



# **The 8th US-Japan Digital Innovation Hub and Advanced Technology Workshop**

September 11 – 12, 2024



THE OHIO STATE  
UNIVERSITY

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# The 8th US-Japan Digital Innovation Hub and Advanced Technology Workshop

## Speaker Index

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<u>Hiroyuki Fujita, PhD</u> . . . . .	3	<u>Dee Pai, PhD</u> . . . . .	24
<u>Walter “Ted” Carter Jr.</u> . . . . .	4	<u>Venki Ramaswamy, PhD</u> . . . . .	25
<u>Peter Mohler, PhD</u> . . . . .	5	<u>Tetsuya Sakurai, PhD</u> . . . . .	26
<u>Shuzaburo Takeda, PhD</u> . . . . .	6	<u>Mika Takagi</u> . . . . .	27
<u>H.E. Shigeo Yamada</u> . . . . .	7	<u>Kazuya Takeda</u> . . . . .	28
<u>Patricia Gruber, PhD</u> . . . . .	8	<u>Michael Chertoff</u> . . . . .	29
<u>Sanjay Natarajan, PhD</u> . . . . .	9	<u>Naoshi Sugiyama, PhD</u> . . . . .	30
<u>Hideo Ohno, PhD</u> . . . . .	10	<u>Chris Fall, PhD</u> . . . . .	31
<u>Steven Ringel, PhD</u> . . . . .	11	<u>Roy Sugimura, PhD</u> . . . . .	32
<u>Eugene A. Fitzgerald, PhD</u> . . . . .	12	<u>Dennis Hirsch</u> . . . . .	33
<u>Mark Lundstrom, PhD</u> . . . . .	13	<u>Tetsuo Morishita</u> . . . . .	34
<u>Akinobu Teramoto, PhD</u> . . . . .	14	<u>Yoshio Tanaka, Dr. Eng</u> . . . . .	35
<u>Hiromi Yuasa, PhD</u> . . . . .	15	<u>Masahiko Uchino</u> . . . . .	36
<u>Supratik Guha, PhD</u> . . . . .	16	<u>Duane Detwiler</u> . . . . .	37
<u>Zeke Johnston-Halperin, PhD</u> . . . . .	17	<u>John Thornton</u> . . . . .	38
<u>Joseph Broz, PhD</u> . . . . .	18	<u>John M. Horack, PhD</u> . . . . .	39
<u>Takao Onoye, PhD</u> . . . . .	19	<u>Jeffrey Manber</u> . . . . .	40
<u>Raymond E. Samuel, MD, PhD</u> . . . . .	20	<u>Kazuo Shiokawa</u> . . . . .	41
<u>Kevin Singh, PhD</u> . . . . .	21	<u>Yuka Suzuki</u> . . . . .	42
<u>Ayanna Howard, PhD</u> . . . . .	22	<u>John Vickers</u> . . . . .	43
<u>Ness Shroff, PhD</u> . . . . .	23	<u>Kyosuke Nagata, PhD</u> . . . . .	44

## **Hiroyuki Fujita, PhD**

**Former Chair, The Ohio State University Board of Trustee; Honorary Consul of Japan in Cleveland; Chairman, Canon Healthcare USA, Inc.**

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**Hiroyuki Fujita, PhD**, Former Chair, The Ohio State University Board of Trustee; Honorary Consul of Japan in Cleveland; Chairman, Canon Healthcare USA, Inc.

Hiroyuki Fujita an immigrant from Japan and industrialist, is the founder and CEO of Quality Electrodynamics (QED), a global developer and magnetic resonance imaging (MRI) technology manufacturer. In October 2019, QED became a subsidiary of Canon Inc. based in Tokyo, with Dr. Fujita serving as chief technology officer of the CT-MR Division of Canon Medical Systems Corporation (CMSC), headquartered in Tochigi, Japan. In November 2022, Dr. Fujita was named Chairman of Canon Healthcare USA, Inc.

After studying at Waseda University (Tokyo), Dr. Fujita completed his BA in physics and mathematics at Monmouth College (IL) and his PhD in physics at Case Western Reserve University (OH). He has authored 17 patents and published over 40 peer-reviewed scientific papers and abstracts.

Dr. Fujita is an adjunct full professor at Case Western Reserve University in the Departments of Physics and Radiology and is a senior fellow of the International Society for Magnetic Resonance in Medicine.

Dr. Fujita is an active member of numerous boards and committees, including Cleveland Clinic Hillcrest Hospital, Chairman of the Board of Trustees; The Cleveland Orchestra's Executive Committee; Okinawa Institute of Science and Technology (OIST) Graduate University Board of Governors; and OIST Foundation Trustee. He is the Honorary Consul of Japan in Cleveland, a member



of the U.S.-Japan Council's (USJC) Board of Councilors; Global Cleveland; the Cleveland Council on World Affairs; Greater Cleveland Partnership; and a trustee of The Kelvin and Eleanor Smith Foundation. He serves on the International Affairs Visiting Committee and the Inamori International Center for Ethics and Excellence at Case Western Reserve University.

Dr. Fujita is a frequently invited lecturer, both nationally and internationally. He published his autobiography, *A Pathfinder* (Shogakukan, 2013), and *Fail Fast! Creating the Future by Learning Lessons from Our Mistakes* (Wedge, Tokyo, 2021). He also authored a monthly editorial in *Wedge Magazine* (JR Tokai; May 2017-August 2020).

Dr. Fujita served two terms on the U.S. Manufacturing Council for the U.S. Secretary of Commerce during the Obama Administration, sat on its U.S. Tax and Export Subcommittee, and co-chaired the Energy Policy Subcommittee.



# Walter “Ted” Carter Jr.

## President, The Ohio State University

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**Walter “Ted” Carter Jr.** was appointed as the 17th president of The Ohio State University by the Board of Trustees on August 22, 2023. He began his tenure at Ohio State on January 1, 2024.

As president, Carter leads the state’s flagship, public research university with six campuses in Ohio and a student body of more than 65,000. Ohio State’s largest campus is in Columbus, the state capital and one of the fastest growing cities in the country. Additionally, the university has campuses in Lima, Mansfield, Marion, Newark and Wooster, as well as the nationally recognized Wexner Medical Center, a global research enterprise and leading athletics program.

Formerly, Carter served as president of the University of Nebraska System, where he was focused on greater access and opportunities for the state’s students and families. He launched the Nebraska Promise, a financial aid program guaranteeing full tuition coverage for low- and middle-income students, and implemented a budget plan that included a two-year tuition freeze. Under his leadership, Nebraska saw system-wide growth in enrollment, including record-setting gains among underrepresented students. Also during his tenure, Nebraska has been ranked among the world’s top 100 institutions for earning research patents and launched plans for a major expansion of programs at the University of Nebraska Medical Center, as well as a significant enhancement of the medical center’s presence across the state.

Prior to serving as president of the University of Nebraska System, Carter led the U.S. Naval Academy as its longest continuously serving superintendent since the Civil War. During his tenure, the Naval Academy achieved multiple top national rankings while setting institutional records for student success. Carter also previously served as president of the U.S. Naval War College in Newport, Rhode Island, leading 1,600 resident and 100,000 distance education students pursuing graduate-level education.

He is a retired vice admiral with 38 years of service and has logged more than 6,300 flying hours. Carter flew 125 combat missions in Iraq, Afghanistan, Kuwait, Bosnia and Kosovo. He received the Distinguished Flying Cross with combat distinction for valor and is a recipient of the Bronze Star. He holds the national



record for carrier-arrested landings, with over 2,000 mishap-free landings.

In 2022, Carter received the U.S. Naval Academy Distinguished Graduate Award, the highest honor bestowed upon academy graduates. Recognizing exceptional leadership and service, the award has been given to just 110 individuals, including former President Jimmy Carter and former Senator John McCain. He currently serves as the chair of the board of directors for the Daugherty Water for Food Global Institute as well as on the boards of the Naval Aviation Museum Foundation and the American Council on Education, and is a member of the Association of Public and Land-Grant Universities’ Council of Presidents, the Big Ten Council of Presidents and Chancellors, and the U.S. Council on Competitiveness. By request of the Secretary of the Navy, he served in 2023 on the Naval Education Task Force, charged with delivering a strategic vision for the future of higher education in the naval service — including advancing the country’s leadership in cyber security.

Carter earned a bachelor’s degree in physics and oceanography from the U.S. Naval Academy, where he played ice hockey for four years and served as team captain.



## **Peter Mohler, PhD**

**Executive Vice President,  
The Ohio State University**

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**Peter Mohler** is executive vice president for research, innovation and knowledge playing a leading role in expanding the university's cutting-edge research, creative expression and scholarship, stimulating entrepreneurship, and building strategic partnerships.

