PITAC Members (2003 - June 2005)

(Updated June 2005)

Co-Chairs

Marc R. Benioff	Salesforce.com, Inc.
Edward D. Lazowska, Ph.D.	University of Washington

Members

Ruzena Bajcsy, Ph.D.	University of California, Berkeley
J. Carter Beese, Jr.	Riggs Capital Partners
Pedro Celis, Ph.D.	Microsoft Corporation
Patricia Thomas Evans	Global Systems Consulting Corporation
Manuel A. Fernandez	SI Ventures/Gartner
Luis E. Fiallo	Fiallo and Associates, LLC
José-Marie Griffiths, Ph.D.	University of North Carolina at Chapel Hill
William J. Hannigan	AT&T
Jonathan C. Javitt, MD, MPH	The Potomac Institute for Policy Studies
Judith L. Klavans, Ph.D.	University of Maryland
F. Thomson Leighton, Ph.D.	Akamai Technologies and Massachusetts Institute of Technology
Harold Mortazavian, Ph.D.	Advanced Scientific Research, Inc.

Randall D. Mott	Dell Computer Corporation
Peter M. Neupert	Consultant
Eli M. Noam, Ph.D.	Columbia University
David A. Patterson, Ph.D.	University of California, Berkeley
Alice G. Quintanilla	Information Assets Management, Inc.
Daniel A. Reed, Ph.D.	University of North Carolina at Chapel Hill
Eugene H. Spafford, Ph.D.	Purdue University
David H. Staelin, Ph.D.	Massachusetts Institute of Technology
Peter S. Tippett, MD, Ph.D.	TruSecure Corporation
Geoffrey Yang	Redpoint Ventures

PITAC Members Biographies

(Updated May 2005)

Ruzena Bajcsy ("buy chee") was appointed Director of CITRIS at the University of California, Berkeley on November 1, 2001. Prior to coming to Berkeley, she was Assistant Director of the Computer Information Science and Engineering Directorate (CISE) between December 1, 1998 and September 1, 2001. As head of National Science Foundation's CISE directorate, Dr. Bajcsy managed a $500 million annual budget. She came to the NSF from the University of Pennsylvania where she was a professor of computer science and engineering.

Dr. Bajcsy is a pioneering researcher in machine perception, robotics and artificial intelligence. She is a professor in the Electrical Engineering and Computer Science Department at Berkeley. She is also a member of the Neuroscience Institute and the School of Medicine at the University of Pennsylvania. She is the former Director of the University of Pennsylvania's General Robotics Automation Sensing Perception Laboratory, which she founded in 1978.

Dr. Bajcsy has done seminal research in the areas of human-centered computer control, cognitive science, robotics, computerized radiological/medical image processing and artificial vision. She is highly

regarded, not only for her significant research contributions, but also for her leadership in the creation of a world-class robotics laboratory, recognized world wide as a premiere research center. She is a member of the National Academy of Engineering, as well as the Institute of Medicine. She is especially known for her wide-ranging, broad outlook in the field and her cross-disciplinary talent and leadership in successfully bridging such diverse areas as robotics and artificial intelligence, engineering and cognitive science.

Dr. Bajcsy received her master's and Ph.D. degrees in electrical engineering from Slovak Technical University in 1957 and 1967, respectively. She received a Ph.D. in computer science in 1972 from Stanford University, and since that time has been teaching and doing research at Penn's Department of Computer and Information Science. She began as an assistant professor and within 13 years became chair of the department. Prior to her work at the University of Pennsylvania, she taught during the 1950s and 1960s as an instructor and assistant professor in the Department of Mathematics and Department of Computer Science at Slovak Technical University in Bratislava. She has served as advisor to more than 50 Ph.D. recipients. In 2001 she received an honorary doctorate from University of Ljubljana in Slovenia.

In 2001 she became a recipient of the ACM A. Newell award. In the November 2002 issue of Discover Magazine she was named to its list of the 50 most important women in science. In April of 2003 she received the CRA Distinguished Service Award and in May 2003 she was named to PITAC (the President's Information Technology Advisory Committee). She was selected recipient of the 2003 ACM Distinguished Service Award. She will receive an Honorary Degree of Doctor of Engineering from Lehigh University in May 2004.

