74th Annual Honor Awards Program

January 2023
Herbert C. Hoover Auditorium
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74TH HONOR AWARDS PROGRAM

HERBERT C. HOOVER BUILDING AUDITORIUM
1401 Constitution Avenue NW
January 24, 2023

INTRODUCTION
Jeremy Pelter
Acting Chief Financial Officer/Assistant Secretary for Administration

PRESENTATION OF COLORS
Armed Forces Color Guard

NATIONAL ANTHEM
Stacy F. Hoffman

WELCOME
Don Graves
Deputy Secretary

ADDRESS
Gina Raimondo
Secretary of Commerce

ANNOUNCEMENT OF AWARDS
Jeremy Pelter
Acting Chief Financial Officer/Assistant Secretary for Administration

PRESENTATION OF GOLD AND SILVER MEDALS
Secretary Raimondo assisted by Department Officials
MESSAGE FROM THE SECRETARY

Welcome to the 74th Annual Department of Commerce Honor Awards.

With these awards, we honor those among us who have gone above and beyond to advance the Commerce Department’s work of supporting economic growth and opportunity for all communities.

This year’s recipients are model public servants whose talent, expertise, and ingenuity are making a difference in the lives of Americans. Their dedication is a model for all of us, and their efforts are helping ensure that America remains the best place in the world to live, work, and do business.

I’m proud of everything we’ve accomplished at the Commerce Department over the last year and look forward to continuing to work with the entire Commerce team to build a more competitive America.

Congratulations to the recipients of this year’s Honor Awards!

Secretary Gina Raimondo
U.S. Secretary of Commerce
GOLD MEDAL

This award, the highest honorary award given by the Department, is granted by the Secretary for distinguished performance characterized by extraordinary, notable, or prestigious contributions that impact the mission of the Department and/or one or more operating units.

SILVER MEDAL

This award, the second highest honorary award given by the Department, is granted by the Secretary for exceptional performance characterized by noteworthy or superlative contributions that have a direct and lasting impact within the Department.

To warrant a Gold or Silver Medal, a contribution must focus on qualitative and quantitative performance measures reflected in the Department’s Strategic Plan and be identified in one of the following areas:

- Leadership
- Personal and Professional Excellence
- Scientific/Engineering Achievement
- Organizational Development
- Customer Service
- Administrative/Technical Support
- Heroism
The team is honored for innovation that significantly improved accurate measurement of housing services throughout U.S. economic accounts. The new methodology creates the best local area estimates of housing services at the state level for regional accounts, which are then aggregated to national totals. Housing services account for 10% of gross domestic product. This is the first time that BEA's housing services methodology and estimates are fully integrated between regional and national statistics, improving accuracy and analytic capacity.

The group is honored for developing and publishing Trade in Value Added statistics for the United States. This dataset provides new insight into the U.S. role in increasingly complicated global supply chains, including trade linkages between the United States and Canada, China, Europe, Mexico, and the rest of the world. The team also developed expanded tables showing how research and development and related science and technology industries contribute to trade and the U.S. economy. These datasets go beyond traditional trade statistics to show the mix of foreign and domestic inputs used to create U.S. industries' exports.
The group is honored for creating new international investment statistics that identify U.S. exposure to foreign currency risks, help recognize potential financial crises, and provide a better understanding of the complex financing of multinational entities. The group developed new statistics on the currency, institutional sector, and maturity of U.S. debt assets and liabilities. They also developed the Nation’s first statistics on special purpose entities of multinationals, which can have substantial international investment flows despite having little or no employment or physical presence.


BUREAU OF INDUSTRY AND SECURITY

GOLD MEDAL
PERSONAL AND PROFESSIONAL EXCELLENCE

Cynthia Velasco
Office of the Assistant Secretary for Export Enforcement
Bureau of Industry and Security

Special Agent Velasco is honored for her work on a 4-year investigation that resulted in the convictions of Ye Sang Wang, a former U.S. Navy sailor assigned to the Naval Special Warfare Command, and her husband, Shaohua Wang. Over a period of several years, the Wangs procured and unlawfully exported sensitive military equipment to China for profit. Special Agent Velasco’s efforts contributed to the removal of a servicemember abusing her military position to procure U.S.-origin equipment and disrupted an illegal supply chain benefiting an adversary.

Steve Huerta
Office of the Assistant Secretary for Export Enforcement
Bureau of Industry and Security

Special Agent Huerta is honored for work on a complex investigation that resulted in the criminal conviction of a business executive as well as the BIS assessment of approximately $1.9 million in civil penalties. VTA Telecom, a U.S. subsidiary of a government-owned telecommunications company in Vietnam, was involved in the procurement of various controlled military and dual-use components in the United States, which were exported or intended to be exported to Vietnam for use in developing cruise missiles and armed Unmanned Aerial Vehicles.
The group is honored for its adroit and arduous effort, given extremely short timelines set by the White House and the rapidly unfolding international events in Ukraine, to author, coordinate, and publicly roll out regulations, press releases, analyses, websites, fact sheets, and training for industry, allies, agencies, and Congress. As a result, 37 countries joined the United States in the synchronized implementation of unprecedented export controls on Russia and Belarus to degrade Russia’s military capability, disrupt its industrial base, and undercut Russia’s strategic ambitions.
The group is honored for their exemplary professionalism in the development of the 100-day report on the risks in the semiconductor manufacturing and advanced packaging supply chains and in its exemplary coordination and execution of a research, analysis, and expository activity managed by BIS and implemented across the agencies in response to supply chain disruptions brought on by the COVID-19 pandemic, cyber attack, and other conditions that have reduced the availability of ICT critical goods and services.
GOLD MEDAL
PERSONAL AND PROFESSIONAL EXCELLENCE

Kimberly Jones
Andrew Foote
Stephen Richard Tibbets
Lawrence Fujio Warren
Patrick Hayward
Jody Alexander Hoon-Starr

U.S. Census Bureau

The group is recognized for its extraordinary focus and concentrated efforts on Post-Secondary Employment Outcomes (PSEO) expansion and commitment to the long-term viability of PSEO and its complementary application, PSEO Explorer. Their efforts resulted in 22 new PSEO partners in 18 states, representing an estimated coverage of greater than 25% of total annual post-secondary graduates. PSEO has strengthened Census’s position as a trusted source for workforce data and information.