In addition, he serves as vice president for research where he leads strategy and efforts to grow Ohio State's research and creative expression enterprise, and oversee research operations, sponsored programs and research compliance while providing strategic direction and oversight for large-scale, interdisciplinary research centers and institutes. He also serves as chief scientific officer for the Wexner Medical Center at Ohio State.

Dr. Mohler has been at Ohio State since 2011 when he was recruited to Columbus as the director of Dorothy M. Davis Heart and Lung Research Institute and subsequently served as Chair of the Department of Physiology and Cell Biology in the College of Medicine. Dr. Mohler also previously served as vice dean of research in the College of Medicine.

Dr. Mohler has more than 250 publications including manuscripts in *Nature*, *Cell*, *Journal of Clinical Investigation*, *Circulation*, *Circulation Research*, *Nature Medicine*, *Journal of Cell Biology*, and *PNAS*. His research focuses on uncovering the mechanisms underlying abnormal heart rhythms and heart failure in children and young adults with the goal of designing new diagnostics and therapies in individuals and populations.

Dr. Mohler has received multiple awards, including being named a Pew Scholar and Outstanding Investigator of the American Heart Association. In 2015 he received the



inaugural College of Medicine Distinguished Mentor Award. He recently served on the Program Project Grant (P01) Parent committee for the National Heart Lung and Blood Institute. Dr. Mohler was named an inaugural NIH National Heart Lung and Blood Institute Outstanding Investigator (R35 Award) and leads large program grants funded by the American Heart Association and the LeDucq Foundation.

Dr. Mohler received a bachelor's in biology from Wake Forest University, his doctorate in cell and molecular physiology from the University of North Carolina at Chapel Hill and performed a postdoctoral fellowship in the Howard Hughes Medical Institute at Duke University Medical Center.

## Shuzaburo Takeda, PhD

### President, Takeda & Associates

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**Shuzaburo Takeda, PhD** is President of Takeda and Associates. He is Special Advisor to the President of Tsukuba University and Advisor to Tokai National Higher Education and Research System (Nagoya University and Gifu University). He is Senior Advisor to the Chertoff Group (TCG).

In the past, he has served as chairman and member of the Japanese government's councils on energy, industrial policy, and advanced technology policy since the 1980s. He also served as Senior Advisor to the Ministry of Education, Culture, Sports, Science and Technology (MEXT) from 2013 to 2018 and as Management Advisor to RIKEN (founded in 1917 and is Japan's only comprehensive science research institute) from 2013 to 2022. In the United States, he was a member of the Presidential Council of Olin College of Engineering from 2013-2019, a member of the IACA of Washington University in St. Louis from 1994-2018, and Senior Advisor to the President (as Vice President) of the University of Tennessee System from 1990-1992. In Japan, he was a professor at Tokai University, then Waseda University from 2007-2012, and Kyoto University from 2012-2018.

Dr. Takeda has been closely involved in Japan-U.S. relations for 45 years and was a close advisor to the late Senator Howard H. Baker (former U.S. Ambassador to Japan) for decades. He was a senior advisor of The Japan-U.S. Strategic Advisory.

For the past 10 years, he has been involved in promoting cooperation between Japan and U.S. universities and research institutions, focusing on the field of advanced technologies.

He received the 2018 Distinguished Alumni Achievement Award from The Ohio State University, where he received his PhD in



physics. He has been a member of the Cosmos Club in Washington DC since 1992.

## H.E. Shigeo Yamada

### Ambassador of Japan

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**Ambassador Shigeo Yamada** assumed his post as ambassador extraordinary and plenipotentiary of Japan to the United States in December 2023. Ambassador Yamada is a long-time veteran of the Japanese Ministry of Foreign Affairs. His very first posting was as a second secretary in Washington D.C. in 1989. In 2012, he returned to Washington as political minister.

Prior to assuming his current post, Ambassador Yamada served as senior deputy minister for foreign affairs. In that capacity, he was political director for Japan's 2023 G7 presidency, supporting the G7 summit in Hiroshima and the G7 foreign ministers' meeting in Nagano-Karuzawa. Ambassador Yamada's previous positions in Tokyo include deputy minister for Foreign Affairs for foreign policy, deputy director general for North American Affairs, director for Northeast Asia, director for Southeast Asia, and director for the Status of U.S. Forces Agreement. He also served as a cabinet councillor in the National Security Secretariat in the Prime Minister's Office. In addition to his postings in Washington and Tokyo, over the course of his career he oversaw the public and culture affairs at the embassies of Japan in London and Beijing.

The Ambassador's broad diplomatic assignments have led him to the realization, "The Japan-U.S. alliance is no longer just a bilateral relationship, but a global partnership." It is this conviction that informs his perspective as Japan's Ambassador to the United States.

Ambassador Yamada earned a BA in law from Keio University in 1987 and a BA in political science from Carleton College in Minnesota in 1989.





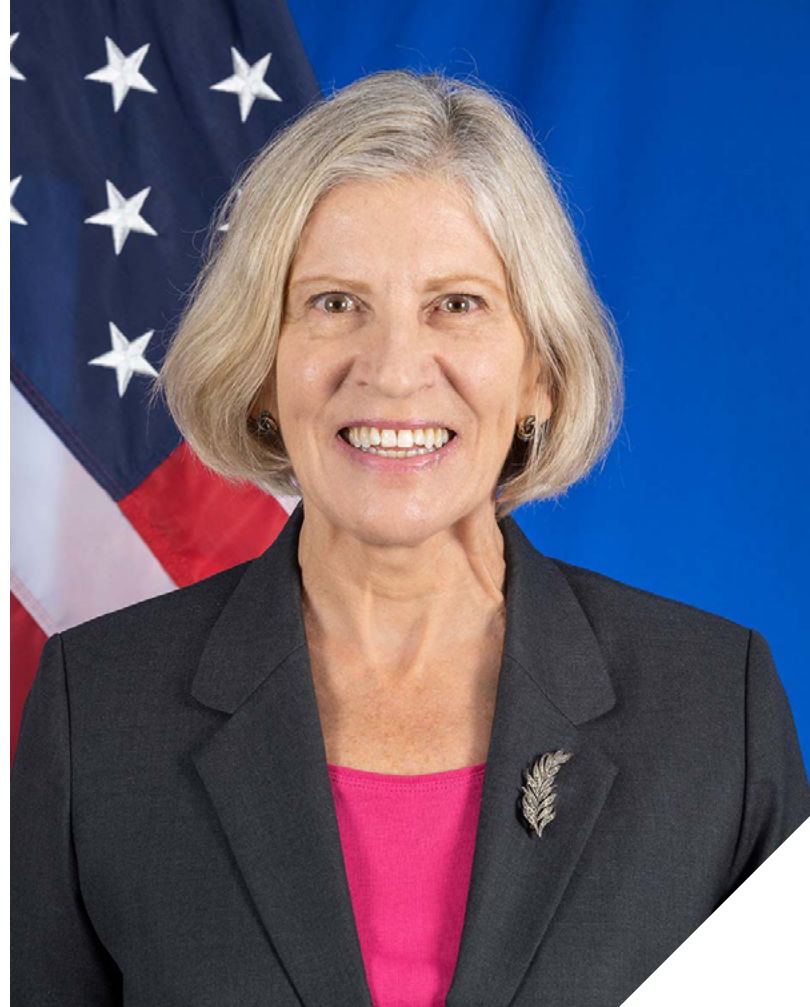
## **Patricia Gruber, PhD** Science and Technology Adviser to the Secretary of State, U.S. Department of State

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**Patricia Gruber** is serving as the science and technology adviser to the Secretary of State. In this role, she engages with academic and private sector research communities to inform foreign policy priorities and promote international science and technology collaboration.

Dr. Gruber served as the director of research at the Office of Naval Research (ONR) with responsibility for the Department of Navy fundamental research portfolio, balancing critical investments in future capabilities with exploration of high risk, emerging technologies. In this role, she also led the development of the Naval S&T Strategic Plan, initiated the Basic Science of Autonomy program and coordinated ONR's education, outreach and diversity programs. More recently, she served as technical director for ONR Global, leading a group of 50 scientists and engineers who facilitated international research collaboration and acted as technical liaisons to operational fleet/forces. She had oversight of the Navy's International Science Program which awarded over 200 grants per year across a wide range of technologies and partner nations. Prior to ONR Global, she was vice president/general manager of maritime systems at Battelle and the deputy director at the applied research laboratory at the Pennsylvania State University. She has held a number of technical management and business development positions at AT&T, Lucent Technologies and Marconi Communications.

Dr. Gruber received a M.S. and PhD in applied marine physics from the University of Miami and a B.S. in meteorology from the Pennsylvania State University. She conducted



research in marine science at the Naval Research Laboratory and Bell Laboratories.

