In accordance with the implementation of the U.S. Government National Standards Strategy for Critical and Emerging Technology, the National Institute of Standards and Technology (NIST) and U.S. government participants are listening to various stakeholder communities – and seeking input through a Request for Information.

International standards development is critical to realizing the potential of investments in cutting-edge R&D. Basic and applied research activities are essential to advancing critical and emerging technologies (CET) in the marketplace. Yet, when training the next generation of scientists and engineers, we fail to fully appreciate the role that standards play in the R&D ecosystem. Supporting robust standards development activities for CET requires new and creative partnerships. Government, industry, and academia must work collaboratively to facilitate a standards-savvy workforce ready for the innovation challenges of tomorrow.

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<th>Time</th>
<th>Discussion and Speakers</th>
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<td>1:00–1:10 pm</td>
<td><strong>Welcome Remarks from Columbia University School of Professional Studies (SPS)</strong></td>
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<td><strong>Steve Safier,</strong> Program Director and Lecturer, Human Capital Management – Columbia University School of Professional Studies</td>
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<td><strong>Won Palisoul,</strong> Adjunct Associate Faculty for Human Capital Management – Columbia University School of Professional Studies</td>
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<td>1:10–1:30 pm</td>
<td><strong>Fireside Chat: Standards and the Innovation Ecosystem</strong></td>
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<td><strong>Dr. Alexis Wichowski</strong>, Professor of Professional Practice and Program Director, Technology Management, will engage <strong>Dr. Laurie Locascio</strong>, Director of NIST and the Under Secretary of Commerce for Standards and Technology, in conversation about the U.S. Government National Standards Strategy on Critical and Emerging Technology.</td>
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<td>1:30-1:35 pm</td>
<td><strong>Remarks from the International Trade Administration</strong></td>
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<td><strong>Heather Evans,</strong> Deputy Assistant Secretary for Manufacturing – International Trade Administration</td>
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<td>1:35–1:45 pm</td>
<td><strong>Overview of U.S. Government National Standards Strategy for Critical and Emerging Technology</strong></td>
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<td><strong>Dr. Jayne Morrow,</strong> Senior Advisor to the Director for Standards Policy – NIST National Institute of Standards and Technology</td>
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1:45–2:20 pm **Panel Discussion**  
Experts from industry, academia, and government will discuss unique challenges and opportunities to educate and empower a robust, diverse, and inclusive standards workforce to support critical and emerging technologies.  
**Moderator:** Dr. Roy Swift, Executive Director – Workcred  
**Panelists:**  
- Dr. Diana Gelhaus, Senior Advisor for the Chief Digital and Artificial Intelligence Office (CDAO) – Department of Defense (DoD)  
- Tanya Pope, Assistant Vice President of University Supplier Diversity – Columbia University

2:20–2:55 pm **Moderated Group Discussion**  
To inform the implementation of the U.S. Government National Standards Strategy for Critical and Emerging Technology, participants will contribute their perspectives on the following questions:  
- How can we work together, learning from each other’s experience, to build standards awareness and foster a standards-literate workforce of the future?  
- How can we expand efforts to educate and empower a new standards workforce and be more inclusive to additional stakeholders, such as start-ups, small- and medium-sized companies, academia, and members of civil society?  
- What standards development information, guidance, training, educational tools, and assistance are needed to reach a more diverse audience?

2:55-3:00 pm **Closing Remarks and Adjournment**  
**Dr. Jayne Morrow**, Senior Advisor to the Director for Standards Policy – NIST National Institute of Standards and Technology
ABOUT THE PRESENTERS

Steve Safier – Welcome Remarks

Program Director and Lecturer, Human Capital Management – Columbia University School of Professional Studies

Steve Safier is a change management/turnaround authority and trusted consigliere to Boards of Directors, executive management and employee teams. He has experience working as a transformational leader and strategic advisor, having served as a CHRO, COO, Business President, and Human Capital consultant.

