30 research papers and 20+ pending patent submissions.

Kenneth Carrigan

Mr. Carrigan graduated from Walla Walla College, WA in 1982 with a Bachelor of Science, Electrical Engineering (BSEE) degree and entered into Civil Service at Naval Sea Systems Command **(**NAVSEA) in the Electromagnetics (EM) Department (SEA 53H). He has over 26 years of engineering experience in all aspects of Electromagnetic Environmental Effects (E^3) both on ships and shore. He has served over 13 years in the government managing and directing various ship and equipment EM projects, composed ship EM specifications to ensure electromagnetic compatibility (EMC) and developed a ship specific electromagnetic interference (EMI) data tracking system known as SMITS. In 1990, he left civil service to support Space & Naval Warfare Systems Command **(**SPAWAR) E^3 Headquarters (HQ) and the Joint System Center (JSC) and later supported NAVSEA HQ. Mr. Carrigan also served as the administrator for Inside NAVSEA City web-space for Ron Bradley, and was congratulated for the web-space being the most visual, populated and up-to-date with a vast amount of information. He currently resides at NSWC Dahlgren where he chairs the LHA-6/7 Electromagnetic Compatibility Advisory Boards **(**EMCABs), conducts topside studies to ensure system performances are optimized while achieving EMC, supports NAVSEA HQ in many areas such as Data Exchange Agreements with the U.K., Norway, and the Netherlands, updates Mil-Stds and Naval Vessel Rules, performs E^3 and Spectrum Management risk and analysis of equipment for Ship Change Documents, and participates in impact studies, tests, and meetings regarding broadband wireless access (BWA) systems affecting Naval Radars and Fixed Satellite

Services. He subscribes to the Institute of Electrical & Electronics Engineers (IEEE) standards committee, Antenna, EMC, Communications, and Biomedical societies.

Rajarathnam Chandramouli

R. Chandramouli (Mouli) is the Thomas Hattrick Chair Professor of Information Systems in the Department of Electrical and Computer Engineering (ECE) at Stevens Institute of Technology and Co-Director of the Information Networks and Security (iFINITY) research laboratory. He is a Co-Founder of Dynamic Spectrum, LLC---a startup offering cloud-enabled cognitive radio technologies for various markets including consumer communications, public safety, and the DoD; and Jaasuz.com that provides a suite of advanced text forensics technologies to verify trust in documents. His research spans the areas of wireless networking, social media analytics/security and computational psycho-linguistic text mining.

John Chapin

Dr. John Chapin is a Program Manager in the Strategic Technology Office. He joined DARPA in August 2011. His areas of focus include advanced wireless systems and associated spectrum access and spectrum sharing technologies, and advanced networking technology for dynamically changing and heterogeneous communications systems.

Dr. Chapin most recently served as Visiting Scientist at the Research Laboratory of Electronics of the Massachusetts Institute of Technology and concurrently as Chief Scientist at TV Band Service, LLC. He earlier spent 9 years in technical leadership roles at Vanu, Inc., a provider of software-designed radio (SDR) based cellular radio access networks. His work there on SDR and cognitive radio earned multiple awards including Institute of Electrical and Electronics Engineers, Dynamic Spectrum Analysis best paper, SDR Forum best paper, and SDR Forum Industry Achievement Award. Prior to Vanu he was on the faculty of the Electric Engineering and Computer Science department of MIT, where his research earned the Presidential Early Career Award for Scientists and Engineers (PECASE). He served as chairman of the SDR Forum from 2007 to 2009 and has been a member of the Federal Communications Commission Technological Advisory Council since its inception. He earned a Doctor of Philosophy in Computer Science from Stanford University in 1997.

Lijun Chen

Lijun Chen is an Assistant Professor in Telecommunications at University of Colorado at Boulder, and a Visiting Associate in Computing and Mathematical Sciences at California Institute of Technology. He received his Ph.D. from California Institute of Technology, and was a Research Scientist at the same institute before joining University of Colorado. He was a co-recipient of the Best Paper Award at the IEEE International Conference on Mobile Ad-hoc and Sensor Systems in 2007. His current research interests are in communication networks, smart

grids, optimization, game theory and their engineering application, and theoretical foundations for complex networked systems.

Andrew Clegg

Dr. Andrew Clegg is the creator and program director of the Enhancing Access to the Radio Spectrum (EARS) program at the National Science Foundation. He received the B.A. degree in physics and astronomy with highest distinction from the University of Virginia in 1985, and the M.S. and Ph.D. degrees in radio astronomy (major) and electrical engineering (minor) from Cornell University in 1989 and 1991, respectively. From 1991 – 1995, he was with the Remote Sensing Division at the Naval Research Laboratory in Washington, D.C. From 1995 – 1997, he was a senior engineer with Comsearch in Reston, Virginia, and from 1997 – 2003 he was a senior engineer, senior manager, and lead member of technical staff with BellSouth/Cingular Wireless in Atlanta. He joined the National Science Foundation in 2003, where he has previously served as program manager for the National Radio Astronomy Observatory and for the Advanced Technologies and Instrumentation program.

Pierre de Vries

Dr. De Vries works at the intersection of information technology and government policy, researching alternative models for wireless policy and new regulatory paradigms for the internet/web. De Vries is a Research Fellow at the Economic Policy Research Center of the University of Washington and a Senior Adjunct Fellow of the Silicon Flatirons Center at CU Boulder. He is a former Chief of Incubation and Senior Director of Advanced Technology and Policy at Microsoft Corporation. Prior to his twelve years at Microsoft, De Vries worked for Korda & Co, a London seed capital company and consultancy. De Vries holds a DPhil in theoretical physics from the University of Oxford.