GOLD MEDAL
SCIENTIFIC/ENGINEERING ACHIEVEMENT

Victoria A. Velkoff
Ryan R. Cumings
Michael B. Hawes
Philip Daniel Leclerc
Pavel Zhuravlev
Matthew Spence
Cynthia Davis Hollingsworth
James C A Whitehorne
John M. Abowd
Simson L. Garfinkel

U.S. Census Bureau

The group is honored for the practical design, testing, and implementation of a cutting-edge disclosure avoidance system for the legally mandated 2020 Census P.L. 94-171 Redistricting Data Summary File, thereby guaranteeing the quality and availability of Census data for critical societal purposes, including the redrawing of Federal and state legislative voting districts, while providing mathematically provable guarantees of the confidentiality of census respondents’ information.
The group is honored for overcoming many unexpected obstacles, including higher rates of non-interview, characteristic nonresponse, and measurement error – mostly brought about by the pandemic straining the established statistical assumptions. With almost no time to research optimal methods, they had to adapt the planned statistical estimation regime, and implement it with no time to spare. Their statistical innovations addressed these problems successfully, producing coverage estimates for the 2020 Census that are statistically defensible and will help us better prepare for the 2030 Census.
GOLD MEDAL
SCIENTIFIC/ENGINEERING ACHIEVEMENT

Jonathan Louis Rothbaum
Jonathan Spencer Eggleston
Charles Adam Bee
Mark Alexander Klee
Brian C. B. Mendez-Smith
Mark E. Asiala

U.S. Census Bureau

The group is honored for developing a new methodology to address nonresponse bias in the 2020 ACS. Their work resulted in the release of the 2020 Experimental ACS estimates and made possible the release of the 2020 5-year ACS data file and all related data products used for distributing more than $675 billion in state and Federal funds. Using an array of administrative records, the group developed an alternate set of weights using entropy balancing, which built on work that had been done previously by members of the group for the CPS ASEC.

GOLD MEDAL
ORGANIZATIONAL DEVELOPMENT

Veronica M. LeGrande
Lisa M. Frid
Laura Catherine Nixon Kriviski
Thomas J. Chesnut
Rebecca J. Hutchinson
Christopher Nicholas Carrino
Jennifer Cheeseman Newburger
Steven S. Klement
Robert W. Colosi
Mary Olivia Michael

U.S. Census Bureau

The group is honored for efforts to establish a new occupational series to classify work performed by data scientists. The group identified and described the appropriate roles, competencies, and complexities of data scientist work, which is critical in recruiting and training/developing this highly skilled and sought-after talent pool. Establishing a new professional/scientific series has not occurred in decades, so this achievement allows the Federal Government to better attract, recruit, and retain talent that meets the evolving data landscape.
GOLD MEDAL
CUSTOMER SERVICE

Cynthia Davis Hollingsworth
Jane H. Ingold
Letha L. Rubin
Thomas A. Morton
Jennie Karalewich
Michael Clark
Michael R. Moorefield
Tina T. Egan
James C A Whitehorne

U.S. Census Bureau

The group is honored for strategic thinking and vision – overcoming pandemic-related delays and accounting for high-profile stakeholder concerns – to replan and publish quality 2020 Census redistricting data. Despite uncertainty around the timing of critical inputs, the team developed a dual data release plan and held to that plan. The governor’s and state legislature’s expectations were met, and litigation was withdrawn on the schedule for redistricting data.

SILVER MEDAL
LEADERSHIP

Milicent Y. Alexander
Chante R. Sawyers
Trung Khac Nguyen
Deitra A. Phillips
Vincent John Czecha
Aretha G. Wilkerson
J. Kent Patterson
Jennifer Lynn Simpson
Marguerite Molnar

U.S. Census Bureau

The group is honored for digitizing Census’s records. Paper records at Headquarters, Regional Offices, and Regional Census Centers were collected, digitized, paper destroyed, and electronic versions returned to the program areas. More than 2.3 million records were converted from non-electronic to digital format resulting in reduced physical space and cost for maintaining records. Planning for digitizing mixed media records in hard-to-access formats is complete; digitizing them allows continued accessibility as technology advances and old mediums become obsolete.
SILVER MEDAL
PERSONAL AND PROFESSIONAL EXCELLENCE

Kristin D. Koslap
Steven G. Wilson

U.S. Census Bureau

The group is honored for distinguished performance in managing and coordinating the creation and delivery of the 2020 Census state population and congressional apportionment data products to the Secretary of Commerce, the President, and the public. These data were the first published results from the 2020 Census, and they are used to reapportion the seats in the U.S. House of Representatives among the states. The group worked extraordinarily hard to ensure the timeliness and quality of this highly anticipated data delivery, which reflected favorably on the Department of Commerce.