Steve joined the Columbia School of Professional Studies Human Capital Management program as a part-time lecturer in the Fall of 2018, and joined the full-time faculty in July 2019. He currently serves as Program Director.

Steve began his business career consulting for HayGroup, a role he performed for nearly 20 years. He has demonstrated expertise in HR Strategy development, organization design, leadership development, executive coaching, talent selection and development, performance management, compensation and HR team effectiveness, with an emphasis on helping organizations develop and execute practical, actionable business solutions.

Steve was hired by one of his clients—the Subway Franchisee Advertising Fund Trust—to build out the marketing and advertising capability for Subway restaurants around the world. As Chief Operating Officer, he had accountability for Finance, Legal, HR, IT, Governance, Facilities, Internal Communications, and Meetings.

Steve returned to consulting for a brief period, and then joined Panasonic North America, first as Chief Transformation and Human Resources Officer, and then as President of the Health and Wellness Solutions business. He has held other HCM consulting roles since.

Steve has a Ph.D. in Clinical Psychology, and enjoys speaking to audiences, including HR and other professionals, graduate and college students about implementing business strategy through organization structure, role clarity and personal and team behavior.

Won Palisoul – Welcome Remarks

Adjunct Associate Faculty for Human Capital Management – Columbia University School of Professional Studies

Won Palisoul is VP of Dodd-Frank Act (Swap Dealer and Security-Based Swap Dealer) Compliance and an Advisor of Asian Professional Network at SG. In 2021, she was appointed to be the Special Assistant to the Under Secretary of Defense for Personnel and Readiness (P&R) at the Pentagon. Won supported the optimization of STEM talent management, elite training and education, quality family support, and resilience through Diversity, Equity, Inclusion and Accessibility (DEIA). During her year at the Pentagon, she collaborated with the Dept. of Labor, Veterans Affairs, Small Business Administration and the National Economic Council on supply chain and military transition programs.

Prior to the Department of Defense, Won was an Associate Director of Investment Bank CORC at UBS and a Certified Fraud Examiner. She was also a Senior Compliance Officer of credit-focused asset management firm and hedge fund, a Compliance Consultant in crypto asset and a Compliance Examiner at an SRO for the U.S. derivatives industry. Won’s SRO examiner responsibilities included OTC derivatives, swap dealer compliance programs, and adherence to the Dodd-Frank Wall Street Reform and Consumer Protection Act. Previously, she was an Office Manager for a retirement fund with $6 billion AUM and in 2012, she was named a Veteran Associate at the New York Stock Exchange.

Won began her career as a Gas Turbine Technician (Electrical) in the U.S Navy, serving aboard guided missile destroyers forward deployed in the Pacific region for Operation Enduring Freedom. After eight years of service (active and reserve), she received an
honorable discharge and founded a small business that she ran for four years prior to transitioning into finance. After service, she founded Women Veterans and Families Network and serves on the DNC Vets and Military Families Council. Won is the Chair of Veterans Roundtable at CFA Society New York and the Co-Lead of Women Veterans on Wall Street (wVOWS), a subcommittee of VOWS. She works with leaders of Fortune 500 companies and nonprofits to facilitate roundtable discussions and DEIA best practices forums on hiring military veterans and military spouses.

Won holds an M.A. in IT Management from Webster University and an M.S. in Nonprofit Management from Columbia University’s School of Professional Studies (SPS). She is an adjunct associate faculty member of the M.S. in Human Capital Management Program. She was honored with the SPS Alumni Dean’s Excellence Award and serves on the Board of Directors of Columbia DC Alumni Chapter. Won is married to a veteran of the U.S. Navy, and they have two children.

**Dr. Alexis Wichowski – Fireside Chat: Standards and the Innovation Ecosystem**

*Professor of Professional Practice and Program Director, Technology Management*

Dr. Alexis Wichowski works, teaches, and writes on technology, government, and power. She currently serves as Professor of Professional Practice at Columbia University’s School of Professional Studies as well as Program Director for the MS and Executive MS Technology management and affiliate faculty with Columbia's School of International & Public Affairs, where she's been teaching as an adjunct for over a decade. Her public service work focuses on technology in government, agency communications, and technology policy.