Sujit Dey

Sujit Dey is a Professor with the Department of Electrical and Computer Engineering, University of California, San Diego, where he heads the Mobile Systems Design Laboratory, engaged in developing adaptive hardware, software, and networking techniques to enable the next generation of mobile broadband applications. He is affiliated with the California Institute of Telecommunications and Information Technology (Calit2), and the UCSD Center for Wireless Communications. He also serves as the Chief Scientist, Mobile Networks, at Allot Communications. He founded Ortiva Wireless in 2004, where he served as its founding CEO and later as CTO, till its acquisition by Allot Communications in 2012. Prior to Ortiva, he served as the Chair of the Advisory Board of Zyray Wireless till its acquisition by Broadcom in 2004, and as an advisor to multiple companies including ST Microelectronics and NEC. Prior to joining UCSD in 1997, he was a Senior Research Staff Member at the NEC C&C Research Laboratories in Princeton, NJ. He received his PhD. Degree in Computer Science from Duke University,

Durham, NC in 1991. Dr. Dey has co-authored more than 180 publications, including journal and conference papers, a book on low-power design and several book chapters. He is the co-inventor of 16 US and 2 international patents, resulting in multiple technology licensing and product developments. He has been the recipient of several Best Paper awards, and has chaired multiple IEEE conferences and workshops.

Ahmed Eltawil

Ahmed M. Eltawil is an Associate Professor at the University of California, Irvine. He received the Doctorate degree from the University of California, Los Angeles, in 2003 and the M.Sc. and B.Sc. degrees (with honors) from Cairo University, Giza, Egypt, in 1999 and 1997, respectively. Since 2005, he has been with the Department of Electrical Engineering and Computer Science, University of California, Irvine. He is the founder and director of the Wireless Systems and Circuits Laboratory. (http://newport.eecs.uci.edu/~aeltawil/) a member laboratory of the Center for Pervasive Communications and Computing (CPCC).
His current research interests are in low power digital circuit and signal processing architectures for wireless communication systems where he has published more than 80 technical papers on the subject, including four book chapters. Dr. Eltawil has been on the technical program committees and steering committees for numerous workshops, symposia and conferences in the area of VLSI, and communication system design. He has received several distinguished awards, including the NSF CAREER award in 2010 supporting his research in low power systems. Since 2006, he has been a member of the Association of Public Safety Communications Officials (APCO) and has been actively involved in efforts towards integrating advanced communication technologies in critical first responder networks. Dr. Eltawil held several industry positions including the director of ASIC Engineering at Innovics Wireless (2000-2003) and Silvus Communications (2003-2005).

Joseph Evans

Joseph B. Evans received the B.S.E.E. degree from Lafayette College in 1983, and the M.S.E., M.A., and Ph. D. degrees from Princeton University in 1984, 1986, and 1989, respectively.

In 1989, he joined the faculty at the University of Kansas (KU), where he is the Deane E. Ackers Distinguished Professor of Electrical Engineering & Computer Science. From 2008 to 2010, he was also the Director of the Information & Telecommunication Technology Center (ITTC), one of the largest research centers at the University of Kansas. From 1997 to 2004, Dr. Evans served as Director of the Networking & Distributed Systems Laboratory at ITTC, and he served as Acting Director of ITTC from October 1999 to August 2000. He served as the Director of Research Information Technology for the University of Kansas, reporting to the Vice Provost for Research, from 2005 to 2008, where he was responsible for creating the University's research cyberinfrastructure strategy.

Dr. Evans served as a Program Director in the Division of Computer and Network Systems, Directorate of Computer & Information Science & Engineering (CISE) at the National Science Foundation (NSF) from 2003 to 2005. At NSF, he had oversight responsibility for over $70 million in multi-organizational networking research efforts in wireless networking, cybersecurity, optical networking, and scientific applications. Further, he was responsible for over $50 million in new research and infrastructure awards in newly created programs.

Dr. Evans was a co-founder and member of the Board of Directors of NetGames USA, Inc., a network gaming company acquired by Microsoft in 2000; XBox Live, Microsoft's Internet gaming service, utilizes the NetGames USA technology. He was also President and CEO of Ambient Computing, Inc., which developed software and hardware solutions that enable smart wireless environments. Dr. Evans was a partner and Chief Scientist at Ascend Intelligence, LLC, which developed the Tactical Ground Reporting System (TIGR) for DARPA and the US Army, with large deployments in the Iraq and Afghanistan theatres of operation.

Dr. Evans' current research interests include cognitive networks, wireless and mobile networking, ubiquitous computing environments, adaptive computing systems, and system implementations.

He has been involved in a variety of networking projects while at KU, ranging from the MAGIC gigabit networking testbed (developing high speed SONET/ATM systems and performing protocol tuning), the ACTS ATM Internet, and the Rapidly Deployable Radio Network project (creating mobile broadband wireless systems) to a collaborative effort with the KU School of Education to deliver K-12 educational resources over the Internet during the early days of the web (students on this project were founding members of Netscape).

Dr. Evans spent the 1996-1997 academic year on sabbatical at Cambridge University and Olivetti & Oracle Research Laboratory in Cambridge, England, working in the area of mobile computing and communications systems. He participated in the Air Force Summer Research Program at Hanscom AFB in 1991.

Prior to joining the University of Kansas, he held a postdoctoral position in the Network Systems Research Department of AT&T Bell Laboratories in Holmdel, New Jersey, where he was involved in the design of a high performance integrated network. While at Princeton, he was awarded an AT&T Bell Laboratories Graduate Fellowship for 1984-1988; during this time, he was also a part time employee of Bell Labs, working in the field of speech processing algorithms for packet networks.

He was a member of the planning group for the NSF Global Environment for Network Innovations (GENI) and co-chair for the GENI Substrate Working Group. He served as a member of the Board of Directors of the Software and Information Technology Association of Kansas (SITAKS) from 2008 to 2010.

Dr. Evans is a Senior Member of the IEEE, and was elected to the IEEE Communications Society (ComSoc) Board of Governors for the 2009-2011 term. He served as Vice-Chair of the IEEE ComSoc Technical Sub-Committee on Cognitive Networks, Chair of the Technical Committee on High-Speed Networks, and as Associate Editor of the IEEE Communications Letters, and is currently Co-Editor of the IEEE Communications Magazine Radio Communications Series. He is also a member of the ACM (SIGCOMM and SIGMOBILE).

Behrouz Farhang-Boroujeny

Behrouz Farhang-Boroujeny (M'84-SM'90) received the B.Sc. degree in electrical engineering from Teheran University, Iran, in 1976, the M.Eng. degree from University of Wales Institute of Science and Technology, UK, in 1977, and the Ph.D. degree from Imperial College, University of London, UK, in 1981.