SILVER MEDAL
PERSONAL AND PROFESSIONAL EXCELLENCE

Shadana R. Myers
Sherry E. Thorpe
Monique L. Rhames
Alonzo W. Johnson
Peter P. Davis
Gerard Boudriault
Beverly Anne Harris
Kenneth B. Dawson
Alexander Scott Vallens

U.S. Census Bureau

The group is honored for innovative thinking and actions to complete complex components of the Post-Enumeration Survey (PES). Confronted with overcoming obstacles such as lasting impacts of a global pandemic, limited resources, and limited budget, the group conducted a comprehensive assessment of available resources, schedule, and systems to develop and implement a plan for completing remaining field data collection and matching operations. Completion of PES data collection enabled subsequent work to develop and release critical measures of data quality building confidence in 2020 Census results.
SILVER MEDAL
PERSONAL AND PROFESSIONAL EXCELLENCE

Aileen D. Bennett
Arumugam Sutha
Chuc Phan
Fuad J. Foty
Juan Lopez
Kenneth B. Dawson
Michael H. Coan
Reyan Azeem
Tammy L. Worth

U.S. Census Bureau

The group is honored for exceptional performance in designing, developing, testing, and implementing the 2020 Island Areas Response Processing system while performing regular American Community Survey duties. Staff worked tirelessly under adverse constraints producing high-quality products on schedule. This system transformed data, updated coding systems, and integrated manually coded write-in responses into the system. The team created the Island Areas Decennial Response File, Island Area Censuses Unedited File, Island Area Censuses Edited File, and Island Area Censuses Microdata File.

SILVER MEDAL
PERSONAL AND PROFESSIONAL EXCELLENCE

Leslie Aaron Fleet
Hue Tu Ly
Ebony D. Davis
Indirani Sundaram
Nebabu Aynealem
Thomas P. McCoy
Thuy T. Nguyen
Shardae Robinson
Janette Gresham
James A. Cope

U.S. Census Bureau

The group is honored for adapting software systems to employ statistical methodologies that improve the quality of 2020 Census response data. Delays resulting from the COVID pandemic created a dynamic environment for processing data to meet legislated deadlines. Committed to quality results, the team, working with data analysts, implemented validity checks, consistency checks, and missing data imputation methods to inform real-time assessments and decision making. This work became the foundation for the mandated P.L. 94-171 redistricting release.
The group is honored for launching EHealth, a new research program that brings health claims and electronic health records into the Census linkage infrastructure for the first time. Health records are linked to the ACS to study the relationship between healthcare and the social determinants of health (environmental conditions where people live and work that affect their health outcomes). Prior to EHealth, it was necessary to assume that area-level conditions applied to each individual. EHealth has made it possible for individual health records to be linked to Census microdata.
Haya A. El Nasser

U.S. Census Bureau

Ms. El Nasser is honored for her visionary creativity and tireless dedication and motivation in building and growing the America Counts digital platform to eight million visits in 5 years. It has become a premier source of information actively sought by Census customers for plain language and resonant explanations of the agency’s data and statistics. Ms. El Nasser has independently grown the platform substantially by carrying stories around major releases and identifying and targeting stories to topics and issues that impact everyday life for the public.
Ms. Campbell is honored for undertaking a deliberate and consultative process to expand Tribal eligibility for EDA grants to include a new category of eligible recipients, private entities “wholly owned by, and established exclusively for the benefit of, a Tribe.” Ms. Campbell recognized that increasingly such entities are key to the delivery of services on Tribal lands. A change of this magnitude to EDA’s eligibility requirements has not occurred in more than 50 years and will help to advance more inclusive economic growth and more equitable outcomes for decades to come.
SILVER MEDAL
LEADERSHIP

Cindy Edwards
Lee Mertins
Dennis Foldenauer
Marguerite McGinley
Christine Frost
Christopher Christian
Matthew Giannini
Maiea Sellers
Kerstin Millius
Jessica Falk

Office of Regional Affairs
Economic Development Administration

The Area Directors are honored for supportive leadership that enabled EDA’s Regional Offices to effectively process and award a four-fold increase in grants from previous years. Each team managed an unprecedented workload in a remote environment, hiring and training new managers and staff. They developed new tools and processes that increased program effectiveness and staff engagement, resulting in 1,021 grants in Fiscal Year 2021, totaling nearly $1.2 billion, as well as investments in 2022 to drive equitable, place-based economic development.
Jennifer Aguinaga
Dave Huether
Isabel Hill
Curt Cottle
John Terpening
Christina Gay

Industry and Analysis
International Trade Administration

Zack Schwartz

U.S. Census Bureau

For leading Commerce’s advocacy for changes to pandemic travel restrictions. The team developed the Secretary’s decisive argument in IPC discussions, leading to an exception for international students and removal of geographic restrictions in favor of a policy consistent with health/economic security objectives. As a result, the number of international students in 2021 reached pre-pandemic levels, international visitors increased by 119% in the 2 months following the policy change, and travel spending doubled to $5.2 billion in December 2021.

Southwest Network
Middle East & Africa Region
CS United Arab Emirates

Global Markets
International Trade Administration

The team is honored for delivering Trade Winds Middle East & Africa, created for U.S. clients to establish and grow their sales in the region. In the face of COVID and severe staffing shortages, the Southwest Network and the Middle East & Africa Region shaped a program across eight markets to connect 110 U.S. businesses with key contacts through strategic meetings and educational briefings. The program attracted 47 GDEI companies, provided a platform for the Women Empowered Leave Legacies through Trade and Investment initiative, and generated nearly 1,000 business meetings for U.S. companies.
GOLD MEDAL
PERSONAL AND PROFESSIONAL EXCELLENCE

Enforcement and Compliance

International Trade Administration

Chief Counsel for Trade Enforcement and Compliance

Office of the General Counsel

The team is recognized for meritorious performance in conducting the AD and CVD investigations of various aluminum sheet products from 18 countries. Covered imports from the 18 countries were close to $2 billion. These investigations presented novel and challenging issues, with some being conducted on a truncated schedule, and under intense scrutiny from Congress, the U.S. aluminum industry, and senior USG leaders. The team’s thorough analyses and collaborative efforts helped offset many unfair trade practices and ensured a level playing field for U.S. aluminum workers and manufacturers.