Recent roles include Deputy Chief Technology Officer for the City of New York, Associate Commissioner for NYC's Department of Veterans' Services, and various roles within the US Department of State and the US Mission to the United Nations. Past life work includes disaster relief, literary translation, media impact research, indexing, coding, theater production, and pretzel vending. Alexis Wichowski holds a Ph.D. in Information Science from SUNY Albany and a BA in Chinese from Connecticut College, completed in three years.

**Laurie E. Locascio – Fireside Chat: Standards and the Innovation Ecosystem**

*Director of NIST and the Under Secretary of Commerce for Standards and Technology – National Institute of Standards and Technology*

Laurie E. Locascio is the 17th director of NIST and the fourth Under Secretary of Commerce for Standards and Technology. In this role, she provides high-level oversight and direction of NIST.

Dr. Locascio most recently served as vice president for research at the University of Maryland College Park and University of Maryland Baltimore, where she focused on the development of large interdisciplinary research programs, technology commercialization, innovation and economic development efforts, and strategic partnerships with industry, federal, academic and nonprofit collaborators. She also served as a professor in the Fischell Department of Bioengineering at the A. James Clark School of Engineering with a secondary appointment in the Department of Pharmacology in the School of Medicine.

Before joining the University of Maryland, Dr. Locascio worked at NIST for 31 years, rising from a research biomedical engineer to eventually leading the agency’s Material Measurement Laboratory (MML). She also served as the acting associate director for laboratory programs, the No. 2 position at NIST, providing direction and operational guidance for NIST’s lab research programs.

As director of MML, one of NIST’s largest scientific labs, Dr. Locascio oversaw 1,000 research staff in eight locations around the United States and a $175 million annual budget and recruited top talent, fostered excellence, and built a collegial and collaborative workplace. She implemented strategic partnerships with universities, industry and other government labs, including a partnership with the University of
Maryland’s Institute for Bioscience and Biotechnology Research at the Universities at Shady Grove. Before that, Dr. Locascio served as chief of MML’s Biochemical Sciences Division.

Dr. Locascio’s most recent honors and awards include the 2021 induction as a fellow of the National Academy of Inventors, the 2017 American Chemical Society Earle B. Barnes Award for Leadership in Chemical Research Management, and the 2017 Washington Academy of Sciences Special Award in Scientific Leadership. She has published 115 scientific papers and has received 12 patents in the fields of bioengineering and analytical chemistry. Her honors and awards also include the Department of Commerce Silver and Bronze Medal Awards, the American Chemical Society Division of Analytical Chemistry Arthur F. Findeis Award, the NIST Safety Award and the NIST Applied Research Award. She is also a fellow of the American Chemical Society and the American Institute for Medical and Biological Engineering.

Dr. Locascio has a B.S. in chemistry from James Madison University, an M.S. in bioengineering from the University of Utah, and a Ph.D. in toxicology from the University of Maryland Baltimore.

Heather Evans – Remarks from the International Trade Administration

*Deputy Assistant Secretary for Manufacturing – International Trade Administration*

Dr. Heather Evans is the Deputy Assistant Secretary for Manufacturing for the International Trade Administration. In this role, she directs the U.S. Department of Commerce’s efforts to advance the global competitiveness of manufacturing industries through the development and execution of international trade and investment policies and promotion strategies. She oversees the Office of Transportation and Machinery, the Office of Energy and Environmental Industries, and the Office of Health and Information Technology.