## **Sanjay Natarajan, PhD** Senior Vice President and General Manager, Components Research, Intel Corporation

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**Sanjay Natarajan** is a Senior Vice President and General Manager of Intel Foundry Technology Re-search & External R&D Engagements organization at Intel Corporation. He is responsible for Intel's internal semiconductor research, external engagements with Universities and Consortia, and gov-ernment engagements worldwide related to semiconductor R&D. During his 31-year career in the semiconductor R&D industry, Sanjay led the development of Intel's 14nm process technology, and prior to that, he led development of Intel's industry-leading 32nm process technology. In addition to Intel, Sanjay has held senior executive positions at Applied Materials, where he led a group de-veloping new types of semiconductor equipment focused on extending Moore's Law. Outside of work, Sanjay is a Research Professor in the Department of Mechanical & Materials Engineering at Portland State University. He also serves on the Advisory Boards to the Deans of Engineering at Portland State University and Carnegie Mellon University and serves on the Advisory Council for the National Science Foundation Engineering Directorate. He is an IEEE member and received his BS, MS, PhD in Electrical Engineering from Carnegie Mellon University.



## **Hideo Ohno, PhD**

**Special Advisor, Ministry of Economy, Trade and Industry, former President of Tohoku University**

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**Hideo Ohno** is special advisor, Ministry of Economy, Trade and Industry, and former president of Tohoku University. He completed his doctorate at the Graduate School of Engineering, The University of Tokyo in 1982. Dr. Ohno has held myriad esteemed positions, including as the 22nd president of Tohoku University from 2018 to March 2024.

Dr. Ohno joined Tohoku University as the Professor in the Department of Electronic Engineering. He was the director of Center for Spintronics Research Network, Tohoku University from 2016 to 2018; director, Research Institute of Electrical Communication, Tohoku University from 2013 to 2018; professor, Center for Innovative Integrated Electronic Systems, Tohoku University, from 2012 to 2018; and director, Laboratory of Nanoelectronics and Spintronics, Research Institute of Electrical Communication, Tohoku University from 2012 to 2013.

Dr. Ohno is a leading authority in spintronics, a key technology for achieving a decarbonized society through energy-efficient and high-performance semiconductor technologies. To date, he has published over 660 papers and holds more than 100 patents. Additionally, he has received numerous international awards, including being named a Thomson Reuters Citation Laureate in 2011.

In March 2024, he became special advisor for science and technology, Ministry of Economy, Trade and Industry and Special Senior Advisor to the President of Tohoku University in April of the same year. From 2010 to 2014, he was a core researcher of “Research and Development of Energy-saving Spintronics



Logic Integrated Circuits,” a cutting-edge research and development support program of the Cabinet Office, Government of Japan.



## **Steven Ringel, PhD**

**Executive Director, Institute  
for Material and Manufacturing  
Research and Distinguished  
University Professor, Electrical and  
Computer Engineering, The Ohio  
State University**

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In addition to serving as Ohio State's **Institute for Material and Manufacturing Research's** chief executive officer, **Steven Ringel** is a distinguished university professor and the Neal Smith Endowed Chair in Electrical and Computer Engineering at the university. He is also a professor in both the departments of physics and materials science and engineering.

Dr. Ringel's research falls within the area of electronic materials and devices. His work focuses particularly on solar cells, wide bandgap semiconductors used in power and RF electronics, defect characterization methods, epitaxial growth and integration of compound semiconductors with silicon.

Among his honors, Dr. Ringel is a fellow of IEEE, fellow of AAAS, associate fellow of AIAA, former NSF National Young Investigator, and with his students has received 10 best paper/presentation awards.

In addition to being an Ohio State distinguished university professor, Ohio State's highest faculty title, he has been honored with the Ohio State Distinguished Scholar Award – the university's highest recognition for scholarly achievement – and the following Ohio State College of Engineering recognitions: Scott Award, Harrison Award, 4 Lumley research awards and the College Faculty Mentoring Award.

Dr. Ringel holds leadership and board positions at several organizations in Singapore, Ireland and India, he is a distinguished visiting professor at IIT-Bombay



and has held visiting faculty positions in Spain, the UK and Singapore. Dr. Ringel is deeply committed to global innovation that connects academia with industry.

**Eugene A. Fitzgerald, PhD**  
CEO, Singapore-MIT Alliance  
for Research and Technology  
and Singapore MIT Alliance  
Professor of Materials Engineering,  
Massachusetts Institute of  
Technology

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**Eugene A. Fitzgerald** has a distinguished career as an academic, researcher, and serial entrepreneur, and has a keen awareness on innovation. He earned a B.S. in materials science and engineering at MIT in 1985 and a PhD at Cornell in 1989. Building on early experiences at AT&T Bell Labs, he and colleagues invented high-mobility strained silicon and commercialized the technology through AmberWave System Corporation – a company he co-founded in 1998. Most silicon integrated circuits in cell phones, computers, and other applications use the technology today. He also founded or co-founded six other companies specializing in semiconductors, water purification, and silicon-based high-efficiency multi-junction solar cells.

Dr. Fitzgerald was appointed CEO and director of the Singapore-MIT Alliance for Research and Technology, or SMART, MIT's research enterprise in Singapore. Under his leadership, SMART's Low Energy Electronic Systems program saw the development of manufacturable methods for integrating compound semiconductors into silicon integrated circuits. As a result, a new silicon integrated circuit company was founded in Singapore. Fitzgerald is the co-author of the 2010 book *Inside Real Innovation*, which provides insights into the processes behind innovation. Dr. Fitzgerald's research pushes the limitations of electronic materials, especially limitations created by imperfections in materials such as point, line and planar defects.



## **Mark Lundstrom, PhD**

**Don and Carol Scifres**

**Distinguished Professor of  
Electrical and Computer  
Engineering and Chief  
Semiconductor Officer,  
Purdue University**

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**Mark Lundstrom** is the Don and Carol Scifres Distinguished Professor of Electrical and Computer Engineering at Purdue University where he currently serves as Purdue's Chief Semiconductor Officer. He is also a Senior Research Fellow for the Krach Institute for Tech Diplomacy at Purdue. During 2020, he served as acting dean for Purdue's College of Engineering and from 2022-2023 as interim dean.

Dr. Lundstrom began his career as an integrated circuit process development and manufacturing engineer and has been at Purdue since 1980 where his research and teaching have focused on the theory, modeling, and numerical simulation of electronic and thermal transport in semiconductor devices. He is known best for his groundbreaking work on nanoscale transistors, which supported the design and manufacturing of transistors at the 10 nanometer length scale.

Beginning in 1995, before the term "cloud computing" entered the vocabulary, Dr. Lundstrom founded nanoHUB, which for the past 25 years has offered online access to sophisticated electronic device simulation tools. The nanoHUB was also one of the very first to offer open-content educational resources, and it now serves a global community of more than two million annually.

Dr. Lundstrom has received several recognitions for his career contributions to microelectronics including the Semiconductor



Industry Association's University Researcher Award (2005) and election to the U.S. National Academy of Engineering for "leadership in microelectronics and nanoelectronics through research, innovative education, and unique applications of cyberinfra-structure" (2009).



## **Akinobu Teramoto, PhD**

**Director, Research Institute for  
Semiconductor Engineering (RISE),  
Hiroshima University**

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**Akinobu Teramoto** became director of the Research Institute for Semiconductor Engineering (RISE) at Hiroshima University in 2021, where he began as a professor in 2019.

Dr. Teramoto previously worked as an engineer in the Mitsubishi Electric Corporation LSI Laboratory, and as an associate professor and professor at Tohoku University's New Industry Creation Hatchery Center.

Dr. Teramoto's research focus includes semiconductor device structure, process technology, and evaluation technology. In 2023, he established Setouchi Semiconductor Consortium which is being operated through the cooperation of industry, government, and academia, centered around Hiroshima University. It includes two local governments, 24 private companies, two universities, and the national government agency. The consortium contributes to the entire semiconductor industry, including the supply chain, through cooperation that encompasses the entire semiconductor industry.

He earned a master's degree in electronic engineering and a PhD in engineering, both from Tohoku University.

He was awarded the Outstanding Paper Award from The Japan Society of Applied Physics.



## **Hiromi Yuasa, PhD**

**Professor of Faculty of Information Science and Electrical Engineering, Vice Director of Education Center for Semiconductors and Value Creation, Kyushu University**

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**Hiromi Yuasa** received a master's degree and a PhD in physics from Keio University in 1998 and 2009, respectively. She worked for Toshiba corporation starting in 1998, where she engaged in research and development activities in the field of spintronics for hard disk drives and authored 185 registered patents and 288 patent applications.