J. Carter Beese, Jr. is President of Riggs Capital Partners, a venture fund that manages in excess of $100 Million. The Fund is part of Riggs National Corporation, based in Washington, D.C.

Preceding his appointment to Riggs, Mr. Beese was Vice Chairman of the Global Banking Group at Bankers Trust. Prior to the merger between Bankers Trust and Alex. Brown, Mr. Beese was Chairman of Alex. Brown International. He originally joined Alex. Brown in 1978, became an officer in 1984, and a partner in 1987.

In 1990, Mr. Beese was appointed by President George Bush as a Director of the Overseas Private Investment Corporation (OPIC). In 1992, he was nominated by President Bush, confirmed by the U.S. Senate and appointed as the 71st Commissioner of the U.S. Securities and Exchange Commission (SEC). While at the SEC, Mr. Beese was particularly active in the areas of the derivatives markets, corporate governance, and 401(k) Employee Benefits. In November 1994, he rejoined Alex. Brown as Vice Chairman of Alex. Brown International.

Mr. Beese serves as Senior Advisor to the Washington, D.C.-based center for Strategic and International Studies (CSIS), a non-partisan think tank that has been at the forefront of shaping public policy for over 30 years. He is also Senior Advisor to Allied Capital Corporation, and serves on the boards of Aether Systems (Nasdaq:AETH), Nastech Pharmaceutical Company (Nasdaq:NSTK), and Riggs National Corporation (Nasdaq:RIGS).

Marc R. Benioff is Chairman and CEO of salesforce.com. He founded the company in March 1999 with a vision to create a Web-based software utility that would replace traditional enterprise software technology. Benioff is now regarded as the leader of what he termed "The End Of Software," the growing idea that Web-based applications deliver immediate benefits at reduced risks and costs. Under Benioff's leadership, salesforce.com has become the global leader of this new industry and SunBridge, the leading incubator in Japan, named Benioff Entrepreneur of the Year for his work in catalyzing technology change.

Benioff, a 25-year software industry veteran, is recognized as one of the preeminent thinkers in information technology. In May 2003, President George W. Bush appointed Benioff co-chairman of the President's Information Technology Advisory Committee (PITAC), a bi-partisan organization of business leaders and academics that guides the Administration on developing and adopting vital information technology. In October, Hawaiian Governor Linda Lingle named Benioff to Citizens to Achieve Reform in Education, a committee that has been called together to build public support for education reforms in Hawaii's public schools. Fortune Magazine called Benioff one of its Top 10 Entrepreneurs to Watch in 2003; BusinessWeek named him one of the 25 people responsible for turning e-business around; CRM Magazine recognized him as one of the 20 most influential people in the industry; and Silicon.com named Benioff to its list of Agenda Setters for 2003. Also this year, Ernst & Young honored Benioff as a Northern California Entrepreneur of the Year for his innovation in software-as-service.

Throughout his career, Benioff has been determined to use information technology to produce positive social change. In July 2000, with Colin Powell in attendance, Benioff launched the salesforce.com/foundation, a multi-million dollar global philanthropic organization aimed at bridging the digital divide. Pioneering the "1 percent solution" - where the company contributes 1 percent of profits, 1 percent of equity, and 1 percent of employee hours back to the communities it serves - the salesforce.com/foundation has demonstrated the power and impact of integrated philanthropy.

In 2004, Benioff co-authored Compassionate Capitalism, the first-ever best practices guide for corporate philanthropy that illustrates the success of the integrated model. The book was launched in conjunction with the World Economic Forum's 2004 meeting in Davos, Switzerland. Previously, members of the World Economic Forum selected Benioff as a "Global Leader of Tomorrow," one of 100 leaders in business, politics, and the arts committed to addressing social issues. Computerworld awarded Benioff an Honors Laureate for his visionary way of using information technology to better communities. In addition, Benioff received the Promise of Peace award from the Prime Minister of Israel Benjamin Netanyahu for his work using technology as a means to further Middle East peace and the Bridge Award from the non-profit organization HEAVEN (Helping Educate, Activate, Volunteer, and Empower via the Net) for providing internet access to the underserved in America's inner cities.