Evans joined ITA after working at the National Institute of Standards and Technology (NIST) for over a decade. Most recently, she served as Director of the NIST Program Coordination Office in the Office of the Under Secretary, leading efforts on policy, budget, and strategy issues for the institute. Before that, she served as NIST Liaison and Senior Technology Advisor in the Office of Policy and Strategic Planning at Commerce, where she led efforts on international standards, cybersecurity, and emerging technologies including artificial intelligence for the Department. Heather was part of the initial team at NIST that built the foundation of the National Network for Manufacturing Innovation, now known as Manufacturing USA. She led many change initiatives across NIST, including data-driven studies and staff engagements to address inequity, which led to the establishment of a new NIST-wide office of diversity, equity, and inclusion. As a 2008-2010 AAAS Science and Technology Policy fellow in the National Nanotechnology Coordination Office and the White House Office of Science and Technology Policy, she was part of the Emerging Technologies Interagency Policy Committee that developed principles for the oversight and regulation of emerging technologies, including nanotechnology and synthetic biology.

Evans was a Humboldt Postdoctoral Research Fellow in Germany and holds a doctorate in materials science from the University of California Santa Barbara and bachelor’s degree in physics from Macalester College in St. Paul, Minnesota. She and her husband Chris, another science and technology policy wonk, live in Alexandria, VA.

Senior Advisor to the Director for Standards Policy – NIST National Institute of Standards and Technology

Dr. Jayne Morrow is a Senior Advisor to the Director of National Institute of Standards and Technology leading a portfolio focused on standards policy for critical and emerging technologies. She is responsible for efforts to build stronger connections between standards and the innovation ecosystem of the United States, broadening participation in international standards development among academia, industry and government agencies and policy development in international standards. She has extensive standards and policy experience across a wide range of critical and emerging technologies and public policy areas, including national security, environmental health, public health and safety, and law enforcement. Her current role builds on the experience garnered in national science and technology (S&T) strategic policy development she garnered as the Executive Director of the National Science and Technology Council in the Executive Office of the President during the Obama Administration.

Previously, she led a research career at NIST focused on metrology for biological science programs and underpinning biological response frameworks with measurement science. The program demonstrated impact across the federal agencies, industry, and academia through standards to enable confident decision-making founded on scientific evidence for response to Anthrax, Ebola, SARS-CoV-2 and applied these same principles to the analytical characterization of the opioid epidemic. Her standards work led to science policy development with the National Biosurveillance and Biological Response and Recovery Science and Technology Roadmaps published during the Obama Administration. Recently, in response to COVID-19 pandemic, Dr. Morrow partnered with motivated volunteers to form a non-profit IBEC, and host the CLEAN2020 Summit series, bringing together leaders from business, policy, standards development, science, and engineering to create a framework for controlling viral transmission in the built environment. These efforts to continue to help translate the research, standards and guidance into practice were welcomed by the White House COVID Task Force and Office of Science and Technology Policy as they work to define a campaign for clean indoor air.

She also served as a Research Professor in Civil Engineering and the Assistant Vice President for Research and Economic Development at Montana State University where she focused on federal relations to grow research programs in emerging technologies. She has a B.Sc. degree in Civil Engineering from Montana State University as well as a M.S. and Ph.D. in Environmental Engineering with a specialty in molecular and microbiology from the University of Connecticut.

Roy A. Swift, Ph.D. COL, Retired – Panel Discussion Moderator

Executive Director – Workcred

Dr. Roy Swift is currently the executive director of Workcred, where he executes the mission and vision of Workcred to achieve a labor market which relies on the relevance, quality, and value of workforce credentials for opportunities, growth, and development. Previously, he served as the chief workforce development officer at ANSI, and as ANSI’s senior director of personnel credentialing accreditation programs.

Prior to ANSI, he was a consultant to educational, certification, licensure, and health care organizations. From 1993-1998, he was executive director of the National Board for Certification in Occupational Therapy. This appointment followed a 28-year career in the U.S. Army Medical Department, where in his last position, he was chief of the Army Medical Specialist Corps in the Army Surgeon General’s Office with policy responsibility for Army occupational therapists, physical therapists, dietitians, and physician assistants throughout the world. He was also involved in working groups related to personnel credentialing with the International Organization for Standardization (ISO), and was a guest lecturer on credentialing at the University of Geneva.
Dr. Swift holds a B.S. in occupational therapy from the University of Kansas, an M.S. Ed. from the University of Southern California, and a Ph.D. in continuing and vocational education with an emphasis in continuing competency in the professions from the University of Wisconsin-Madison. He has also successfully completed the University of Chicago’s management development course.