She moved to Kyushu University as a professor in 2015. Her current interests are the physics and devices using spin current phenomena and the dynamics of magnetization based on in torque in the artificial magnetic structures.

Dr. Yuasa has won multiple awards, including the Female Researcher Research Achievement/Human Resource Development Award (Research Achievement Category) given by Japanese Applied Physics Society in 2015.



## **Supratik Guha, PhD**

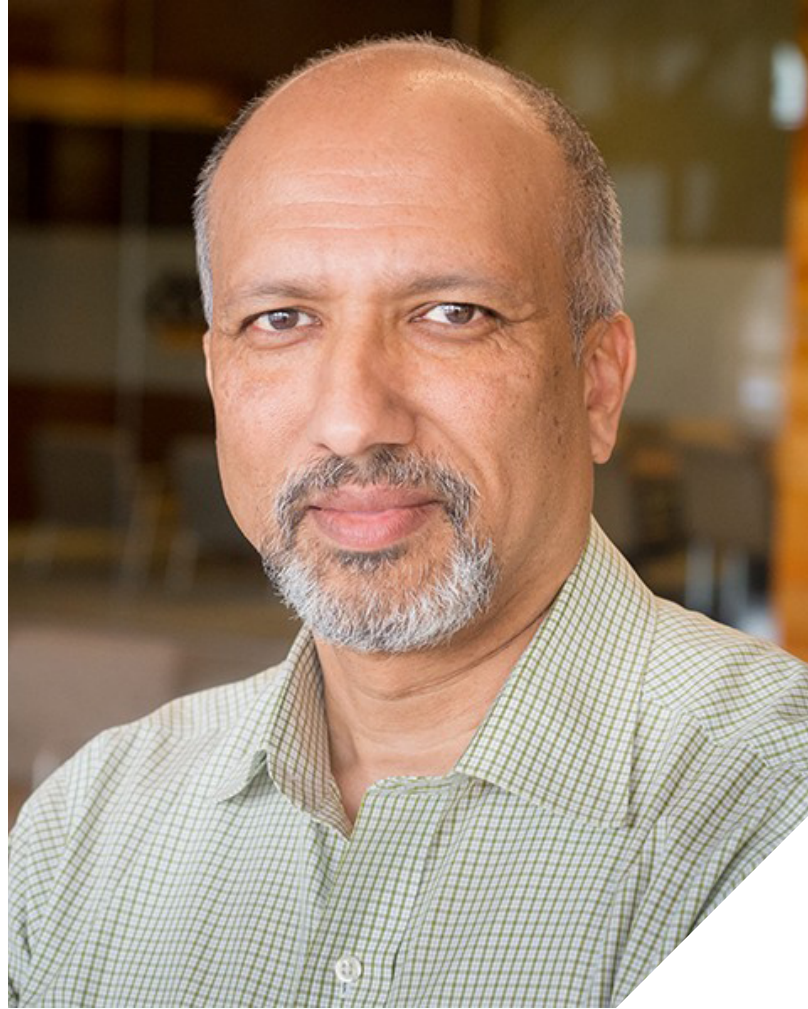
**Professor, Pritzker School of Molecular Engineering and Senior Advisor to Argonne Physical Sciences and Engineering, University of Chicago and Chicago Quantum Exchange**

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**Supratik Guha** is a professor at Pritzker Molecular Engineering and senior advisor to Argonne National Laboratory's Physical Sciences and Engineering directorate, leading the lab's microelectronics and quantum information science strategic efforts.

Dr. Guha led the Center for Nanoscale Materials, a U.S. Department of Energy Office of Science user facility, from 2015 to 2019. Before joining Argonne and the University of Chicago in 2015, he spent 20 years at IBM Research, where he last served as the director of physical sciences. At IBM, Dr. Guha pioneered the materials research that led to IBM's high dielectric constant metal gate transistor, one of the most significant developments in silicon microelectronics technology. He was also responsible for initiating or significantly expanding IBM's R&D programs in silicon photonics, quantum computing, sensor based cyberphysical systems and photovoltaics.

Dr. Guha is a member of the National Academy of Engineering and a fellow of the Materials Research Society, American Physical Society, a 2018 Department of Defense Vannevar Bush faculty fellow, and the recipient of the 2015 Prize for Industrial Applications of Physics. He received his PhD in materials science in 1991 from the University of Southern California, and a BTech in 1985 from the Indian Institute of Technology, Kharagpur. At the University of Chicago and Argonne, his interests are focused on discovery science in the area of



nano-scale materials and epitaxy for energy, sensing and future information processing.



## **Zeke Johnston-Halperin, PhD**

**Professor, Department of Physics,  
College of Arts and Science, The  
Ohio State University**

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**Ezekiel “Zeke” Johnston-Halperin** received his PhD in Physics from the University of California at Santa Barbara in 2003. He is currently a professor in the Department of Physics at The Ohio State University.

Dr. Johnston-Halperin’s research focuses on studies of coherent spin and magnetization dynamics, synthesis of magnetic materials, and prototype device development for spintronics and quantum information applications. Dr. Johnston-Halperin is a fellow of the American Physical Society and served on the Executive Committee of the Division of Materials Physics (DMP), has held science leadership positions such as IRG and thrust co-leadership in NSF MRSEC and DOE EFRC centers, respectively, and is leading the NSF-funded education initiative QuSTEAM: Convergent Undergraduate Education in Quantum Science Technology, Engineering, Arts, and Mathematics.



## **Joseph Broz, PhD**

**Vice President of Quantum  
BD- Public and Academia, IBM  
Quantum**

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**Joseph Broz** has responsibility for leading IBM Quantum's quantum-centric supercomputing programs and adoption of advanced quantum computing capabilities. Dr. Broz joined IBM Quantum in March 2021 after serving as the founding executive director of the federally chartered quantum economic development consortium (QED-C) under the National Quantum Initiative Act. He has supported DOE, DOD, Air Force, Army, Navy, DHS, NIH, NIAID, DOJ, and other departments through agency research, consulting contracts, and advisory boards.

Prior to the QED-C, he served as vice president of applied sciences at SRI, where he led laboratories in applied science, government business development, technical and business strategy. He also served as vice president of business development and research at Titanium Metals, and laboratory director of Tenneco, Inc., where he was responsible for product development, manufacturing operations, quality, technology, and environmental management across corporate divisions worldwide.

He served as a White House fellow for the Office of Science and Technology Policy in the administration of George H.W. Bush. He was a British American fellow at Johns Hopkins SAIS, and a senior fellow for national security and energy at NORC at the University of Chicago. Dr. Broz has a B.S. in physics from the Massachusetts Institute of Technology and a PhD in physics from the Swiss Federal Institute (ETH) in Zurich.



## **Takao Onoye, PhD**

**Executive Vice President,  
Osaka University**

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**Takao Onoye** began serving as executive vice president for research of National University Corporation Osaka University in 2019. He completed his Master's Course in the Department of Electronic Engineering at Osaka University's Graduate School of Engineering in 1993 and completed his Doctor of Engineering degree at Osaka University in 1997.

He worked as an associate professor at the Kyoto University Graduate School of Informatics before returning to Osaka University where he served in various positions throughout his career, including dean of the Graduate School of Information Science and Technology, director of the Osaka University Libraries, and as vice president prior to his current position. He has served several positions of international academic societies including a board member of IEEE Circuits and Systems Society, an IEEE Japan Council chair, and an IEEE Region 10 (Asia-Pacific) vice chair for technical activities. His research interests include media-centric signal processing and system-on-a-chip design.





# Raymond E. Samuel, MD, PhD

Professor, Department of Biology  
North Carolina A&T State  
University

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A chemical engineer, biophysics researcher, physician, orthopedic surgeon, health scientist, **Raymond Samuel** is known for his interinstitutional and transdisciplinary collaboration on research and education programs.

Since he joined NC A&T in 2019, Dr. Samuel has led multiple research and education initiatives covering areas from translational health research to QISE. One consistent theme of Dr. Samuel's work is enhancing the diversity of the STEM research workforce along the workforce development pipeline. He is particularly passionate about the preparation of HBCU undergraduate students in biomedical research and QISE. He has continued to work tirelessly to provide internal and external research experiences for undergraduate and graduate students, promote professional development for junior faculty, and cultivate relationships with academic institutions, national labs, and industry partners on behalf of NC A&T.