From 1981 to 1989 he was with the Isfahan University of Technology, Isfahan, Iran. From 1989 to 2000 he was with the National University of Singapore. Since August 2000, he has been with the University of Utah where he is now a professor and Associate Chair of the department.

He is an expert in the general area of signal processing. His current scientific interests are adaptive filters, multicarrier communications, detection techniques for space-time coded systems, cognitive radio, and signal processing applications to optical devices. In the past, he has worked and has made significant contribution to areas of adaptive filters theory, acoustic echo cancellation, magnetic/optical recoding, and digital subscriber line technologies. He is the author of the books "Adaptive Filters: theory and applications", John Wiley & Sons, 1998, and "Signal Processing Techniques for Software Radios", self-published at Lulu publishing house, 2009.

Dr. Farhang-Boroujeny received the UNESCO Regional Office of Science and Technology for South and Central Asia Young Scientists Award in 1987. He served as an associate editor of IEEE Trans. on Signal Processing from July 2002 to July 2005, and as an associate editor of IEEE Signal Processing Letters from April 2008 to March 2010. He has also been involved in various IEEE activities, including the chairmanship of the Signal Processing/Communications chapter of IEEE of Utah in 2004 and 2005.

Recently, Dr. Farhang's work with Idaho National Laboratory on spectrum access methods was selected by R&D Magazine as one of the top 100 best inventions of 2012.

Caleb Fulton

Dr. Caleb Fulton received his B.S. and Ph.D. in ECE from Purdue University in 2006 and 2011, respectively. As a graduate student at the IDEAS Microwave Laboratory at Purdue University, his main work was on the Army Digital Array Radar (DAR) Project. He functioned as the lead

system designer and integrator, receiving the Purdue University Eaton Alumni Award for Design Excellence in 2009.

His research activities in support of this effort included digital phased array calibration and compensation for transceiver errors, calibration for high-quality polarimetric radar measurements, panel-level integration of direct-conversion transceivers and high-power GaN devices, and hierarchical digital beamforming design considerations. He was the winner of the Meritorious Paper Award for a summary of these efforts at the 2010 Government Microcircuit Applications and Critical Technologies Conference.

Dr. Fulton is a member of the IEEE Antennas and Propagation and Microwave Theory and Techniques Societies, and served as the President/Chair of the Purdue University Student Branch Chapter of the latter from 2010-2011.

Dirk Grunwald

Dirk Grunwald is Professor in the Dept. of Computer Science at the Univ. of Colorado. He's been involved in cognitive and software radio systems for several years and is currently leading the NSF GENI CogRadio platform development effort.

David Gurney

Dave Gurney is a Distinguished Member of the Technical Staff in the CTO organization at Motorola Solutions in Schaumburg, IL. In his 22 year career at Motorola, he has worked on numerous communications systems, including US and Japan Digital Cellular, IS-95 CDMA, Wimax, LTE, cable and P25 systems. He has also worked extensively on Cognitive Radio, TV white space, RFID, and Fiber-to-the-Home projects. He holds a BSEE degree from the University of Illinois, and a MSEE degree from NTU. He currently holds 28 patents, and is recognized as a Master Innovator at Motorola Solutions.

Philip Harris

Philip Harris has 28 years of experience in various engineering roles that include commercial telecommunications network design, RF engineering, support for standards development and NIJ research & development programs. His career roles include engineering, engineering management, program management and technology pilot support activities. His progressive responsibilities include all aspects of project system engineering, project cost compilation, customer sales support, and project coordination; concept through activation encompassing all aspects of project engineering and implementation.

He is currently serving in a support role as Technology Director for the NIJ Communications Center of Excellence, and has spent most of the last decade working primarily in the field of

Public Safety and Criminal Justice related wireless communications technology, on behalf of NIJ supporting of State, Local and Tribal law enforcement and public safety agencies. This includes technology analysis, technology R&D program support, investigating the potential for software defined radio, cognitive radio applications and technical standards in regard to development Public Safety communications tasks and needs.

Dale Hatfield

Dale N. Hatfield is currently an independent consultant and Adjunct Professor in the Interdisciplinary Telecommunications Program at the University of Colorado at Boulder. Prior to joining the University of Colorado, Hatfield was the Chief of the Office of Engineering and Technology at the Federal Communications Commission and, immediately before that, he was Chief Technologist at the Agency. He retired from the Commission and government service in December 2000. Before joining the Commission in December 1997, he was Chief Executive Officer of Hatfield Associates, Inc., a Boulder, Colorado based multidisciplinary telecommunications consulting firm. Before founding the consulting firm in 1982, Hatfield was Acting Assistant Secretary of Commerce for Communications and Information and Acting Administrator of the National Telecommunications and Information Administration. Before moving to NTIA, Hatfield was Chief of the Office of Plans and Policy at the FCC. Hatfield has nearly four decades of experience in telecommunications policy and regulation.

Hatfield has been involved in spectrum management issues for almost his entire career, including having major responsibilities for management of the resource at both the FCC and NTIA. Additionally, he has lectured, developed and taught short courses, and consulted in the area of spectrum management both domestically and internationally. For example, during 2005, Hatfield presented material and moderated a series of four virtual conferences on the topic of spectrum management for the development arm of the International Telecommunications Union (ITU-D). The fourth conference included participation by 18 countries around the world. Also, in 2005, Hatfield co-chaired the Technical Committee of the IEEE Symposium on New Frontiers in Dynamic Spectrum Access" (DSA) networks, co-chaired a day-long panel session on spectrum management issues on behalf of the General Accounting Office at the National Academies, and spoke at the Spectrum Summit of the US Department of Defense. Hatfield was also the co-author of the 2004/2005 ITU publication "Trends in Telecommunication Reform."