Prior to creating salesforce.com, Benioff spent 13 years at Oracle Corporation, holding a number of leadership positions in sales, marketing, and product development. Most recently, he was a senior vice president reporting to company chairman Lawrence J. Ellison, a founding investor in salesforce.com. Before joining Oracle, Benioff worked at Apple Computer and founded Liberty Software. Benioff received a B.S. in Business Administration from the University of Southern California in 1986.

Pedro Celis, Ph. D. was born and raised in Monterrey, Mexico. He holds an engineering degree from the Monterrey Institute of Technology (ITESM), and M. Math and Ph. D. degrees in Computer Science from the University of Waterloo in Canada.

Pedro worked as a post-doctoral fellow at the University of Waterloo and later as an assistant professor at the Computer Science Department at Indiana University in Bloomington Indiana.

He worked in California for Britton-Lee Systems before joining the Non-Stop SQL group of Tandem Computers where he worked for 9 years and became one of the few persons ever named Technical Director.

He is currently a Software Architect in the SQL Server group where he has architectural and management oversight responsibilities on one of the most innovative efforts in the company, replacing the existing Windows file system with an integrated storage platform for structured and semi-structured data. He is the holder of over 12 U.S. Patents.

Pedro is also very active in serving in the community. He is an active member in many professional and community associations. He is a board member of the Washington State Hispanic Chamber of Commerce, the Professional Latino Association of the Northwest, The Hispanic Society of Professional Engineers (SHPE) Industrial Partners Council, his neighborhood association, and several other organizations.

In 2003, Pedro was nominated by President Bush to serve a two year term in his President's Information Technology Advisory Committee (PITAC). This 25-member committee is made up of information infrastructure experts from industry and academia that advise the president on how to maintain U.S. pre-eminence in information technology.

Together with his wife Laura and their four children, he relocated to Redmond, Washington from Austin, Texas in October 1998.

Patricia Thomas Evans is President and CEO of Global Systems Consulting (GSC), a business management and IT management consulting firm that she co-founded. Her fourteen-year career with IBM and six-year career as principal consultant with PricewaterhouseCoopers LLP include a solid background in the corporate world of information technology, business management, and consulting. She began her career in Houston, Texas as a developer with IBM on the NASA Space Shuttle operating system software. Ms. Evans is a contributing writer to Minority Business News USA, a national business magazine. She works with local investment clubs to help them assess their approach to fundamental analysis of stocks. Ms. Evans's pedagogical career includes teaching mathematics at high school and collegiate levels. She taught English classes and held calculus workshops (in English) at Ake no Hoshi University in Japan. She contributes to America's small businesses by cturing on information technology for the Service Corps of Retired Executives (SCORE), a Small Business Administration resource partner. Ms. Evans holds the Project Management Professional (PMP) certification from the Project Management Institute (PMI). She serves on the Board of Directors of the Virginia Chamber of Commerce and is a member of the Workforce Investment and Development Committee of the Fairfax County Chamber of Commerce.

In 2003, President George W. Bush appointed Ms. Evans to serve a two-year term in his President's Information Technology Advisory Committee (PITAC). This 25-member PITAC committee, whose members are leading information infrastructure experts from industry and academia, advise the President on maintaining America's pre-eminence in advanced information technologies.

Ms. Evans earned a bachelor's degree in mathematics from Centenary College of Louisiana, along with teaching certification. Ms. Evans earned a master's degree in mathematics (with minor in physics) from The University of Texas at Austin. She received an MBA degree from The George Washington University in Washington, DC.

Manuel A. Fernandez, Managing Director, has been with SI Ventures since its inception in 1998. Prior to his present position he was Chairman, President and CEO of Gartner since January 1991. Currently, Fernandez serves as Chairman Emeritus of Gartner. While at Gartner, the world's leading information technology research and consulting company, the company grew from $45 million to nearly $1 billion during his tenure. Prior to Gartner he held President and CEO position at Dataquest, Inc., an information services company, Gavilan Computer Corporation, a laptop computer manufacturer, and Zilog Incorporated, a semiconductor manufacturing company.