Dr. Samuel has been pivotal in initiating NC A&T's engagement in QISE. NC A&T is an inaugural member of the Howard University-based IBM-HBCU Quantum Center, wherein Dr. Samuel recruited undergraduate and graduate students in IBM-HBCU Quantum Center sponsored QIS research projects. He is the Site PI for the NSF-funded QuSTEAM Phase 2 Convergence Accelerator, wherein a consortium of researchers and educators develop undergraduate curricula for expanding the QISE workforce. He is PI of the NSF-funded Catalyst Project, which is aimed at increasing the interest in quantum information science and engineering (QISE) among students enrolled at NC A&T via a combination of culturally relevant pedagogy and experiential learning activities. His team has recently been awarded an ExpandQISE Track 2 project by NSF, which involves the application of variational quantum algorithms to the design of two-dimensional quantum materials and the computational characterization of complex hypersonic flow conditions. His team will also embark on the construction of a quantum computer on NC A&T campus.

From 2013 to 2017, he served as Contact Principal Investigator on a large (\$3,000,000 per year; \$13,500,000 over 5-year project period) NIH-funded Cooperative



Agreement, the Hampton University-based Minority Men's Health Initiative (MMHI). A major component of the MMHI was an innovative Pilot Project Program that catalyzed the entry of new investigators at participating HBCUs to develop strong capabilities in minority men's health disparities research.

Dr. Samuel was the Contact PI for a National Research Mentoring Network (NRMN) Planning Grant and organized a national consortium in the original NRMN competition. He also served as the Project Director and Contact PI of the NSF-funded Hampton-Brandeis Partnership for Research and Education in Materials (PREM), wherein an interdisciplinary team at Hampton University and Brandeis University conducted collaborative research aimed at the development of drug delivery systems for delivery of therapeutic agents in cancer and other chronic diseases.

He has supported the professional growth and development of early career faculty at HBCUs for nearly 10 years through a myriad of activities, including provision of pilot and seed funding, assistance in building research collaborations, diversity supplement funding, summer research experiences at major research institutions, inclusion in team science activities, and academic career progression.

# Kevin Singh, PhD

Assistant Professor in Physics, The Ohio State University

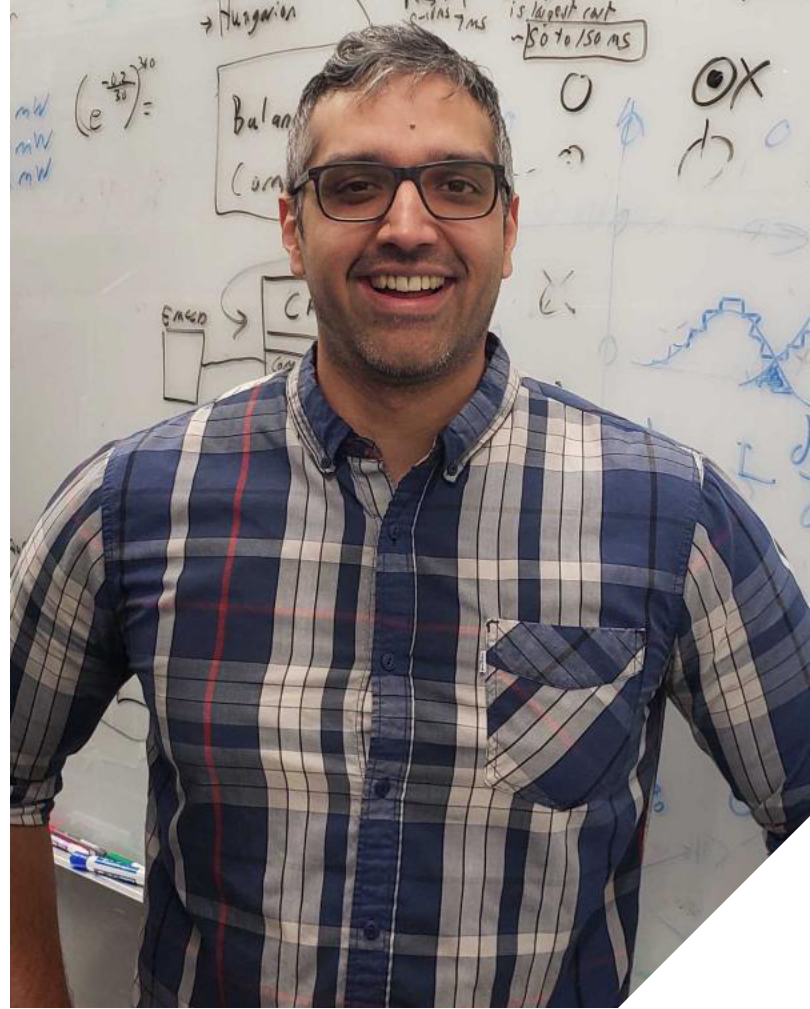
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**Kevin Singh** is an assistant professor, John W. Wilkins Endowed Professorship of Physics in the Department of Physics at The Ohio State University.

Dr. Singh earned an S.B. in physics from MIT, and an M.A. and PhD in physics from UC Santa Barbara.

Before coming to Ohio State, Dr. Singh was a postdoctoral fellow at the University of Chicago Pritzker School of Molecular Engineering. His areas of expertise include quantum information; atomic, molecular, and optical physics; and quantum optics.

He has been recognized with numerous awards including the Boeing Quantum Creators Prize (Chicago Quantum Exchange), 2023 and the Maria Lastra Excellence in Mentoring Award (PME, University of Chicago), 2021.



## **Ayanna Howard, PhD** Dean, College of Engineering, The Ohio State University

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Accomplished roboticist, entrepreneur and educator **Ayanna Howard** became dean of The Ohio State University College of Engineering on March 1, 2021. Previously she was chair of the Georgia Institute of Technology School of Interactive Computing in the College of Computing, as well as founder and director of the Human-Automation Systems Lab (HumAnS).

Her career spans higher education, NASA's Jet Propulsion Laboratory, and the private sector. Dr. Howard is the founder and president of the board of directors of Zyrobotics, a Georgia Tech spin-off company that develops mobile therapy and educational products for children with special needs. Zyrobotics products are based on Dr. Howard's research.

Among many accolades, Forbes named Dr. Howard to its **America's Top 50 Women In Tech** list. In 2021, the Association for Computing Machinery named her the ACM Athena Lecturer in recognition of fundamental contributions to the development of accessible human-robotic systems and artificial intelligence, along with forging new paths to broaden participation in computing. In 2022, she was elected Fellow of the American Association for the Advancement of Science (AAAS) and the National Academy of Inventors (NAI), and was appointed to the National Artificial Intelligence Advisory Committee (**NAIAC**).

Dr. Howard also is a tenured professor in the college's Department of Electrical and Computer Engineering with a joint appointment in Computer Science and Engineering. As dean, she holds the Monte Ahuja Endowed Dean's Chair, which was established in 2013 through a generous gift



from distinguished alumnus Monte Ahuja '70. [\[View Dean Howard's full CV\]](#)

She is the first woman to lead the College of Engineering. Throughout her career, Dr. Howard has been active in helping to diversify the engineering profession for women, underrepresented minorities, and individuals with disabilities.

Dr. Howard earned her bachelor's degree in computer engineering from Brown University, her master's degree and PhD in electrical engineering from the University of Southern California, and her MBA from Claremont Graduate University.



## **Ness Shroff, PhD**

**Computer Science and Engineering,  
The Ohio State University**

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**Ness B. Shroff** received his PhD from Columbia University in 1994 and joined Purdue University immediately thereafter as an assistant professor. At Purdue, he became professor of the school of Electrical and Computer Engineering and director of CWSA in 2004, a university-wide center on wireless systems and applications. In July 2007, he joined the ECE and CSE departments at The Ohio State University, where he holds the Ohio Eminent Scholar Chaired Professorship of Networking and Communications. He served as a guest chaired professor of wireless communications at Tsinghua University, Beijing, China, and honorary guest professor at Shanghai Jiaotong University in China.

Dr. Shroff's research interests span the areas of communication, networking, computing, storage, cloud, recommender, social and cyberphysical systems. He is especially interested in fundamental problems in machine learning, design, control, performance, pricing and security of these complex systems. He currently serves as the Editor in Chief of the IEEE/ACM Trans. on Networking, and as the Steering Committee Chair of ACM Mobihoc. He has also been the technical program chair of a number of IEEE and ACM conferences (e.g., IEEE INFOCOM 2003, ACM Mobihoc 2008), and has served on the editorial boards of various IEEE journals, as well as on the technical and executive committees of several major conferences and workshops. He has given several keynote addresses at major conferences and has also organized a number of workshops for the National Science Foundation.