Joseph Heaps

Joseph Heaps is the Policy Advisor on Communications and Radio Frequency issues at the National Institute of Justice (NIJ) within the U.S. Department of Justice. Mr. Heaps has recently returned to NIJ from invited details to the Federal Communications Commission to work on the National Broadband Plan and the Department of Commerce to work on the Broadband Technology Opportunities Program. Prior to NIJ, Mr. Heaps was Vice President of Business

Development at AstroVision International, a commercial satellite company. Mr. Heaps was a Senior Policy Analyst at the FCC, where he advised three FCC Chairmen and served as a United States Delegate to the World Radiocommunication Conference in Istanbul (2000) and in Geneva (1997). Prior to the FCC, Mr. Heaps worked in fixed income portfolio investment management at T. Rowe Price Associates and served eight years on active duty in the U.S. Navy as an Aviator and in Systems Acquisition in the Space and Electronic Warfare Community. Mr. Heaps holds a Masters in Business Administration from the Darden Graduate School of Business at the University of Virginia and a Bachelors Degree in Electrical Engineering from Villanova University. Mr. Heaps is a member of the Veterans of Foreign Wars.

James Kimery

James Kimery is the Director of Marketing for National Instruments RF / Communications / SDR initiatives. In this role, James is responsible for the defining the product roadmaps for the company's software defined radio strategy. He also leads the RF and Communications Lead User programs for research and education. Prior to joining NI, James was the Director of Marketing for Silicon Laboratories' wireless division which is now a subsidiary of ST-Ericsson. As Director, the wireless division grew to over $250M in revenue and produced several industry innovations including the first integrated CMOS RF synthesizer and transceiver for cellular communications, the first digitally controlled crystal oscillator, and the first integrated single chip phone (AeroFONE). AeroFONE was voted by the IEEE as one of the top 40 innovative ICs ever developed. James also worked at National Instruments before transitioning to Silicon Labs and led many successful programs including the concept and launch of the PCI eXtensions for Instrumentation (PXI) platform. James was a founding member of the VXIplug&play Systems Alliance, VISA working group, and PXI System Alliance. He has authored over 26 technical papers and articles covering a variety of wireless and test and measurement related topics. James holds degrees from the University of Texas at Austin (MBA) and Texas A&M University (BSEE).

Bruce Kraemer

Bruce Kraemer has been participating in IEEE activities since 1996. Within the IEEE, he is currently serving as 802.11 Chair. Additionally within the IEEE Standards Association, he is a member of RevCom, AudCom and is a member of the Board of Governors.

He participates in various standards development organizations such as ETSI BRAN, ITU-R, and ISO/JTC1, in industry groups such as and Bluetooth, as well as Smart Grid activities such as NIST/Smart Grid Interoperability Panel and Open SG. He has actively participated in the Wi-Fi Alliance having served there as Chair of the Long Range task group and vice chair of the Spectrum and Regulatory task group.

He currently serves as Senior Manager of Strategic Marketing for Marvell Semiconductor and has previously been involved in communications product development for wired and wireless systems for Intersil, Globespan, Conexant and Harris Semiconductor.

He holds a BS degree in Chemistry from MIT and a Masters in Management Science from Worcester Polytech.

J. Nicholas Laneman

J. Nicholas Laneman is Founding Director of the Wireless Institute in the College of Engineering, an Associate Professor of Electrical Engineering, and a Fellow of the John J. Reilly Center for Science, Technology, and Values at the University of Notre Dame. He joined the faculty in August 2002 shortly after earning a Ph.D. in Electrical Engineering and Computer Science from the Massachusetts Institute of Technology (MIT). His research and teaching interests are in communications architecture—a blend of information theory, error-control coding, signal processing for communications, network protocols, and hardware design—with current emphasis on wireless systems. Laneman has initiated collaborations with other engineers, economists, and policy makers to help shape spectrum regulation and innovation policy.

Laneman has received a 2006 Presidential Early-Career Award for Scientists and Engineers (PECASE), a 2006 National Science Foundation (NSF) CAREER Award, a 2003 Oak Ridge Associated Universities (ORAU) Ralph E. Powe Junior Faculty Enhancement Award, and the 2001 MIT EECS Harold L. Hazen Graduate Teaching Award. He is an IEEE Senior Member and has served as an Associate Editor for IEEE Transactions on Communications, as a Guest Editor for Special Issues of IEEE Transactions on Information Theory and IEEE Journal on Selected Areas in Communications, and as the first Online Editor for the IEEE Information Theory Society.

Laneman is author or co-author on over 100 publications, including 32 journal articles and 3 invited book chapters, and has been recognized by Thomson Reuters as an ISI Highly Cited Researcher (2010). He is co-inventor on 5 U.S. patents and has several patents pending. He currently advises six Ph.D. students; five Ph.D. degrees, ten M.S. degrees, and one B.S. honors degree have been earned under his supervision. All of these research efforts have been supported in part by over $8M in research funding, with Laneman serving as principal investigator on just under $3M.

William Lehr

Dr. William Lehr is a telecommunications/Internet industry economist and policy analyst with over twenty years of experience in academic research and industry consulting. He is currently a research scientist in the Computer Science and Artificial Intelligence Laboratory (CSAIL) at the Massachusetts Institute of Technology (MIT). Dr. Lehr's research focuses on the economic and policy implications of broadband Internet access, next generation Internet architecture, and the

evolution of wireless technology. Dr. Lehr holds a PhD in Economics from Stanford, an MBA in Finance from the Wharton School, and MSE, BA, and BS degrees from the University of Pennsylvania.

David Love

David J. Love received the B.S. (with highest honors), M.S.E., and Ph.D. degrees in electrical engineering from the University of Texas at Austin in 2000, 2002, and 2004, respectively. During the summers of 2000 and 2002, he was with Texas Instruments, Dallas, TX. Since August 2004, he is with the School of Electrical and Computer Engineering, Purdue University, West Lafayette, IN, where he is now an Associate Professor and University Faculty Scholar. He currently serves as an Associate Editor for the IEEE Transactions on Signal Processing and previously served as an Associate Editor for the IEEE Transactions on Communications. He has also served as a guest editor for special issues of the IEEE Journal on Selected Areas in Communications and the EURASIP Journal on Wireless Communications and Networking. His research interests are in the design and analysis of communication systems, human-aware wireless, MIMO array processing, and array processing for medical imaging.