Manny has been in the leading edge of technology development from the first programmable memory device, to the most successful microprocessor, to the first fully battery operated lap top computer. Fernandez has been the recipient of two "Entrepreneur of the Year" awards.

He is presently serving on the board of directors of Brunswick Corporation, The Black & Decker Corporation, eAngler, OpenNetwork Technologies, RealVue Technologies and RelayHealth. In addition he is Chairman of the University of Florida Board of Trustees, and serves on the University of Florida Foundation Board and the University of Florida Research Foundation Board. In May of 2003, President George W. Bush appointed Fernandez to serve as a member of the President's Information Technology Advisory Committee.

Fernandez holds a bachelor's degree in electrical engineering from University of Florida, and completed post-graduate work in solid-state engineering at University of Florida and in business administration at the Florida Institute of Technology.

Luis E. Fiallo is President of Fiallo & Associates, a management consulting organization helping technology companies meet the needs of today's expanding marketplace. Mr. Fiallo is a leader in the development and management of advanced technologies critical to meeting emerging business needs. He has deep expertise in the areas of distributed computing, security and data networking, and is a frequent speaker on such topics in North America and Europe. He currently works with several successful and innovative Fortune 500 companies, and other early stage technology innovators. Mr. Fiallo is also a member of President Bush's information technology council, called the President's Information Technology Advisory Committee (PITAC).

Previously, Mr. Fiallo was the vice president of eBusiness Solutions for BCE Teleglobe. As Teleglobe's Internet officer, he built and launched one of the largest integrated global computing and

communication services. Prior to joining Teleglobe, Fiallo worked as vice president of data networking and Web hosting services for AppliedTheory Corporation, an Internet Service Provider (ISP). He developed and commercialized Delta Edge, a patented next generation dynamic content distribution technology. Furthermore, he held senior management roles at IBM, Sprint and Cable & Wireless where he focused on advanced data networking and computing solutions.

Fiallo received a bachelor's degree in business administration in international business from George Washington University, and a master's degree in information systems from The American University.

José-Marie Griffiths is the Dean of the School of Library and Information Sciences at the University of North Carolina - Chapel Hill. Dr. Griffiths has a research and administrative career that spans 30 years. She was previously the Doreen E. Boyce Chair and Professor in the School of Information Sciences and served as Director of the Sara Fine Institute for Interpersonal Behavior and Technology at the University of Pittsburgh. At the University of Michigan (1996-2001) she was university CIO, Executive Director of the Information Technology Division, Founding Director of the Collaboratory for Advanced Research and Academic Technologies (CARAT) and Professor in the School of Information. She was instrumental in the development of the Ann Arbor IT Zone (to encourage the recruitment and retention of hi-tech companies and talent to the region) and was Founding Chair of its Board. At the University of Tennessee (1989-1996) she held a joint appointment with the Oak Ridge National Lab., as part of the distinguished scientist program, was Professor and Director of the School of Information Sciences, and Vice Chancellor for Computing and Telecommunications (later renamed Information Infrastructure). Dr. Griffiths also held positions as Vice President of King Research, Inc. (1980-1989) directing research projects in advanced information systems and as Director of the Research Computing Laboratory of the Imperial Cancer Research Fund Laboratories (1978-79). Dr. Griffiths presently serves as a member of the U.S. President's Information Technology Advisory Committee, and served as a member of the U.S. National Commission on Libraries and Information Science from 1996-2002. She is the recipient of numerous awards for her contributions to information science, information technology in higher education, the development of the IT industry in Michigan, and community networking in Tennessee. She holds a B.Sc. in physics and Ph.D. in information science from University College London.

William J. Hannigan is President of AT&T, a position he assumed in December 2003. He also is a member of AT&T's Office of the Chairman, the company's governing executive panel led by Chairman and CEO David W. Dorman.

Hannigan, 44, is a seasoned telecom executive who was most recently chairman and chief executive officer of Sabre Holdings (NYSE: TSG) an S&P 500 company and world leader in travel commerce, distribution and technology.