Dr. Shroff is a Fellow of the IEEE, and a National Science Foundation CAREER awardee. His papers have received numerous awards at top-tier venues. For example,



he received the best paper award at IEEE INFOCOM 2006, IEEE INFOCOM 2008, and IEEE INFOCOM 2016, the best paper of the year in the journal of Communication and Networking (2005) and in Computer Networks (2003). He also received runner-up awards at IEEE INFOCOM 2005 and IEEE INFOCOM 2013. In addition, his papers have received the best student paper award (from all papers whose first author is a student) at ACM Sigmetrics 2017, IEEE WiOPT 2013, IEEE WiOPT 2012, and IEEE IWQoS 2006. Dr. Shroff is on the list of **highly cited researchers from Thomson Reuters ISI** (previously ISI web of Science) in 2014 and 2015, and in Thomson Reuters Book on **The World's Most Influential Scientific Minds in 2014**. He received the IEEE INFOCOM achievement award for seminal contributions to scheduling and resource allocation in wireless networks in 2014. He is currently leading an NSF AI Institute for Future Edge Networks and Distributed Intelligence.

## **Dee Pai, PhD**

**Chief Data Scientist,  
JP Morgan Chase**

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**Dee Pai** is the chief data scientist for CCB Data and Analytics. In this role, Dr. Pai oversees the governance and consistency of analytical methodologies, as well as all aspects of best-in-class experimental design and implementation. Some of her major projects include establishing the Methodology Community of Practice and developing an internal wallet model.

Previously, Dr. Pai served as the head of CCB Marketing Analytics and Audience Targeting from 2018 to 2020, and as the head of Consumer Bank Marketing Analytics from 2014 to 2018. During her tenure at Chase, she was instrumental in the development of several patents, including a “Method and System for Implementing Behavior Isolating Predicting Model.”

Before joining Chase, Dr. Pai worked at Nationwide Insurance as the Director of P&C Marketing Analytics.

Dr. Pai is currently a champion for P&E DEI and serves as a CCB Culture Connector representing P&E.

Dr. Pai holds a PhD from The Ohio State University. She is married with three children and currently resides in Dublin, Ohio. Dee is a die-hard Ohio State football fan. She and her husband go to every home game and exhaust themselves by screaming their lungs out the whole game. She believes it is a good physical and mental exercise every Saturday afternoon from September to January!



## **Venki Ramaswamy, PhD**

Chief Technologist for  
NextG, MITRE Labs

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**Venkatesh (Venki) Ramaswamy** is chief technologist for NextG at MITRE Labs in Bedford, Massachusetts where he currently leads technical innovation and R&D activities in 5G/xG technologies. He has more than 20 years of experience in the telecommunications industry and has held technical leadership positions at top technology companies, startups, and research labs. Currently, he serves as one of the active industry members of the ATIS/Next G Alliance Research Council working on the development of a comprehensive North American 6G strategy. He is also an industry researcher at the NSF Edge AI Institute looking at synergies between networking and AI. He has published more than 50 peer-reviewed publications and patents, served as a TPC member for various conferences, and participated in several technical panels. He received his PhD in electrical engineering in 2007 from the University of Mississippi.





## **Tetsuya Sakurai, PhD**

**Director, Center for Artificial  
Intelligence Research,  
University of Tsukuba**

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**Tetsuya Sakurai** is a professor in the Department of Computer Science at the University of Tsukuba and is the director of the university's Center for Artificial Intelligence Research (C-AIR). His areas of focus include machine learning, artificial intelligence (AI), mathematical algorithms, and quantum machine learning.

Dr. Sakurai's research includes knowledge discovery using spectral framework, privacy preserving distributed data analysis, federated learning system, spectral methods for data and image analysis, and algorithms for deep neural networks (DNNs). He was awarded a commendation for Science and Technology by the Minister of Education, Culture, Sports, Science and Technology in 2018.

He earned a PhD. in computer engineering from Nagoya University in 1992.



## **Mika Takagi**

**Director General, New Energy and Industrial Technology Development Organization (NEDO), Special Advisor to Ministry of Economy, Trade and Industry (METI)**

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**Mika Takagi** serves as the director general of New Energy and Industrial Technology Development Organization (NEDO)'s Washington, D.C. Office since July 2022, where she promotes Japan-U.S. collaboration for developments in the field of critical and emerging technologies and clean energy. NEDO is a Japanese government backed funding agency that financially supports demonstration phase projects in those fields by utilizing programs such as the \$18 billion Green Innovation Fund.

She manages NEDO's projects in the Americas, as well as helping the Ministry of Economy, Trade and Industry (METI) Japan as a special advisor to form Japanese S&T R&D policies and energy policies. Prior to this, she had worked for several different divisions in METI, including the International Economic Affairs Division and International Standard Division. Both divisions focus on global rulemaking and coordination with regard to the use of new technologies. She holds a BA in Economics from Tokyo University and an MBA from Stanford University.



## **Kazuya Takeda**

**Vice President for Information System (Digital University) and Information-Related Strategies, Nagoya University**

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**Kazuya Takeda** is the vice president for information systems and information-related strategies at Nagoya University, where he also serves as a professor in the Graduate School of Information Science and the Graduate School of Informatics.

His research focus includes modeling and prediction of driving behavior, information processing of speech and acoustic signals, and human/machine interaction. Dr. Takeda serves in leadership roles in various organizations, including the IEEE Intelligent Transportation Systems (ITS) Society and the IEEE Signal Processing Society. Dr. Takeda earned a PhD in engineering from Nagoya University.





## Michael Chertoff

Co-founder and Executive  
Chairman, Chertoff Group

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**Michael Chertoff** is Co-Founder and Executive Chairman of the Chertoff Group, a global security risk management and growth advisory firm, which he co-founded after a notable career in public service, where he addressed security issues of first impression.

As U.S. Department of Homeland Security Secretary from 2005-2009, he led the largest reorganization of the Federal civilian workforce since World War II. He gave up lifetime federal appeals court judgeship to serve as DHS Secretary.

Earlier, at U.S. Department of Justice, he supervised investigation into the 9/11 attacks. Secretary Chertoff began his career as federal prosecutor in New York in 1983, where he led the simultaneous prosecution of the heads of five major mafia crime families.

At Chertoff Group, Mr. Chertoff uses the same critical thinking discipline he used in government to help major corporations address evolving security issues, including cyber, geopolitical and physical risk. “Risk management has become the CEO’s concern,” he says. “We help our clients develop comprehensive strategies to manage risk without building barriers that get in the way of carrying on their business.”

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

He serves as an advisor to the American Bar Association’s Artificial Intelligence Task Force, as co-chair of the Transatlantic Commission



on Election Integrity, on the board of trustees of the Freedom House, and as a director on the board of The Atlantic Council.

He is the author of *Exploding Data: Reclaiming Our Cyber Security in the Digital Age*.

Previous government service includes:

- Secretary, U.S. Department of Homeland Security (2005 – 2009)
- Federal Judge, U.S. Court of Appeals for the Third Circuit (2003 – 2005)
- Assistant Attorney General of the United States, Criminal Division (2001 – 2003)

## **Naoshi Sugiyama, PhD**

### **President, Nagoya University**

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**Naoshi Sugiyama** assumed office as the 15th President of Nagoya University on April 1, 2022. He is also Executive Trustee and Vice Chancellor of the Tokai National Higher Education and Research System. Nagoya University has grown to become one of Japan's leading comprehensive research universities, comprising nine schools and 13 graduate schools.

At Nagoya University, Dr. Sugiyama has served as Dean of the School and Graduate School of Science, Trustee and Vice President, and Provost. He has also served as Trustee at the Tokai National Higher Education and Research System.

His fields of specialization include theoretical astronomy and astrophysics, cosmology, observational cosmology, cosmic microwave background, large-scale structure of the cosmos, and thermal history of the universe.

He was awarded the Nishinomiya Yukawa Memorial Prize in 2001, the JSPS Prize in 2007, and the Hayashi Chushiro Prize from the Astronomical Society of Japan in 2009.



## **Chris Fall, PhD**

### **Vice President for Applied Sciences, MITRE Corporation**

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**Chris Fall** is Vice President for Applied Sciences at MITRE. He leads core research and development in emerging technology domains, including quantum computing, material science, synthetic biology and space. He oversees five MITRE Labs innovation centers spanning life, physical, and health sciences; transportation; economics; acquisition; and enterprise strategy. These groups include more than 1,100 engineers, scientists, analysts, clinicians, and strategists solving critical scientific challenges for our nation.

Previously, Dr. Fall was confirmed by the U.S. Senate as the director of the U.S. Department of Energy Office of Science, the nation's largest supporter of basic research in the physical sciences. He was responsible for 10 of the department's 17 national laboratories and played a key part in the department's investments in quantum science, synthetic biology, and artificial intelligence. Dr. Fall also served as acting director of ARPA-E and led the department's response to the COVID-19 pandemic.