Dr. Love is a Senior Member of the IEEE and a member of both Tau Beta Pi and Eta Kappa Nu. Along with co-authors, he was awarded the 2009 IEEE Transactions on Vehicular Technology Jack Neubauer Memorial Award for the best systems paper published in the IEEE Transactions on Vehicular Technology in that year. He was the recipient of the Fall 2010 Purdue HKN Outstanding Teacher Award and was an invited participant to the 2011 NAE Frontiers of Engineering Education Symposium. In 2003, Dr. Love was awarded the IEEE Vehicular Technology Society Daniel Noble Fellowship.

Preston Marshall

Preston F. Marshall is the Deputy Director of the Information Sciences Institute (ISI) of University of Southern California's Viterbi School of Engineering, and a Research Professor at USC's Ming Hsieh Department of Electrical Engineering. He is responsible leadership to computational technology, including High performance computing, biomedical electronics, smart grid, and circuit design research programs. His personal research interests are in wireless networking, cognitive radio, spectrum policy, and extreme communications requirements.

Formerly he was Program Manager with the Defense Advanced Research Projects Agency (DARPA) Strategic Technology Office (STO), for many of the DARPA Wireless, Cognitive Radio, and networking programs. These programs include development of the XG Dynamic Spectrum Access technology, Wireless Networking after Next (WNAN) program for low cost wireless networking and the Disruption and Delay Tolerant Networking Program (DTN).

Dr. Marshall has written many articles, book chapters and conference presentations on the subject of cognitive radio and spectrum issues. He is author of the recently released "Quantitative Analysis of Cognitive Radio and Network Performance" and the upcoming "Scaling, Density, and Decision-Making in Cognitive Wireless Systems" by Cambridge University Press. He is Executive Chair of the IEEE DYSPAN Dynamic Spectrum conference. Dr. Marshall holds a B.S.E.E and M.S. Information Science from Lehigh University, and a Ph.D. in Electrical Engineering from Trinity College, Dublin, IE.

Howard McDonald

Howard McDonald joined the Defense Spectrum Organization (DSO) in December 2008 after a 23 year career in private industry addressing a wide variety of challenges associated with DoD spectrum operations. Mr. McDonald was the project manager for the Defense Information Systems Agency's Emerging Spectrum Technologies program for several years, addressing a wide range of topics including exploration of early concepts for supportability of adaptive/cognitive systems. He is currently DSO's team lead for Dynamic Spectrum Access (DSA) activities.

Mark McHenry

Mark A. McHenry has extensive experience in military and commercial communication systems design, including research on the next generation of advanced wireless networks. He founded two high-tech wireless research and development companies. In 2000, he founded Shared Spectrum Company (SSC), which is developing automated spectrum sharing technology. Shared Spectrum Company develops advanced technologies for government and industry customers with challenging radio frequency and networking needs. It specializes in dynamic spectrum management applications. McHenry was also a co-founder of San Diego Research Center, Incorporated (SDRC) that focused on DoD test and training systems. SDRC was acquired by Argon ST in 2006. McHenry was a Program Manager at DARPA, where he managed multiple tactical wireless related programs. McHenry received the Office of Secretary of Defense Award for Outstanding Achievement in 1997 and the Office of Secretary of Defense Award for Exceptional Public Service Award in 2000. McHenry was an engineer at SRI International, Northrop Advanced Systems, McDonnell Douglas Astronautics, Hughes Aircraft and Ford Aerospace. McHenry was named Engineer of the Year by the District of Columbia Council of Engineering and Architectural Societies in February, 2006. McHenry was appointed by Secretary of Commerce, Carlos Gutierrez, to serve as a member of the Commerce Spectrum Advisory Committee, in December 2006. McHenry received a B.S. in Engineering and Applied Science from the California Institute of Technology, a M.S. in Electrical Engineering from the University of Colorado, and a Ph.D. in Electrical Engineering from Stanford University.

Laurence Milstein

Laurence B. Milstein (S66, M68, SM77, F85) received the B.E.E. degree from the City College of New York, New York, NY, in 1964, and the M.S. and Ph.D. degrees in electrical engineering from the Polytechnic Institute of Brooklyn, Brooklyn, NY, in 1966 and 1968, respectively.

From 1968 to 1974, he was with the Space and Communications Group of Hughes Aircraft Company, and from 1974 to 1976, he was a member of the Department of Electrical and Systems Engineering, Rensselaer Polytechnic Institute, Troy, NY. Since 1976, he has been with the Department of Electrical and Computer Engineering, University of California at San Diego, La Jolla, where he is the Ericsson Professor of Wireless Communications Access Techniques and former Department Chairman, working in the area of digital communication theory with special emphasis on spread-spectrum communication systems. He has also been a consultant to both government and industry in the areas of radar and communications.

Dr. Milstein was an Associate Editor for Communication Theory for the IEEE TRANSACTIONS ON COMMUNICATIONS, an Associate Editor for Book Reviews for the IEEE TRANSACTIONS ON INFORMATION THEORY, an Associate Technical Editor for the IEEE Communications Magazine, and the Editor-in-Chief of the IEEE JOURNAL ON SELECTED AREAS IN COMMUNICATIONS. He has been a member of the board of governors of both the IEEE Communications Society and the IEEE Information Theory Society, and was the Vice President for Technical Affairs in 1990 and 1991 of the IEEE Communications Society. He was a former chair of the IEEE Fellows Selection Committee, and was a recipient of the 1998 Military Communications Conference Long Term Technical Achievement Award, an Academic Senate 1999 UCSD Distinguished Teaching Award, an IEEE Third Millennium Medal in 2000, the 2000 IEEE Communications Society Armstrong Technical Achievement Award, and various prize paper awards. He was also the recipient of the IEEE Communications Theory Technical Committee (CTTC) Service Award in 2009, and the CTTC Achievement Award in 2012.