GOLD MEDAL
PERSONAL AND PROFESSIONAL EXCELLENCE

Global Markets
Industry and Analysis

International Trade Administration

For the successful execution of an advocacy campaign to secure the contract for a subsea cable from Singapore to Europe on behalf of a U.S. exporter. The campaign involved advocacy in 15 countries by officers and specialists from around the globe and at headquarters as well as interagency coordination with ExIm, TDA, and the State Department. This win against competition from China ensured that a vital piece of global telecommunications infrastructure would be built by a U.S. company in support of American jobs and national security interests.
The group is honored for work in support of reaching the U.S.–EU agreement on trade in steel and aluminum. The group provided critical analysis of steel and aluminum production, trade flows, and use of exclusions granted to the EU; used said analysis to recommend policy options to leadership; and worked with partner agencies to ensure that U.S. commitments were realistic. The team worked doggedly over 4 months and helped USG negotiators reach a deal on October 31 – just hours before the November 1 deadline and the onset of additional retaliatory tariffs from the EU.
The team is recognized for its multi-year effort to overhaul and improve aspects of trade enforcement regulations, culminating in new rules entering into effect in the Fall of 2021. This massive project started in 2015 and involved hundreds of hours of work, intense collaboration across offices, and dozens of Commerce employees. These modifications to the Department’s antidumping duty (AD) and countervailing duty (CVD) regulations have greatly improved enforcement activities designed to defend U.S. companies from unfair and illegal trade practices, providing the relief necessary to thrive.

In the face of Russia’s February 24, 2022, invasion of Ukraine (following the months-long buildup of Russian forces on Ukraine’s borders), the team evidenced incredible bravery, working to support U.S. commercial interests in Ukraine and the wider region up to and during the Russian attack. Despite the imminent personal threat to these employees and their families, they worked tirelessly to further the important missions of the U.S. Department of Commerce.
INTERNATIONAL TRADE ADMINISTRATION

SILVER MEDAL
LEADERSHIP

Christina Sharkey
Global Markets
International Trade Administration

Ms. Sharkey is honored for maintaining momentum on key U.S. government priorities through a historically turbulent change in the Czech Government and for successfully advocating for foundational changes in Czech law and regulations, resulting in a broader opening of the Czech market for U.S. exporters in the healthcare and energy sectors. Ms. Sharkey’s “strategic vision encompasses the entire Mission, ensuring Embassy Prague is well positioned to create U.S. jobs, battle for positive influence, and counteract malign Russian and Chinese incursions.” – Chargé Jennifer Bachus.

SILVER MEDAL
PERSONAL AND PROFESSIONAL EXCELLENCE

Mark Brown
Richard Champley
Claudia Wolfe
John Terpening
Christina Gay
Industry and Analysis
International Trade Administration

The group is honored for developing new travel and tourism data visualization tools that enable policy makers, industry officials, and the media to better understand the state of international travel to the United States. The COVID-19 pandemic had an unprecedented impact on tourism to and in the United States. These tools provided critical information to the Department of Commerce’s efforts to aid the recovery of the industry and support travel-related jobs.
SILVER MEDAL
PERSONAL AND PROFESSIONAL EXCELLENCE

Julia Hancock
Alis Asadurian
Bhargav Desai
Kamila Khamidova
Hugh Smachlo
Jacob Couture
Jayden Graham-White
Gabriel Esteves
Elisabeth Urfer

Enforcement and Compliance
International Trade Administration

Jessica Link

Chief Counsel for Trade Enforcement and Compliance
Office of the General Counsel

The AIM team is recognized for their exceptional work in creating new regulations, developing a new Commerce aluminum import licensing and monitoring system, and providing the U.S. aluminum industry with a potent tool to help identify potential transshipment and circumvention of Commerce’s AD/CVD orders that protect U.S. businesses and workers from unfairly traded foreign products. The team not only demonstrated outstanding dedication, professionalism, and teamwork, but also leveraged expertise from different parts of Commerce to ensure success of the new program.
GOLD MEDAL
LEADERSHIP

Barbara Goldstein
Physical Measurement Laboratory
National Institute of Standards and Technology

Ms. Goldstein is recognized for her dynamic leadership of NIST-on-a-Chip (NOAC), a program that unites experts across NIST to transform the delivery of metrology through a suite of quantum-based, fit-for-function, point-of-use standards. By cultivating strategic partnerships with the Department of Defense, other agencies, and industry, Ms. Goldstein has motivated the U.S. investment of nearly $100M in quantum-sensing technologies and has made NOAC a cornerstone of DoD’s strategy for meeting the metrology needs of future military systems.

GOLD MEDAL
LEADERSHIP

Michaela Iorga
David Waltermire
Wendell Piez
Dmitry Cousin
Alexander Stein
Stephen Banghart
Nikita Wootten
Information Technology Laboratory
National Institute of Standards and Technology

The group is recognized for enabling faster, more accurate, and more secure system deployments and updates with reduced operational costs through the automated assessment of security control implementation and effectiveness. The group developed and increased adoption of the Open Security Controls Assessment Language to facilitate a transition from manual to machine-driven, automated security assessments. The rapid international adoption demonstrates OSCAL’s groundbreaking transformation of systems security assessment processes.
GOLD MEDAL
LEADERSHIP

Sumona Sarkar
Sheng Lin-Gibson
Laura Pierce
Steven Lund
David Newton

Material Measurement Laboratory
National Institute of Standards and Technology

The group is recognized for exceptional leadership in developing a suite of international standards as well as implementing open-source software tools for the characterization of cell therapy products. This effort serves to anchor the development and manufacturing of game-changing living drugs by providing accessible analytical methods to help ensure product safety and efficacy, thereby supporting a growing therapeutics industry that has revolutionized treatment of previously incurable diseases as well as other existing and emerging biotechnology applications.