Prior to his tenure at the Department of Energy, Dr. Fall spent seven years at the Office of Naval Research (ONR) in several senior management roles, including acting chief scientist. While on detail from ONR, Dr. Fall served for three years across two administrations in the White House Office of Science and Technology Policy, as assistant director for defense programs and then as acting lead for the National Security and International Affairs Division.

In addition to his government service, Dr. Fall spent more than two decades in academia, where his research focused on neuroscience, systems biology, and bioengineering. He



has been a faculty member or postdoctoral scholar at the University of Illinois at Chicago, Georgetown University, New York University, the University of California at Davis, and the University of Virginia.

He also serves in advisory or board roles with the Sanford Underground Research Facility Foundation and the South Dakota Science and Technology Authority, Oak Ridge Associated Universities, the Japan Society, the Center for Strategic and International Studies, the Council on Strategic Risks, and CRDF Global.

Dr. Fall earned a PhD in neuroscience and a bachelor's degree in mechanical engineering from the University of Virginia, as well as an MBA from Northwestern University's Kellogg School of Management.



**Roy Sugimura, PhD**  
Supervisory Innovation  
Coordinator, National Research  
Institute for Advanced Industrial  
Science and Technology (AIST)

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**Roy Sugimura** earned his PhD in computer science from Kyoto University in 1998 and has held numerous leadership positions at various technology companies including the Matsushita Electric Industrial Co. and Panasonic Mobile Communications.

Since 2019, he has served as a visiting professor at the University of Tsukuba and is the head of Japan's National Body for ISO/IEC JTC 1/SC 42, the international standards committee responsible for standardization in Artificial Intelligence. Dr. Sugimura has served as the Supervisory Innovation Coordinator of the National Research Institute for Advanced Industrial Science and Technology (AIST) since 2016.



## **Dennis Hirsch**

**Professor of Law,  
The Ohio State University**

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**Dennis Hirsch** is a professor at The Ohio State University where he holds a joint appointment in the Moritz College of Law and the Department of Computer Science and is a core faculty member of the Translational Data Analytics Institute. He directs the OSU Program on Data and Governance which focuses on the governance of advanced analytics and AI, and co-directs the OSU Responsible Data Science Community of Practice, a community of over 100 researchers focused on the ethical and just use of advanced analytics and AI. Professor Hirsch teaches courses on privacy law, property law, and on the law, policy, ethics, and management of AI.

A graduate of Yale Law School, Professor Hirsch is a recognized expert on the governance of advanced analytics and AI, having testified on this topic before the US Senate Subcommittee on Privacy, Technology and the Law and before the Federal Trade Commission. His 2020 Maryland Law Review article was one of the inspirations for a bill introduced in the US Senate: the Algorithmic Fairness Act of 2020. Professor Hirsch was the Principal Investigator for an Ohio State research study on business data ethics management. He subsequently founded the Ohio Data Ethics Working Group for organizations seeking to improve their data ethics management programs. He has published dozens of articles and book chapters, and an award-winning book, and has given more than 100 scholarly presentations. In 2010, he served as Fulbright Senior Professor at the University of Amsterdam where he taught privacy law and researched Dutch data protection codes of conduct. He returns to the University of Amsterdam each



summer to teach in its Summer Course on Privacy Law and Policy.

Professor Hirsch has served as chair of the AALS Committee on Defamation and Privacy, reporter for the Uniform Law Commission Drafting Committee on Employee and Student Privacy, member of the Ohio Attorney General's Task Force on Facial Recognition, member of the Smart Columbus privacy and data security board, and as associate dean for faculty and student development at Capital University Law School (2005-2007) where he served on the faculty. He practiced law with Sidley Austin and with Porter Wright Morris & Arthur.

## **Tetsuo Morishita**

**Vice President of Global  
Academic Affairs, Professor of Law,  
Sophia University**

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**Tetsuo Morishita** has been a professor of law at the Sophia University Law School since 1999, where he researches banking, financial law, international business law and negotiations. He completed his bachelor studies in law at the University of Tokyo in 1989 and received an M.A. in law from the Graduate School of Law and Politics at the University of Tokyo in 1994.

Professor Morishita previously worked for The Sumitomo Bank Ltd. In 2015, he chaired the Working Group on Payments and Transaction Banking of the Financial System Council of the Financial Services Agency (FSA), and has been the chairperson of Payments Council on Financial Innovation at FSA since 2016. He participated as a member in various working groups and study groups of FSA and Ministry of Justice.

He is currently the vice president of Global Academic Affairs at Sophia University and is a Director, JBA TIBOR Administration, and a member of the Dispute Resolution Committee, National Consumer Affairs Center of Japan as well as a member of the Working Group on the Financial Market System of the FSA.





**Yoshio Tanaka, Dr. Eng**  
Director-General, Department  
of Information Technology and  
Human Factors, National Institute  
of Advanced Industrial Science and  
Technology (AIST)

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**Yoshio Tanaka** has been Director-General, Department of Information Technology and Human Factors, National Institute of Advanced Industrial Science and Technology, since January 2023. He was previously Director, Security and Information Promotion Department, AIST, from 2020 to 2022.



## **Masahiko Uchino**

**Principal Deputy Director,  
Americas Division, Trade Policy  
Bureau, Ministry of Economy, Trade  
and Industry (METI), Japan**

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Masahiko Uchino is principal deputy director at Americas Division, Trade Policy Bureau, Ministry of Economy, Trade and Industry (METI), Japan where he is responsible for policy planning and coordination of METI's bilateral economic engagement with the U.S. and Canada as well as human resource management of the division since June 2022. Mr. Uchino has been working for the Government of Japan since he joined METI in 2010. Much of his career has focused on international engagements including working for Japanese Embassy in Washington D.C. from 2018 to 2021 and dealing with international economic frameworks such as the Trans-Pacific Partnership (TPP) and Asia-Pacific Economic Cooperation (APEC).

Mr. Uchino earned his M.A. in law and diplomacy at the Fletcher School of Law and Diplomacy, Tufts University in Massachusetts, the U.S., in May 2017. He also holds a B.A. from Hitotsubashi University in Tokyo, Japan, in laws and international relations.



## **Duane Detwiler**

Vice President, Honda Research  
Institute USA, Inc.

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As the vice president of research at Honda Research Institute (HRI) USA, **Duane Detwiler** directs the institute's operations in Ohio that include 99P Labs. The HRI team engages in collaborative research to innovate technologies for future Honda applications and societal benefits.

Duane's technical career of over 25 years at Honda has focused on research, development, and application of physics-based modeling, simulation, and optimization methods for vehicle design and development earning him multiple patents. Duane obtained a Bachelor of Engineering degree in 1991 and Master of Engineering degree in 1993 from The Ohio State University. He has co-authored dozens of scientific papers through his collaborations with research partners.





## John Thornton

CEO, Astrobotic

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Following his graduation from Carnegie Mellon University, **John Thornton** was recruited to work at Astrobotic Technology Inc. by founder Red Whittaker and was promoted to CEO soon after. Under his tenure, Astrobotic secured several contracts from NASA including a \$79.5 million contract to deliver payloads to the moon.

He was named CEO of the Year by the Pittsburgh Technology Council in 2019.

Astrobotic Technology, Inc. is a space robotics company that seeks to make space accessible to the world. The company's lunar lander, Peregrine, delivers payloads to the Moon for companies, governments, universities, non-profits, and individuals for \$1.2 million per kilogram. Astrobotic was selected by NASA in May 2019 for a \$79.5 million contract to deliver payloads to the Moon in 2021. The company also has more than 30 prior and ongoing NASA and commercial technology contracts, a commercial partnership with Airbus DS, and a corporate sponsorship with DHL. The company is also an official partner with NASA through the Lunar CATALYST Program. Astrobotic was founded in 2007 and is headquartered in Pittsburgh, PA.



## **John M. Horack, PhD** Neil Armstrong Chair in Aerospace Policy, The Ohio State University

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**John M. Horack** is the Neil Armstrong Chair in Aerospace Policy, and holds a joint appointment between the Department of Mechanical and Aerospace Engineering in the College of Engineering, and the John Glenn College of Public Affairs at The Ohio State University.

Before coming to Ohio State in 2016, Dr. Horack served as the vice president for space systems at Teledyne Brown Engineering, as the vice president for research at the University of Alabama in Huntsville, and spent nearly two decades as a NASA civil servant, performing original theoretical and experimental research in high-energy astrophysics, cosmology and gamma-ray bursts, as well as serving as a member of the Senior Executive Service, leading the Science and Mission Systems Office at NASA's Marshall Space Flight Center.

He also serves as one of the 12 vice presidents of the International Astronautical Federation, and one of only two Americans, responsible for the technical aspects of the federation, and for the evolution of the annual International Astronautical Congress. He also provides significant consultation services to a number of commercial space start-up companies, to heads of civil space agencies, and to economic development interests tied to spaceflight.