Hannigan was elected to the company's board of directors and named president and CEO in December of 1999. In March of 2000, the company spun off from its parent, AMR, and Hannigan was named chairman of the board. Under Hannigan's leadership, Sabre Holdings completed several strategic transactions including the spin from AMR, the merger of Travelocity and Preview Travel and its subsequent buy-in, a multi-billion-dollar transaction with EDS that included the divestiture of TSG's

infrastructure outsourcing business and numerous other transactions globally. Hannigan left Sabre Holdings with all three of its companies positioned either #1 or #2 globally. Before joining Sabre Holdings in 1999, Hannigan held senior executive positions at SBC Communications. As president of SBC Global Markets, he was responsible for SBC's largest multinational clients. He also served as president of Southwestern Bell's $4.5 billion Business Communications Services unit, where he was responsible for more than 1 million business customers and an organization comprising 5,000 sales, marketing, customer care and network design professionals, as well as the Internet and Network Integration subsidiaries. Prior to SBC's 1997 acquisition of Pacific Bell, Hannigan served as vice president of Business Services for Pacific Bell. Before joining Pacific Bell in 1996, Hannigan spent 13 years at Sprint and its predecessor companies. He began his career at Sprint as a field engineer and then served in positions of increasing responsibility, including vice president and general manager-West Area, and vice president of Engineering and Applications Support.

Hannigan was recently appointed to the President's Information Technology Advisory Committee (PITAC), which provides guidance to the President of the United States and his administration regarding vital information technologies. Hannigan earned a master's degree in business administration from the University of Colorado. He also served six years in the U.S. Navy Submarine Service where he specialized in communications electronics.

Jonathan C. Javitt, MD, MPH is a physician and ophthalmologist with a background in health informatics, health services research, and public health. Dr. Javitt is a Senior Fellow of the Potomac Institute for Policy Studies, in addition to serving as Vice- Chairman of Health Directions, LLC a Bethesda-based investment group that focuses on developing computer solutions to improve the delivery of health care. He is a founder and chief scientific advisor to Active Health Management, Inc., which has deployed a information technology to detect medical errors and reduces health care costs on behalf of three million Americans. Dr. Javitt has previously been a founder of Ingenix, Inc., a information technology-focused division of United Health Care, Clinitek, Inc., a division of Quality Systems, Inc, and Healthcare Computer Associates, which built one of the first microcomputer-based practice management system. He serves on the Medical Faculty of Johns Hopkins University as an adjunct professor and is a graduate of Princeton University, Cornell University Medical College, and the Harvard School of Public Health. Dr. Javitt has been an expert consultant to the White House Council of Economic Advisors, the World Bank, the National Institutes of Health, the Health Care Financing Administration, Department of Veterans Affairs, and the ministries of health of United Kingdom, Sweden, Australia, Japan, and the Netherlands. He is the author of more than 200 scientific books, articles, chapters, and abstracts, including Computers in Medicine: Applications and Possibilities (1984), the first general-market book on the subject.

Judith L. Klavans, is currently at the University of Maryland where she is Associate Director of for Human Language Technology at the newly created center for the Advanced Study of Language (CASL). The University of Maryland was awarded a competitive contract under the University Affiliated Research center (UARC) program to focus on basic and applied research on language, with particular emphasis on the needs of the U.S. government to increase investment in the language problem. CASL's initial research areas include human language technologies, psychological and cognitive factors in

language performance, second language learning, and less commonly taught languages, although additional projects may be added over time. Klavans is responsible for leading interdisciplinary research groups and will set goals for the research staff to be hired in language, linguistics, psychology, and computer science over the next several years. Klavans also holds a research professorship in the College of Language and Information Sciences at the University of Maryland where she leads projects on computational linguistics and image retrieval. Prior to coming to Maryland, Klavans was the Director of the center for Research on Information Access at Columbia University, and before her arrival at Columbia University in 1992, she held a research appointment at the Massachusetts Institute of Technology and spent ten years at the IBM T.J. Watson Research center. Klavans has taught at the City University of New York, Graduate School and at Queens College. Klavans has built large interdisciplinary teams in areas including digital government, digital libraries, medical informatics, image access, multilingual multidocument analysis for summarization, and she was a founding advisory board member for the Anita Borg Institute for Women and Technology. Klavans has authored or co-authored over 100 scientific books and technical chapters on natural language processing and information technology and she also holds several patents.