GOLD MEDAL
SCIENTIFIC/ENGINEERING ACHIEVEMENT

Marc Levitan
Long Phan

Engineering Laboratory
National Institute of Standards and Technology

The group is recognized for technical innovations in conceiving and developing probabilistic tornado-hazard maps and tornado-load methodology for the United States. These first-of-a-kind maps scientifically account for the increased risk of tornado strike with increased facility size. The group also is recognized for efforts to incorporate these maps and load provisions in the American Society of Civil Engineers’ 2022 national standard for Minimum Design Loads for Buildings and Other Structures, thus enabling tornado-resistant design of buildings in the United States for the first time.
GOLD MEDAL
SCIENTIFIC/ENGINEERING ACHIEVEMENT

Kristen Greene
Shanee Dawkins
Jody Jacobs
Mary Theofanos
Jennifer Kostick

Information Technology Laboratory
National Institute of Standards and Technology

The team is recognized for engineering a first-of-its-kind measurement scale that has been adopted worldwide to strengthen organizations’ cybersecurity postures by improving phishing detection training. Socially engineered phishing attacks are on the rise and have become increasingly sophisticated. The culmination of years of research on real-world phishing data, the Phish Scale facilitates a multi-pronged defense incorporating technology, process, and people, enabling categorization of the human detection difficulty of email phishing attempts.

GOLD MEDAL
SCIENTIFIC/ENGINEERING ACHIEVEMENT

Christopher Holloway
Joshua Gordon
Matthew Simons
Alexandra Artusio-Glimpse
Nikunjkumar Prajapati

Communications Technology Laboratory
National Institute of Standards and Technology

The team is recognized for their pioneering research in Rydberg atom technology and applications, leveraging fundamental laws of quantum mechanics to measure electromagnetic signals on an absolute scale. Electromagnetic signals carry the information in our computers, our cell phones, and across the internet. The team demonstrated several firsts with their innovative technology – first directly SI-traceable electric field sensor; first atom-based receiver for communication signals; and first quantum atom-based antenna.
Communications Technology Laboratory
National Institute of Standards and Technology

The group is recognized for leading the development and deployment of a one-of-a-kind advanced communications Lab Network, which enables NIST to conduct public safety research, FirstNet to deploy public safety broadband, and industry to manufacture new products. Created to accelerate next-generation public safety communications’ technology development and adoption, the state-of-the-art network provides research, open data, and technology demonstrations that benefit a diverse stakeholder group. These outputs support innovation in commercial products, research, testing, and standards development.

Physical Measurement Laboratory
National Institute of Standards and Technology

The team pioneered measurement and control techniques and validated the quantum mechanical entanglement of two macroscopic mechanical resonators, with masses on the order of tens of picograms (10^12 atoms). This work experimentally tested the physical size limits at which quantum mechanics ends and classical physics begins. In addition to the impact on basic physics, the techniques demonstrated in this experiment may find application in continuous-variable quantum computing schemes, where fast entangling operations are as critical as logic gates.
GOLD MEDAL

SCIENTIFIC/ENGINEERING ACHIEVEMENT

Jun Ye

Physical Measurement Laboratory
National Institute of Standards and Technology

Dr. Ye is recognized for exceptional advances in metrology that enabled measurement of the difference between the frequency of two optical atomic clocks at the 10^{-21} level. In this new regime for clock operation, Dr. Ye resolved the gravitational redshift below the scale of a millimeter, an improvement of more than two orders of magnitude over the previous state of the art. His work represents a new standard of clock precision for probing the fundamental properties of space and time and demonstrates the practical importance of clock technology for quantum sensing and broader societal benefits.

SILVER MEDAL

SCIENTIFIC/ENGINEERING ACHIEVEMENT

Paul Butler

NIST Center for Neutron Research
National Institute of Standards and Technology

Dr. Butler is recognized for his global leadership in developing the world’s leading software for analyzing small-angle-scattering data, which is now used by thousands of researchers worldwide. Neutron and x-ray small-angle scattering are measurement techniques essential to conducting cutting-edge research and characterizing the molecular structures of important materials such as proteins, batteries, and vaccines. Dr. Butler’s efforts led to the first sustainable, community-based scientific software for these techniques, and his development approach is widely recognized by the community.
SILVER MEDAL
SCIENTIFIC/ENGINEERING ACHIEVEMENT

Jonathan Weigand
Sorin Marcu
Fahim Sadek
Adam Pintar
Long Phan

Engineering Laboratory
National Institute of Standards and Technology

The group is recognized for developing and executing an innovative research program to experimentally measure and analyze the effects of alkali-silica reaction (ASR) on the material and structural integrity of reinforced concrete infrastructure, with application to nuclear power plants. The group’s achievement provided novel scientific performance data and insights that are being used by the Nuclear Regulatory Commission to develop regulatory guidance for recertification of nuclear power plants containing concrete structures affected by ASR.

SILVER MEDAL
SCIENTIFIC/ENGINEERING ACHIEVEMENT

Timothy Quinn
Enrico Lucon

Material Measurement Laboratory
National Institute of Standards and Technology

The group is cited for leading a standard that involved developing a mechanical measurement system and analysis of cardiac leads that improves the quality of life for millions of Americans. The group had to organize a human use conditions study with more than 100 patients and sanitize the data for verification of the standard. This work keeps patients from unnecessary surgeries and saves the healthcare system more than $100M per year.
Justin Zook  
Justin Wagner  
Jennifer McDaniel  
Nathanael Olson  
Lindsay Harris

Material Measurement Laboratory  
National Institute of Standards  
and Technology

The group is recognized for leading two international teams that contributed to mapping the first ever complete human reference genome, uncovering new variants in greater than 100 genes and enabling new insights into how variants in DNA can impact disease risk. The group discovered novel approaches to fix errors in the previous reference genome and developed highly accurate benchmarks for clinically relevant genes. This improves human genome sequencing; provides significant improvements in sequencing challenging genes; and enables discoveries in previously inaccessible genes to support precision medicine.