Apurva Mody

Dr. Apurva N. Mody is the Chairman of the recently launched WhiteSpace Alliance™ as well as the Chair of the IEEE 802.22 Working Group (WG) for Wireless Regional Area Networks (WRANs). Under his leadership, the IEEE 802.22 WG has received the IEEE SA Emerging Technology Award. Dr. Mody received his Ph. D. in Electrical Engineering from Georgia Institute of Technology in December 2004. Dr. Mody sold 6 patents developed during his Ph.D. to Intellectual Ventures**.** Dr. Mody has been responsible for growing the BAE Systems expertise and market share on Cognitive Radio (CR), Dynamic Spectrum Access (DSA) related programs from $650K in 2005 to more than $15M today. Dr. Mody has served in leading roles on many Department of Defense (DoD) programs such as DARPA Communications under Extreme RF Spectrum (CommEx), DARPA Cognitive-radio Low-energy Analysis Sensing IC (CLASIC), US Army Agile Spectrum Utilization for Robustness and Efficiency (ASURE), NTIA Spectrum Sharing Test-

bed etc. Dr. Mody is a regularly invited speaker at DoD and commercial conferences. Dr. Mody is a Senior Member of the IEEE, he was President's Fellow while at Georgia Tech, he is a member of IEEE Eta Kappa Nu and Tau Beta Pi honor societies. His research work has been published in numerous book chapters, publications and patents.

Prakash Moorut

Prakash Moorut received his MSEE degree from Ecole Superieure d'Electricite in Paris, France in 1997. Since then he has worked in Motorola's and more recently since May 2011 in Nokia Siemens Networks' Technology Office on advanced technologies with focus on spectrum regulation (CEPT, ITU, FCC, etc) and strategy, standardization (new 3G, 4G bands RF specifications in 3GPP, ETSI, etc), spectrum coexistence analysis/simulations and efficient spectrum usage solutions for products and operators worldwide. He has worked on multiple wireless technologies including GSM, CDMA, UMTS, TETRA/Public Safety, WiMAX, LTE, LTE-Advanced (Carrier Aggregation), TV White Space and unlicensed systems and is currently enabling HetNets, Small Cells access and backhaul, mm-wave (60-90GHz) Beyond 4G technologies and Spectrum Sharing. He helped pioneer a new approach to inter-system coexistence analysis based on Monte Carlo simulations which led to the first publicly available coexistence simulation tool in CEPT and was also adopted for coexistence studies in 3GPP, CEPT and ITU. He has also developed innovative schemes to manage spectrum efficiently and insert in standards. In Motorola, he created and led a customer facing spectrum engineering group located in USA, France, and China. He was nominated by Nokia Siemens Networks (NSN) as its representative on the technical Working Groups newly formed by the Commerce Spectrum Management Advisory Committee (CSMAC) to facilitate the repurposing of the 1695-1710 MHz and 1755-1850 MHz bands for wireless broadband from Federal Government use and also on FCC's 2015 World Radiocommunication Conference Advisory Committee. He is also NSN's representative in Global TD-LTE Initiative and 4G Americas on spectrum related matters.

Jon Peha

Jon Peha is a Full Professor at Carnegie Mellon University. He served in government in 2008-2011, first as Chief Technologist of the Federal Communications Commission, and then Assistant Director of the White House Office of Science & Technology Policy where he focused on Communications and Research (including creation of the Wireless Spectrum Research & Development Committee). At Carnegie Mellon, he is a Professor in the Dept. of Engineering & Public Policy and the Dept. of Electrical & Computer Engineering. He has served as Chief Technical Officer for three high-tech companies. He has also addressed telecom and e-commerce policy on legislative staff in the House Energy & Commerce Committee and the Senate, and helped launch and lead a US Government interagency program to assist developing countries with information infrastructure. His research has spanned both technical and policy issues of information networks. He holds a PhD in electrical engineering from Stanford. He is an IEEE Fellow, an AAAS Fellow, and winner of the FCC's "Excellence in Engineering Award" and

the IEEE TCCN Publication Award for career "contributions to techno-economic analysis of spectrum allocation policies."

Thomas Power

Tom Power has served as the U.S. Deputy Chief Technology Officer for Telecommunications at the White House Office of Science and Technology Policy since August 2011. As Deputy CTO, Power helps develop and coordinate Administration policy on telecom and technology issues. Before joining OSTP, Power served for more than two years as the Chief of Staff of the National Telecommunications and Information Administration at the U.S. Department of Commerce. At NTIA, Power provided policy and managerial direction for a wide range of agency activities, including spectrum, Internet policymaking, and Recovery Act broadband grant programs.

Between 2000 and 2009, Power served as General Counsel of Fiberlink Communications in Blue Bell, PA. From 1994 -2000, he served in supervisory roles at the Federal Communications Commission before being named Senior Legal Adviser to FCC Chairman William Kennard, advising the chairman on broadband, common carrier, and mass media matters. Before joining the FCC, Power was a telecommunications and litigation partner at the law firm of Winston & Strawn. He received his undergraduate and law degrees from the University of Virginia.

Jeffrey Reed

Dr. Jeffrey H. Reed is the Willis G. Worcester Professor in the Bradley Department of Electrical and Computer Engineering. He currently serves as Director of Wireless @ Virginia Tech, one of the largest and most comprehensive university wireless research groups in the US. He is the Founding Faculty member of the Ted and Karyn Hume Center for National Security and Technology and served as its interim Director when founded in 2010. He arrived at Virginia Tech in 1992 after working as a part-time faculty member at UC Davis and independent consultant.

Dr. Reed's area of expertise is in cognitive radios, software radios, and smart antennas. He has authored, co-authored, or co-edited ten books and proceedings, contributed to six books, and authored or co-authored over two hundred journal and conference papers. He is currently writing two books, one that is a text book on cellular radio systems and the other a text book on SDR and cognitive radio. These books are expected to be published in 2012.

He is co-founder of Cognitive Radio Technologies (CRT), a company that is commercializing of the cognitive radio technologies produced at Virginia Tech for commercial and military applications, and for Power Fingerprinting, a company specializing in security for embedded systems, including Android platforms. He co-founded these companies with his former PhD students. He has also served as a consultant for approximately 30 organizations. He has

served on the technical advisory boards for approximately six companies. In 2005, Dr. Reed became Fellow to the IEEE for contributions to software radio and communications signal processing and for leadership in engineering education.

Dr. Reed has had numerous commercial sponsors including Samsung, Motorola, LG, GM, and Intel; government sponsors including DOJ, Customs Dept., DARPA, ONR, ARO, JIEDDO, CIA, and NSA; and government contractors including Booz, Allen Hamilton, SAIC, General Dynamics, Aerospace, IDA, and Raytheon.