Muhammad Ali – Panelist

Senior Standards Strategy and Policy Lead – HP, Inc.

Ali is responsible for managing external standards engagement and leading HP’s efforts in U.S.–based standards organizations. He is a Certified Standards Professional with leadership in standards development, conformity assessment, and emerging technologies in the consumer and electrical sectors. He previously served as a program manager for the National Electrical Manufacturers Association (NEMA), working on maintenance of ANSI, NEMA, CANENA, IEC, and ISO standards. He has served as a co-vice chair of ANSI’s Committee on Education, and will assume the role of chair in 2024. He also serves on the INCITS Executive Board. He is an ISO/IEC JTC 1-appointed PAS mentor and previously served on the board of SES—The Society of Standards Professionals. He earned his degree in electrical engineering from George Mason University, and is a recipient of the ANSI Next Generation Award, SES Emerging Professional Award, and INCITS Chair Award.

Dr. Diana Gehlhaus – Panelist

Senior Advisor for the Chief Digital and Artificial Intelligence Office (CDAO) – Department of Defense (DoD)

Gehlhaus is an economist and policy researcher working at the intersection of tech and talent. She has almost 20 years of experience leading, designing, and writing public policy research for think tanks and the federal government. Diana is currently a Senior Advisor for the Chief Digital and Artificial Intelligence Office (CDAO), building a data, analytics, and AI education and workforce strategy for the U.S. Department of Defense. She was previously a Research Fellow at the Center for Security and Emerging Technology (CSET), leading research on domestic talent pipelines in AI and other emerging technologies, as well as an adjunct Policy Researcher at the RAND Corporation. Prior to CSET and RAND, Diana spent time at the Progressive Policy Institute, and in government at the U.S. Export-Import Bank and Bureau of Labor Statistics. Diana has a PhD in policy analysis from the Pardee RAND Graduate School, a Master's degree in applied economics from Johns Hopkins University, and studied mathematics and economics at Bucknell University.

Tanya Pope – Panelist

Assistant Vice President of University Supplier Diversity – Columbia University

Tanya E. Pope serves as Assistant Vice President, University Supplier Diversity at Columbia University within Columbia University’s Facilities and Operations Department. She is responsible for sourcing capable, diverse vendors to support the University’s construction projects and business initiatives. Those projects have paid over $1.2 billion to diverse firms over the past 10 years. Additionally, she oversees compliance reporting and community projects related to Columbia University’s agreements for its Manhattanville Campus expansion with the Upper Manhattan community, City and State of New York.

She and her team launched the CU Grow: Vendor Development Program, now in its seventh cohort, in 2017. The program is designed to assist select MWL (Minority, Women and Local) businesses that are positioned to do business with Columbia University. The
engagement helps to grow their business through a coaching and procurement program with a curriculum designed by the Columbia University School of Professional Studies.

In 2022, Tanya negotiated the agreement for Columbia University Facilities and Operations to become the market access partner of Ascend NYC. Through this impactful partnership, with BOC Network, the Ascend NYC team works to expand opportunities for businesses of color with Columbia University and Columbia University Irving Medical Center, as well as 13 other private corporations, which participate as part of Ascend NYC’s “Private Anchor Exchange.”

Ms. Pope is a multi-faceted professional with a deep understanding of government, construction, and large institutional procurement and has held senior roles in the public sector, publishing, travel, cable television, nonprofit, and academia throughout her career. In each role her focus has been on the implementation of innovative diversity solutions and the development of effective workflow processes which have yielded substantial and measurable results.

Tanya holds a B.S. in Communications Management and an M.S. in Leadership and Strategic Management, both from Manhattanville College. She also earned her Master of Public Administration from Columbia University’s School of International and Public Affairs (SIPA) in 2021.