Michael Bartock  
Jonathan Hardis  
Ya-Shian Li-Baboud  
James McCarthy  
Suzanne Lightman  
Karen Reczek  
Jeffrey Sherman  
Roger Brown  
Michael Lombardi  
Judah Levine

Information Technology Laboratory  
National Institute of Standards  
and Technology

The group is recognized for its exceptional leadership and outstanding technical innovation to strengthen the resilience of the Nation’s Positioning, Navigation, and Timing (PNT) infrastructure and services. Through intense collaboration with users, service providers, and manufacturers, the group developed PNT cybersecurity guidance to help organizations make risk-informed cybersecurity decisions on their use of PNT services. The team also developed a service to deliver precision timing signals over optical fiber – an innovative new capability in the United States.
SILVER MEDAL
SCIENTIFIC/ENGINEERING
ACHIEVEMENT

Nicholas Maliszewskyj
Kevin Pritchard
Jeffrey Ziegler
Charles Majkrzak
Jean-Philippe Chabot
Louis Edward Binkley

NIST Center for Neutron Research
National Institute of Standards and Technology

The team is recognized for developing a neutron detector less than 2 mm thick that is more than 90% efficient yet has an exceptionally low background. This level of performance in such a thin detector is unprecedented. The design incorporates a scintillator material that emits light when exposed to neutrons with embedded optical fibers that transport the light to environmentally robust photodiodes. This innovative detector technology has enabled new neutron scattering instrumentation with unmatched counting efficiency and enhanced data acquisition rates.
GOLD MEDAL

LEADERSHIP

Eric Bayler
National Environmental Satellite, Data, and Information Service
National Oceanic and Atmospheric Administration

Carolyn Lindley
Pat Burke
Ed Myer
Derrick Snowden
Alexander Kurapov
Becky Baltes
Jiangtao Xu
Peter Stone

National Ocean Service
National Oceanic and Atmospheric Administration

The group is recognized for conceptualizing and formulating the first data-assimilating, large-scale operational coastal ocean forecasting system for the Nation through a cost-effective partnership with academia. Through leadership, great vision, innovation, and creativity, they implemented a cost-effective system whose scale, scope, and complexity could not have been accomplished solely within the government. Directly supporting the NOAA mission, this operational coastal ocean forecasting system also benefits public and private stakeholders.

GOLD MEDAL

PERSONAL AND PROFESSIONAL EXCELLENCE

NOAA Aircraft Operations Center
Office of Marine and Aviation Operations
National Oceanic and Atmospheric Administration

The organization is honored for exceptional operational performance during the coronavirus pandemic and the 2021 hurricane season. Beginning in June 2021 and continuing through October 1, the AOC flew more than 500 hours on four unique platforms, dropped over 1,300 weather instruments and collected more than 50,000 emergency response images. Leveraging a mature risk management process and on-site medical support staff, all missions were conducted while operating under strict COVID protocols to ensure workforce safety while simultaneously making NOAA data collection a priority.
GOLD MEDAL
SCIENTIFIC/ENGINEERING ACHIEVEMENT

Lee Cajina
Trey Flowers
Mark Glaudemans
Christy Westcott
Ronla Henry
Travis Quarterman
Alison MacNeil
David Welch
Laurie Hogan

National Weather Service
National Oceanic and Atmospheric Administration

The group is being honored for leading the successful multiyear effort that provides the first-ever national solution to ensure continuity of operations when a River Forecast Center (RFC) is unable to conduct its mission operations on premise. Through a formal planning, engineering design, deployment, evaluation, and service delivery process, the Advanced Weather Interactive Processing System (AWIPS) provides a robust, supported service backup capability for RFC forecast operations.

GOLD MEDAL
SCIENTIFIC/ENGINEERING ACHIEVEMENT

Gregory Foltz
Chidong Zhang
Chris Meinig
Gustavo Goni
Edward Cokelet
Eugene Burger
Noah Lawrence-Slavas
Francis Bringas
Ben Carlson

Office of Oceanic and Atmospheric Research
National Oceanic and Atmospheric Administration

Darrin Moore
Office of Acquisitions and Grants
National Oceanic and Atmospheric Administration

The NOAA Hurricane Saildrone Team is honored for its successful experimental application of uncrewed surface vehicles (saildrones) to observe conditions in Atlantic tropical cyclones. The team’s innovative effort led to the first joint operation of remotely-operated saildrones and underwater gliders to collect collocated air-sea observations in tropical cyclones. The real-time data was used for analysis and in support of hurricane forecasts. This major innovation in hurricane observing will advance understanding and prediction of hurricanes to save lives and protect property.
GOLD MEDAL

SCIENTIFIC/ENGINEERING ACHIEVEMENT

Richard Stumpf
Michelle Tomlinson
Timothy Wynne
Christopher Holland
Rance Hardison

National Ocean Service
National Oceanic and Atmospheric Administration

The team is honored for using innovative technology, citizen scientists, and artificial intelligence to develop and disseminate value-added products as part of the Next Generation Gulf of Mexico Harmful Algal Bloom (HAB) Forecast system. This avant-garde forecast provides near real-time predictions of red tide conditions at specific Gulf beaches throughout the day. The state-of-the-art forecasting capabilities reduce the potential health and economic impacts of HABs by providing actionable information to resource managers, public health officials, and beachgoers.