Within the past few years Dr. Reed's recent service activities include serving on White House advisory committee on spectrum issues, working with DoD on countering wireless initiated IEDs, and providing national leaders informal advice on public safety communications legislation.

Dennis Roberson

Dennis A. Roberson is Vice Provost for Corporate Relations and Strategic Initiatives, and a Research Professor in Computer Science at Illinois Institute of Technology. In this capacity, he has responsibility for IIT's relationships with its various corporate partners and serves as the focus for the implementation of IIT's Strategic Plan. He also supports the development of new research centers, and the successful initiation and growth of IIT related technology-based business ventures. Professor Roberson is a co-founder of IIT's Wireless Network and Communications Research Center (WiNCom) and an educator in the wireless networking arena.

He is also the President and CEO of Roberson and Associates, LLC, a consulting firm primarily focused on wireless technology and technology management serving government and commercial customers. He serves on the governing and/or advisory boards of several technology-based companies and on the FCC's Technology Advisory Council and Open Internet Advisory Committee, and the U.S. Commerce Spectrum Management Advisory Committee. He also recently served as an Invited Expert on the President's Council of Advisors on Science and Technology Working Group on Spectrum Policy. Prior to IIT, he was EVP and CTO at Motorola. Professor Roberson has an extensive corporate career including major business and technology responsibilities at IBM, DEC (now part of HP), AT&T, and NCR. He is involved with a wide variety of Technology, Educational and Youth organizations and serves as a frequent speaker at universities, companies, technical workshops, and conferences around the globe. Professor Roberson has BS degrees in Electrical Engineering and in Physics from Washington State University and a MSEE degree from Stanford.

Anant Sahai

Anant Sahai received the B.S. in 1994, from the University of California, Berkeley, and the S.M. and Ph.D. from the Massachusetts Institute of Technology in 1996 and 2001, respectively. He is

an associate professor in the Department of Electrical Engineering and Computer Sciences at the University of California, Berkeley, where he joined as an assistant professor in 2002. Prior to that, he spent a year as a research scientist at the wireless startup Enuvis in South San Francisco, developing software-radio signal-processing algorithms to enable very sensitive GPS receivers for indoor operation. From 2007 to 2009, he was the treasurer for the IEEE Information Theory Society. His current research interests are at the intersection of information theory and decentralized control, as well as in wireless communication, especially green radios and dynamic spectrum sharing. Within spectrum sharing, his interests span spectrum sensing, whitespaces, and the intersection of law/economics/policy/technology --- particularly in supporting light-handed regulation of spectrum.

Brian Scarpelli

Brian Scarpelli is a Manager of Government Affairs with the Telecommunications Industry Association (TIA). TIA is the leading trade association representing the global information and communications technology (ICT) industry through standards development, policy initiatives, business opportunities, market intelligence and networking events. In his capacity at TIA, Mr. Scarpelli is a member of the regulatory team, responsible for policy advocacy to a number of Federal agencies, including the Federal Communications Commission, the National Telecommunications & Information Administration, the Department of Commerce, and others.

Prior to his employment with the Commission, Mr. Scarpelli was employed in the radio industry for 10 years and worked for several communications industry trade associations. He later completed a legal externship in the Office of Commissioner Robert McDowell at the Federal Communications Commission. Mr. Scarpelli received his B.A. from Albion College in 2005 and his J.D. from Thomas M. Cooley Law School in 2008. He is originally from Lansing, Michigan.

Brian Shepherd

Brian Shepherd is currently the Broadband Program Manager for the State of Colorado Governor's Office of Information Technology where he is responsible for the development and implementation of a statewide broadband strategy. Prior to joining the state Mr. Shepherd was involved in the early development of the Nationwide Public Safety Broadband Network (NPSBN) as the Deputy Director of the Adams County Communication Center, one of the 21 initial waiver recipients and 7 BTOP awardees. Mr. Shepherd has worked with the FCC, the NTIA and DHS on a variety of issues related to public safety broadband and was a member of the FCC's Technical Advisory Board for First Responder Interoperability. In addition to his work on Public Safety Broadband Mr. Shepherd was the past chair of the Colorado 9-1-1 Task Force and helped organize the state's efforts towards NextGen 9-1-1.
Mr. Shepherd holds a Bachelors Degree in Information Systems and a Masters Degree in Public Administration, both from the University of Colorado.

Tod Sizer

Dr. Theodore (Tod) Sizer is leader of the Access Technology Research Domain in Bell Laboratories. In this role he leads teams in six worldwide locations innovating in all aspects of access systems and technology both wireless, copper, and optical with special opportunities being explored at the convergence between these. Recently he has had significant impact as a key proponent and inventor of the lightRadio™ technology and systems leading to Alcatel-Lucent's product line solution to address the current Wireless Data explosion. During his tenure at Bell Labs he has performed research in Wired and Wireless Home Networking, Fixed Wireless Loop systems, Video Watermarking technologies, Optical Computing and Switching Systems, and High Power Laser Design. He was a member of the technical team in Lucent's role as a promoter in the Bluetooth Special Interest Group (SIG). His responsibilities in the SIG included being Chair of the Coexistence Working Group. Tod graduated from Amherst College, *Magna Cum Laude* and received his Masters and Doctorate from the Institute of Optics at the University of Rochester. In 2007 Tod was named a Bell Labs Fellow "For sustained creative contributions to wireless systems, particularly in the convergence of packet and wireless technologies". He is the author of 43 patents, 16 patents pending and over 50 refereed publications and is a member of the IEEE and OSA.

John Stine

Dr. John A. Stine is Chief Technology Officer for Operations Research and Systems Analysis at the MITRE Corporation. Prior to joining MITRE, John served 20 years as an engineer and as an ORSA in the U.S. Army. He served in all company level leadership positions and in battalion, brigade, and division staff positions. He taught electrical engineering at the United States Military Academy. He was the coordinating analyst in the Army's first tactical networking experiments. In his ten years at MITRE, he has led internally funded research in mobile ad hoc networking, consulted with the DoD on spectrum management issues authoring "Spectrum Management 101," consulted with Army analysis agencies on modeling and analysis of tactical networks specializing on operational effectiveness, and is currently leading a research project to enable more dynamic spectrum management by exploiting models of spectrum consumption. John has authored numerous papers on wireless networking, spectrum management, dynamic spectrum access and network modeling and evaluation and has patents and patents pending in wireless mobile ad hoc networking and spectrum management. He received the OPNETWORK Distinguished Paper Award in 2005, IEEE Dynamic Spectrum Access Networks Conference best paper award in 2007, and the International Test and Evaluation Association's publication award for 2007.