Edward D. Lazowska holds the Bill & Melinda Gates Chair in the Department of Computer Science & Engineering at the University of Washington. Lazowska received his A.B. from Brown University in 1972 and his Ph.D. from the University of Toronto in 1977. His research and teaching concern the design, implementation, and analysis of distributed and parallel computer systems. He is a member of the Technical Advisory Board for Microsoft Research, and serves as a board member or technical advisor to a number of high-tech startups and venture funds. He has chaired the National Science Foundation Advisory Committee for Computer and Information Science and Engineering (1998-1999), the Computing Research Association Board of Directors (1997-2001), and the University of Washington Department of Computer Science & Engineering (1993-2001). He is a Member of the National Academy of Engineering, and a Fellow of the Association for Computing Machinery, the Institute of Electrical and Electronics Engineers, and the American Association for the Advancement of Science.

F. Thomson Leighton co-founded Akamai Technologies in September 1998. He serves as Chief Scientist and Akamai's technology visionary as well as a key member of the Executive Committee setting the company's direction. As one of the world's pre-eminent authorities on algorithms for network applications, Dr. Leighton's work behind establishing Akamai was based on recognizing that a solution to freeing up Web congestion could be found in applied mathematics and algorithms. Akamai has demonstrated this through the creation of the world's largest distributed computing platform that dynamically routes content and applications across a network of over 13,000 servers. Dr. Leighton's technology achievements at Akamai earned him recognition as one of the Top 10 Technology Innovators in U.S. News & World Report. Dr. Leighton is also a Professor of Applied Mathematics at MIT, and has served as the Head of the Algorithms Group in MIT's Laboratory for Computer Science since its inception in 1996. He holds numerous patents involving cryptography, digital rights management, and algorithms for networks. During the course of his career, he has served on dozens of government, industrial, and academic review committees; program committees; and editorial boards. He is a former two-term chair

of the 2,000-member Association of Computing Machinery Special Interest Group on Algorithms and Complexity Theory, and a former two-term editor-in-chief of the Journal of the ACM, the nation's premier journal for computer science research. Dr. Leighton is also a Fellow for the American Academy of Arts and Sciences. Dr. Leighton has published more than 100 research papers, and his leading text on parallel algorithms and architectures has been translated into several languages. In 2002, Dr. Leighton was recognized by his alma mater as Princeton University's seventh Gordon Wu Distinguished Lecturer. He graduated Summa Cum Laude from Princeton with a B.S .in Engineering. He received his Ph.D. in Mathematics from MIT.

Harold Mortazavian is President and CEO of Advanced Scientific Research, Inc., which he recently founded in Los Angeles. From 1993 to 2002 he was on the faculty of the Henry Samueli School of Engineering and Applied Science at UCLA. During this period his research focused on Control Systems, Communication Networks and Applied Mathematics. He was also affiliated with the NASA-UCLA center for Flight Systems Research. He has been a Principal Investigator for major projects funded by DARPA and NASA. His most original work has appeared in quality professional publications including the highly prestigious Proceedings of the French Academy of Sciences (Mathematics Section), and the IEEE Transactions on Automatic Control, among others. In addition he has been engaged in numerous other professional activities involving government, industry, and academia. Dr. Mortazavian currently serves on the NASA Advisory Council . Dr. Mortazavian was an Assistant Professor of Electrical and Computer Engineering at Wayne State University, Detroit, from 1990 to 1993. In addition he has been a Senior Research Associate at NASA Ames Research center, a researcher at the French National Research Institute in Computer Science and Control (INRIA), Versailles, a Visiting Scientist with the Swiss Federal Institute of Technology, Zurich, a Visiting Research Associate at the University of Toronto and a Resident Professor and Academic Advisor with the Ford of England Research and Engineering center. Dr. Mortazavian received his Ph.D. from Case Western Reserve University, Cleveland in 1980. He is listed in Who's Who in America. Apart from his broad range of experience and expertise in science and technology, Dr. Mortazavian has a keen interest in policy issues.