GOLD MEDAL

CUSTOMER SERVICE

Weather Forecast Office Miami, FL

National Weather Service
National Oceanic and Atmospheric Administration

The organization is honored for extraordinary commitment in overcoming dangerous and highly sensitive conditions in providing decision support services following the Champlain Towers building collapse. WFO Miami supported the largest non-hurricane emergency response in Florida history by providing 6 consecutive weeks of continuous weather support, including five staff deployments to the incident site, and nearly 6 months of daily briefings and urgent notifications. This resulted in timely actions by emergency personnel to protect lives and maximize efficiency of rescue/recovery efforts.
GOLD MEDAL
CUSTOMER SERVICE

Weather Forecast Office Paducah, KY
Weather Forecast Office Louisville, KY
Weather Forecast Office St. Louis, MO

National Weather Service
National Oceanic and Atmospheric Administration

The staff in these offices are honored for exceptional preparation, messaging, decision support, warnings, and post-event support during the unseasonal tornado outbreak that occurred December 10-11, 2021. Pre-storm messaging and collaboration with emergency managers emphasized the dangers of tornadoes after dark, and out-of-season severity of the event. These efforts saved lives. Post-event media attention was international for the following week including a major network special report. From preparation to media management, these professionals reflect the best of NOAA and the National Weather Service.

SILVER MEDAL
LEADERSHIP

Kate Abbott
Derek Hanson
Glenn Tallia

Office of General Counsel
National Oceanic and Atmospheric Administration

Alan Robinson
Tahara Dawkins

National Environmental Satellite, Data, and Information Service
National Oceanic and Atmospheric Administration

The group is honored for developing and implementing a novel approach to regulating private remote sensing space systems. The Department of Commerce, through NOAA, licenses the operation of private remote sensing space systems under the Land Remote Sensing Policy Act. The group developed, negotiated, issued, and implemented new regulations responding to significant changes in the global space-based remote sensing industry and modernizing NOAA’s regulatory approach. These new regulations have greatly reduced regulatory burdens and ensure continued U.S. private sector innovation and global leadership.
SILVER MEDAL
PERSONAL AND PROFESSIONAL EXCELLENCE

David Demer
Kevin Stierhoff
Steve Sessions
Brittany Schwartzkopf
Lanora Vasquez Del Mercado
Kelsey James
Scott Mau
David Murfin
Emily Gardner
Edward Gorecki

National Marine Fisheries Service
National Oceanic and Atmospheric Administration

The group is honored for conceptualizing, coordinating, and conducting the first survey of sardine, anchovy, Pacific mackerel, jack mackerel, and herring stocks that span the waters of the Exclusive Economic Zones of Canada, the United States, and Mexico, by combining international diplomacy, industry collaboration, and collective sampling from NOAA FSV Reuben Lasker, Mexican RV Jorge Carranza, two industry vessels, and three saildrones. This was the first fisheries’ survey conducted off the Pacific coast of Mexico in 50 years and was accomplished during the pandemic.

SILVER MEDAL
SCIENTIFIC/ENGINEERING ACHIEVEMENT

Jeff McQueen
Geoff Manikin
Logan Dawson
Fanglin Yang
Ivanka Stajner
Youngsun Jung
Steven Earle

National Weather Service
National Oceanic and Atmospheric Administration

Rick Saylor
James Wilczak

Office of Oceanic and Atmospheric Research
National Oceanic and Atmospheric Administration

Shobha Kondragunta

National Environmental Satellite, Data, and Information Service
National Oceanic and Atmospheric Administration

The group is honored for rapidly developing and implementing critical upgrades to the Air Quality Model. This model provides operational ozone and particulate matter guidance used by state and local air quality forecasters and the public to limit exposure to and harmful impacts from air pollution, particularly in those areas that are impacted by wildfires and smoke. For the first time, NOAA’s air quality forecast guidance now extends from 48 hours out to 72 hours into the future, allowing air quality agencies to provide official forecasts with longer lead time and improved accuracy.
GOES-R Program Office
Office of Satellite and Product Operations
National Environmental Satellite, Data, and Information Service
National Oceanic and Atmospheric Administration

These organizations are honored for their extreme dedication to the mission in developing tools and techniques for accomplishing their mission to launch the GOES-T satellite on schedule. The organizations had to work together while maintaining pandemic protocols to test the satellite that included new tools for remote observation by testers. Crews were trained under difficult conditions through end-to-end testing while maintaining social distance. The GOES-T satellite will replace the GOES-17 satellite as the operational GOES-West satellite because of GOES-17’s ABI faulty loop heat pipes.

Angel M. Corona
Steven L. Lyell
Randy L. Davis
Michael R. Couch
Larry B. Hubble
Thomas E. Martin
Eric B. Ellis
Eddy J. Allen
John S. Allen
Jeffrey A. Paul

National Weather Service
National Oceanic and Atmospheric Administration

The group is honored for the successful deployment of 12 AROS, automating the traditional manual weather balloon launching systems and lifting gas generation at all AR WSOs. The group accomplished this through extensive cross-organizational coordination with the NWSH, NOAA RPMD, the FAA, the State of Alaska, and a multitude of safety, engineering, and construction contractors. The group also played a critical role in the planning and execution of the installations.
The group is honored for their multiyear, intensive efforts in leading, creating, and communicating the state-of-the-science in separate high-profile reports of the IPCC’s Sixth Assessment Cycle. These reports, together, provide the most definitive assessment on climate change, its implications, potential future risks, and options for adaptation and mitigation. This accomplishment sets a new benchmark for climate science worldwide by providing crucial information to scientists, decision-makers, and the public.
Mr. Larkin is honored for his efforts to draft and gain support for the Prague Proposals on Telecommunications on Supplier Diversity, the first set of internationally agreed principles on 5G supplier diversity. These efforts led to a wide range of international support for the principles at their launch at the 2022 Prague 5G Security Conference. Mr. Larkin has worked to gain additional support from the principals from governments and industry, including through outreach to all diplomatic posts. The principles will lead to government investment and cooperation on new technologies, creating additional alternatives to untrusted suppliers.
OFFICE OF THE SECRETARY

GOLD MEDAL
PERSONAL AND PROFESSIONAL EXCELLENCE

Jeremy Licht

Office of the General Counsel
Office of the Secretary

Mr. Licht is honored for significant contributions to the implementation of some of the Department’s most important Federal financial assistance programs, including NTIA IIJA Broadband, MBDA, and EDA American Rescue Plan. Mr. Licht combined expertise in administrative, constitutional, and Federal assistance law, along with a strategic, holistic, and forwarding-thinking approach to policy implementation, resulting in, among other things, a series of successful notices-of-funding-opportunity to ensure billions of dollars in vital assistance achieves its intended objectives.