Dr. Horack is the author or co-author of over 100 scientific papers, conference proceedings and publications across subjects including space policy, atmospheric physics and high-energy astrophysics. He was an important member of the scientific teams which discovered the existence of flashes of gamma-rays from terrestrial thunderstorms, and the breakthrough scientific discovery that gamma-ray bursts originate from cosmological



distances. He is a sought-after public speaker and authority on space-related matters across the commercial, civil and national security space domains.

Dr. Horack holds a doctorate and a master's degree in astrophysics from the University of Alabama in Huntsville, and a bachelor's degree in physics and astronomy from Northwestern University. He is an FAA-licensed flight instructor, with commercial and instrument pilot ratings.

## Jeffrey Manber

### President International and Space Stations, Voyager Space

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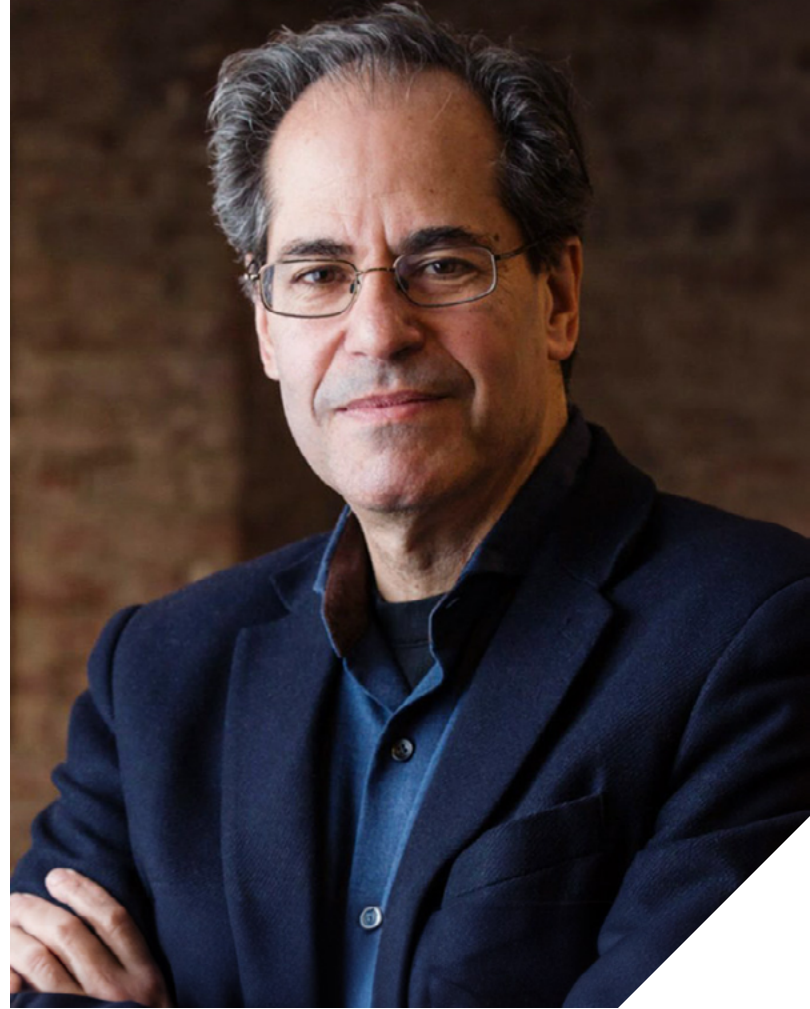
**Jeffrey Manber** is a recognized pioneer in bringing about the commercial utilization of space, from satellites to space stations. He is president of international and space stations at Voyager Space and also serves as chairman of the board for Nanoracks. In addition, he is Director of the George Washington Carver Science Park, dedicated to in-space research, in partnership with The Ohio State University.

Mr. Manber is the co-founder and first employee of Nanoracks. He served as the chief executive officer from 2009 until 2021 where he broke barriers for access to space and oversaw the growth of numerous commercial International Space Station programs. He also directed the development of the Bishop Airlock, the first and only commercial airlock on the space station.

As the only American to ever work officially for the Russian space program, Mr. Manber served as Managing Director of Energia USA, the American arm of RSC Energia. In 1991, he negotiated and executed the first commercial contract between NASA and the NPO Energia in the Soviet Union to use the Soyuz crewed capsule as an escape vehicle for Space Station Freedom. Later, Mr. Manber represented Energia in contract negotiations to construct and operate the International Space Station.

As CEO of MirCorp, he leased the Russian space station “Mir” and oversaw the first ever commercially funded 70-day crewed mission. His experience developing the business base for Mir and on the International Space Station, paved the way Nanoracks to grow into a commercial space station company.

Mr. Manber also co-developed the first fund dedicated to commercial space on Wall Street with Shearson Lehman. He has served as an advisor to numerous space companies and



governments. The author of three books, his second, *Selling Peace*, chronicles his time working with the Russian space program. In 2012, Mr. Manber was awarded the NASA Exceptional Public Achievement Medal and the Space Frontier Foundation’s 2017 Pioneer of New Space Award.



## **Kazuo Shiokawa**

**Director, Institute for Space–  
Earth Environmental Research,  
Nagoya University**

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**Kazuo Shiokawa** is the director of the Institute for Space-Earth Environmental Research (ISEE) at Nagoya University. Dr. Shiokawa earned his B.S. and M.S. in geophysics from Tohoku University and his PhD in science from Nagoya University. Dr. Shiokawa works as an associate professor and professor at the Nagoya University starting in 1999. He is the author or co-author of more than 400 international research publications as well as seven books on aeronomy and optical and electromagnetic measurements related to aurora and airglow. He is a member of the Society of Geomagnetism, and Earth, Planetary, and Space Physics, Japan, for which he is serving as the current president, as well as the American Geophysical Union, the Meteorological Society of Japan, and the International Academy of Astronautics. Dr. Shiokawa is also serving as the current president of the Scientific Committee of Solar-Terrestrial Physics (SCOSTEP) which is an affiliated body of the International Science Council and is a permanent observer of the United Nations Committee on the Peaceful Uses of Outer Space.



## **Yuka Suzuki**

### **Science Counsellor, Embassy of Japan to the United States**

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**Yuka Suzuki** is the science counsellor for the Embassy of Japan to the United States. She earned her Master of Arts in Pharmaceutical Science from the University of Tokyo in 2003 and a Master of Public Policy & Master of Arts in Higher Education from the University of Michigan in 2010.

Ms. Suzuki began working for the Japan Ministry of Education, Culture, Sports, Science and Technology (MEXT) in 2003. Her previous positions include director, Office for Space Utilization Promotion, Space Development and Utilization Division, Research and Development Bureau, MEXT; senior planning officer, Secretariat of New Form of Capitalism Realization Headquarters, Cabinet Secretariat; and director, Office of Human Resource Development and Innovation, Atomic Energy Division, Research and Development Bureau, MEXT.



## John Vickers

CEO, Blue Abyss

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After spending eight years in the British Army, **John Vickers** left to join a city-based management consultancy where he worked on leadership and management development programs for some of the world's Fortune 100 companies including: American Express, Oracle and British American Tobacco. He then worked for IBM before moving to GE Capital where he looked after a FTSE 100 client before advancing to lead the eBusiness initiative within the company. John has experience with two previous start-ups including a consultancy business, which influenced IBM to transform its approach to eBusiness selling, and launching a company that developed an incredibly thin insulation material.

John is a qualified Six Sigma Black Belt practitioner and believes passionately in connecting our marine evolutionary heritage to the future of space exploration. He founded Blue Abyss in October 2014.





## **Kyosuke Nagata, PhD** President, University of Tsukuba

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**Kyosuke Nagata** has been president of University of Tsukuba since 2013. He earned his PhD in pharmaceutical sciences from The University of Tokyo in 1981. Launching his career in the U.S., he held positions at the Albert Einstein College of Medicine and Memorial Sloan-Kettering Cancer Institute before becoming an Associate Professor at the National Institute of Genetics, Japan (1981-1991). He held academic roles at Tokyo Institute of Technology (1991-2001) and joined the University of Tsukuba in 2001, eventually becoming its President in 2013. His research spans virology, molecular biology, and structural biochemistry.

Recognized for his academic contributions, he has received numerous honors, including medals from Uzbekistan and Vietnam, doctorates from Malaysia and Tajikistan, and the Sugiura Incentive Award from the Japanese Society for Virology. He also received a Second Class Medal for Contributions to the Field of Education from Taiwan's Ministry of Education in 2023. Actively engaged in academic societies, he holds positions in government committees and national/international associations. His leadership extends beyond academia, reflecting a rich history of scholarly achievements and global impact.