Randall D. Mott serves as Senior Vice President and Chief Information Officer. In this role, Mr. Mott is responsible for managing Dell's global information-technology infrastructure, including the backbone of its extensive Internet and Web-based capabilities. Mr. Mott, 47, joined Dell in March 2000 from Wal-Mart where he held numerous technical and management positions. He joined Wal-Mart in 1978 and became an officer in 1991. He was named senior vice president and chief information officer in 1994 and joined the company's executive committee in 1997. Mr. Mott was instrumental in the formation of many of Wal-Mart's systems, including leading the IT strategy for the company's rapid and successful global growth. He was recognized by Information Week magazine as "CIO of the Year" in 1997. Mr. Mott holds a bachelor's degree in mathematics from the University of Arkansas.

Peter M. Neupert is a management consultant to early-stage companies. Previously, Mr Neupert was Chairman of the Board of drugstore.com, the leading Internet drugstore. Prior to starting drugstore.com in 1998, Mr. Neupert was Vice President of news and publishing at Microsoft Corporation

where he was responsible for starting and running MSNBC on the Internet and MSNBC Cable, Slate and other online ventures. Before MSNBC, Neupert had several senior roles during an 11 year tenure at Microsoft including; senior director of strategic relationships for Microsoft's advanced consumer technology group, senior director of international development and general manager of the operating systems division. He serves on the board of aQuantive Inc. and Cranium Inc. In 2000, Neupert received an Ernst & Young Entrepreneur of the Year Award. He holds an M.B.A. from the Amos Tuck School of Business at Dartmouth College and a B.A. in philosophy from the Colorado College.

Eli M. Noam has been Professor of Economics and Finance at the Columbia Business School since 1976. He served for three years as Commissioner with the New York State Public Service Commission, and is a member of the President's Advisory Committee on Information Technology. He is the Director of the Columbia Institute for Tele- Information, a university-based research center focusing on strategy, management, and policy issues in telecommunications, computing, and electronic mass media. Noam also chairs the MBA concentration in the Management of Media, Communications, and Information at the Business School. Besides over 300 articles in economic, legal, communications, and other journals, Professor Noam has also authored, and edited, more than 20 books. He is a Fellow of the World Economic Forum, a member of the Council on Foreign Relations, a commercially rated pilot, and an active search and rescue mission pilot with the Carmel Air Patrol (1st Lt.). He received the degrees of AB (Phi Beta Kappa), MA, Ph.D. (Economics) and JD from Harvard University.

David A. Patterson (University of California at Berkeley) was the first in family to graduate from college, and he enjoyed it so much that he didn't stop until a Ph.D. After 5 years developing a wafer-scale computer at Hughes Aircraft, he joined U.C. Berkeley in 1977. He spent 1979 at DEC working on the VAX minicomputer. In reaction to its complexity, at Berkeley Carlo Sequin and HE developed the Reduced Instruction Set Computer (RISC). By joining forces with John Cocke's 801 and John Hennessy's MIPS projects, RISC became widespread: perhaps a billion embedded RISC processors will be sold in 2004. In 1984 Sun Microsystems recruited me to start the SPARC architecture, the success of which led to millions of servers from Sun, Fujitsu, and others.

Back at Berkeley, in 1987 Randy Katz and Patterson wondered if they could build dependable storage systems from the new, small PC disks. This led to the now popular Redundant Array of Inexpensive Disks (RAID); perhaps 80% of server disks today ship in RAIDs.

He spent 1989 working on the CM-5 supercomputer. Back at Berkeley, Tom Anderson, David Culler, and Patterson wondered if they could build a supercomputer using standard desktop computers and switches. The resulting Network of Workstations (NOW) project led to cluster technology used by Inktomi, Scale 8, and other startups.

These experiences resulted in Patterson becoming Chief Scientist for Sun's Networked Storage Division in 1998 and Scale 8's Chief Scientist in 2000. Back at Berkeley, Armando Fox and Patterson are now working on the Recovery Oriented Computing (ROC) project.

His reward for RISC and RAID in 1990 was becoming Chair of Berkeley's CS Division of 1000 students and 100 faculty and staff. He also served as SIGARCH Chair and two terms as CRA Chair. In addition to PITAC, he is currently on advisory boards at IBM, Microsoft, Princeton, and Santa Clara University.