Dr. Stine holds a Bachelor of Science degree in General Engineering from the United States Military Academy at West Point, Master of Science Degrees in Electrical Engineering and in Manufacturing Systems Engineering from the University of Texas at Austin and a Doctorate in Electrical Engineering from the University of Texas at Austin. He is a senior member of the IEEE and is registered as a professional engineer in the State of Virginia.

Koduvayur Subbalakshmi

Prof. K.P. (Suba) Subbalakshmi is an Associate Professor at Stevens Institute of Technology. Her research interests are in the areas of cognitive radio networks, wireless network security, media forensics as well as social networks. She is the Vice-Chair North America region of IEEE Technical Committee on Cognitive Networks. She has given several key-note addresses, plenary talks and tutorials on DSA security at several international conferences. She has also served as a panelist on cognitive radio network security at international conferences including IEEE Dynamic Spectrum Access: Collaboration between the Technical, Regulatory and Business Communities, IEEE ICC, IEEE Sarnoff Symposium etc. She was a Guest Editor of the EURASIP Journal on Advances in Signal Processing, Special Issue on Dynamic Spectrum Access for Wireless Networks. Her work is/has been supported by the National Science Foundation, National Institute of Justice, DoD agencies as well as the Industry. Suba is also the co-founder of two companies that seek to commercialize some of her research work. One of these is Dynamic Spectrum LLC which commercializes her work in Dynamic Spectrum Access Networks.

Rangam Subramanian

Dr. Subramanian is a Principal, Wireless Business and Technology Strategy, National and Homeland Security Directorate, Idaho National Laboratory, Idaho Falls, ID. His primary responsibilities include: developing and executing on secure wireless business development and strategy; delivering on wireless technology leadership for research and testing programs of national importance; building collaborations across the stakeholders in the government, industry, entrepreneurs and the academia; and defining the direction and roadmap for the INL wireless research center. He is currently serving the White House/ OSTP (Office of the Science and Technology Policy) Senior Steering Group (SSG) on Wireless Spectrum Sharing R&D (WSRD).

Dr. Subramanian has more than 20 years of international experience across multiple Telecommunications OEMs, carriers, investors, government and the academic community. His extensive experience spans across wireline, wireless, satellite and converged multimedia Telecommunication technologies. He has contributed in several functional areas, including Telecommunications research, technology development and deployment, mergers & acquisitions, technology strategy and innovation, business development, global partnerships and organizational leadership. Dr. Subramanian is currently working with the leaders from multiple national agencies on national level secure wireless technology research and experimentation needed to appropriately bridge the government, industry and the academia, supporting national defense, public safety, energy grid, intelligent transportation and commercial systems. Dr. Subramanian frequently leads and participates in national level conferences and workshops.

Dr. Subramanian holds an MBA from the Kellogg School of Management, Northwestern University, Evanston, IL, USA; a PhD in Computer & Systems Engineering from the School of Computer Science, Oakland University, Rochester, Michigan, USA; an MS in Telecommunications from the Asian Institute of Technology, Bangkok, Thailand; and a BS in Electronics Engineering from the National Institute of Technology, Calicut, India.

Bryan Tramont

Bryan Tramont, the firm's managing partner, offers strategic counsel to Fortune 100 companies and trade associations, as well as small and mid-sized telecommunications and media companies, on all aspects of communications law and regulation. He regularly advises companies as they develop and evaluate new business opportunities in the technology, media, and telecommunications sectors. Before joining WBK, Mr. Tramont served as Chief of Staff of the Federal Communications Commission under Chairman Michael Powell. As Chief of Staff, he managed all aspects of the agency's operations. Before being elevated to Chief of Staff, Mr. Tramont served as Chairman Powell's Senior Legal Advisor, as well as prior stints as Senior Legal Advisor to Commissioners Kathleen Abernathy and Harold Furchtgott-Roth. He currently is an adjunct law professor in Catholic University of America's Communications Law Institute and a senior adjunct fellow at the University of Colorado, Boulder. Mr. Tramont has been recognized by leading publications like Legal 500, Chambers USA, and Washingtonian as one of the nation's top communications lawyers. Tramont serves on the Commerce Department Spectrum Management Advisory Committee and previously co-chaired the Committee for three years. He has served in numerous leadership positions for the Federal Communications Bar Association, including President for 2010-2011.

Roy Yates

Roy Yates received the B.S.E. degree in 1983 from Princeton and the S.M. and Ph.D. degrees in 1986 and 1990 from MIT, all in Electrical Engineering. Since 1990, he has been with the Wireless Information Networks Laboratory (WINLAB) and the ECE department at Rutgers University. He presently serves as an Associate Director of WINLAB and a Professor in the ECE Dept. He also serves as an associate editor for communication networks of the IEEE Transactions on Information Theory. He is an author of the text "Probability and Stochastic Processes: A Friendly Introduction for Electrical and Computer Engineers" published by John Wiley and Sons. He is a 2011 IEEE Fellow and a recipient of the 2003 IEEE Marconi Prize Paper Award in Wireless Communications. His research in wireless networks includes data dissemination, interference mitigation, secret communication, and spectrum regulation.

Heather Zheng

Haitao (Heather) Zheng is an Associate Professor at the University of California, Santa Barbara. Prof. Zheng's research interests lie in algorithm and system design for general networking

systems, and her recent focus has been on cognitive radios, dynamic spectrum access networks, 60GHz data center networks and social networks. Prof. Zheng received various awards, including the MIT Technology Review Top 35 Innovators under the age of 35 in 2005, and the Bell Laboratories President's Gold Award in 2002. Her research on cognitive radios was also featured by MIT Technology Review as one of the 10 Emerging Technologies in 2006.