All this resulted in 150 papers, 5 books, and the following honors, some shared with friends: from ACM: fellow, SIGMOD Test of Time Award, Karlstrom Outstanding Educator Award; from IEEE: fellow, Johnson Information Storage Award, Mulligan Education Medal, and von Neumann Medal; election to the National Academy of Engineering plus its lifetime service citation.

Alice G. Quintanilla is CEO of Information Assets Management, Inc., (IAM), a company headquartered in Los Alamos, New Mexico that provides highly secure knowledge management services to government and commercial organizations.

Alice is a native of northern New Mexico and a graduate of the University of Colorado. In 1993, she co-founded IAM as a high-tech spin-off business from the Los Alamos National Laboratory (LANL). While at LANL, Alice served as a Technical Staff Member in the Computing Division where she developed an IT solution that was chosen by the Smithsonian Institution for its Advanced Technology collection. In recognition of her outstanding abilities and achievements, the Department of Energy chose Alice for its highly selective and prestigious Technical Women to Entrepreneurship program, a development initiative that singles out talented and accomplished women capable of commercializing DOE laboratory technology. The honor confirmed and encouraged Alice's life-long attraction to help transform northern New Mexico's rural economy.

Alice is a strong advocate of small business. She currently serves on the Los Alamos National Laboratory's Business Advisory Council (BAC) and also chairs the Procurement subcommittee. The BAC advises the Laboratory on the effectiveness of its business practices as they impact business stakeholders and specific target business operational area. Alice also serves as Chairperson for the New Mexico Advisory Board for Small Business Development centers (SBDC) and provides advice and guidance for eighteen small business development centers in New Mexico. Finally, Alice acts as a mentor to Digital Migration, Inc., a Native-American-owned high tech company, under the sponsorship of the Sandia National Laboratories Mentor/Protégé Program. IAM and Digital Migration are two of only four companies that have advanced to the second year program.

Daniel A. Reed is currently Chancellor's Eminent Professor, Vice-Chancellor for Information Technology and CIO, and Director of the Institute for Renaissance Computing at the University of North Carolina at Chapel Hill. Before going to North Carolina in 2003, he held the Edward William and Jane Marr Gutgsell Professorship at the University of Illinois at Urbana-Champaign. Reed received his B.S. from the University of Missouri at Rolla in 1978 and his Ph.D. from Purdue University in 1983. He serves as director of the National Computational Science Alliance (Alliance) and the National center for Supercomputing Applications (NCSA) at the University of Illinois, Urbana-Champaign. In this dual directorship role, Reed provides strategic direction and leadership to the Alliance and NCSA and is the principal investigator for the Alliance cooperative agreement with the National Science Foundation. Dr. Reed is also one of two principal investigators and the Chief Architect for the NSF TeraGrid project to

create a U.S. national infrastructure for Grid computing. The TeraGrid is a multiyear effort to build and deploy the world's largest, fastest, distributed computing infrastructure for open scientific research. Dr. Reed was head of the University of Illinois computer science department from 1996 to 2001. He currently is chair of the NERSC Policy Board for Lawrence Berkeley National Laboratory, is co-chair of the Grid Physics Network Advisory Committee and is a member of the board of directors of the Computing Research Association. In addition, he has served as a member of Illinois Governor Ryan's VentureTECH committee, which advised the former governor on technology investment in Illinois.

Eugene H. Spafford is a Professor of Computer Sciences at Purdue University, where he also holds courtesy appointments in the Departments of Philosophy and Communication and of Electrical and Computer Engineering. He is the founding Director and currently Executive Director of the center for Education and Research in Information Assurance and Security (CERIAS) at Purdue, a large multidisciplinary research center. Spafford is the 2004 recipient of the IEEE Computer Society Taylor L. Booth medal. He has received the National Computer System Security Award for his research and service, is a member of the ISSA Hall of Fame and is a lifetime CISSP honoris causa. He is a Fellow of the ACM, IEEE and the AAAS. He is co-chair of ACM's US Public Policy Committee, and is a member of the Board of Directors of the Computing Research Association. He received his undergraduate degree from the SUNY College at Brockport NY, and his MS and Ph.D. degrees in Information and Computer Science from Georgia Institute of Technology.

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