GOLD MEDAL
PERSONAL AND PROFESSIONAL EXCELLENCE

Parvin Huda
Adam Berry
Gregory Michelsen
Andrea Duvall
Aiysha Hussain
Charles Wall
Candida Harty

Office of the General Counsel
Office of the Secretary

The attorneys are being honored for exceptional legal analysis and review in support of the implementation of impactful export controls in response to Russia’s invasion of Ukraine. These comprehensive controls restricted access to key items and weakened Russia’s military capabilities. The attorneys’ intensive efforts helped to ensure that, by leveraging the available legal authorities, the controls effectively addressed this unprecedented national security threat. The restrictions adopted in “real time” continue to shape the U.S. response to Russia’s destabilizing conduct.
The group is honored for successfully negotiating the Trans-Atlantic Data Privacy Framework. When announcing the TDPF on March 25, President Biden stated that it would provide “unprecedented protections for data privacy and security for our citizens.” After the Court of Justice of the European Union struck down the European Commission adequacy decision that formed the basis of the EU-U.S. Privacy Shield in July 2020, the team engaged in intense negotiations on privacy enhancing changes to U.S. surveillance law and practice, culminating in the TDPF.

Ms. Nickerson is honored for leading negotiations at the Organisation for Economic Co-operation and Development (OECD) of an Antibribery Recommendation and assisting the U.S. delegation in drafting its positions, resulting in groundbreaking legal recommendations and guidance for the 44 states that are parties to the OECD Antibribery Convention. Ms. Nickerson exhibited extraordinary professionalism and leadership in the multiyear virtual negotiations. Her work, which has drawn kudos from the private sector, will help level the playing field for U.S. companies competing for international business.
OFFICE OF THE SECRETARY

SILVER MEDAL
LEADERSHIP

Daniel Bare
Mark B. Daley

Office of the Chief Financial Officer and
Assistant Secretary for Administration
Office of the Secretary

The team is honored for designing and implementing, upon request from Commerce leadership in April 2021, a consolidated enterprise-wide grant progress tracking and analysis function for CARES, ARPA, and CAA grants. The baselining and tracking of these large-scale grant programs leveraged project management best practices to ensure program success by reducing the likelihood of missed legislation dates; quickly identifying program execution issues; and mitigating any potential reputational risk issues from improper execution.
The Patent Data & Document Management (PDDM) Acquisition Team is honored for negotiating and awarding PDDM contracts. These contracts remove the single point of failure for mission-critical work, expand cybersecurity requirements for protecting the Nation’s Intellectual Property (IP) data, provide significant cost savings by introducing competition into a sole source environment, and strengthen the USPTO’s negotiating position by expanding the vendor pool available to perform the work. The PDDM contracts will save the USPTO more than $120M during the 10-year period of performance, reduce risks, and improve protection of IP data.
UNITED STATES PATENT AND TRADEMARK OFFICE

GOLD MEDAL
ORGANIZATIONAL DEVELOPMENT

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Thomas Sweet
Y. Jessica Han

Office of the Commissioner for Patents
U.S. Patent and Trademark Office

For the planning, development, and launch of a system by which a cadre of 150 technically skilled experts and intellectual property professionals chart the future course of more than 8,200 U.S. patent examiners in the Cooperative Patent Classification system. This work includes the building of innovative processes, procedures, and IT tools that place the USPTO in a position to sustain efficient and high-quality patent searching, facilitate international work sharing, and provide an adaptive and effective worldwide classification scheme.

SILVER MEDAL
CUSTOMER SERVICE

Robert W. Larkin
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Office of the Chief Information Officer
U.S. Patent and Trademark Office

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Elizabeth A. Quast
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Robert M. Timblin

Office of the Commissioner for Patents
U.S. Patent and Trademark Office

For distinguished performance in leading the design and development of PE2E-Search, a new search system that provides examiners and the public with advanced search and web-based browsing features to improve the retrieval and review of prior art. PE2E-Search allows examiners to search more than 100 million foreign and domestic fully-indexed reference patent documents, enhances stakeholder communication, and supports higher quality patentability determinations to improve the protection of intellectual property rights for internal and external stakeholders.
Through groundbreaking experiments, seminal publications, and patents, the team laid the groundwork for the use of Rydberg atom technologies as exquisitely sensitive and accurate electromagnetic field sensors. The team demonstrated Rydberg sensors as world-best electromagnetic field measurements with 100x lower uncertainty than conventional sensors, traceable to the SI, in a compact form. They went on to show that their sensors could detect phase, essential for decoding communication signals, and could replace antennas and front-end electronics in conventional receiver systems. This revolutionary innovation enables the use of a new type of receiver for sensitive applications where conventional electronic receivers and antennas would cause debilitating interference and field distortion, representing a completely new way to perform absolute measurements of electromagnetic fields.

The team’s achievement is the culmination of more than a decade of research, including:

- Conceived (2010) and demonstrated (2014) first SI traceable, self-calibrating Rydberg sensor with sub-wavelength spatial resolution, not constrained by the size limitations and invasiveness of traditional antennas.
- Demonstrated accurate field measurements at frequencies above 200 GHz (2016).
- Miniaturized key components to promote commercial applications for Rydberg antennas and sensors (2017).
- Landmark demonstration of Rydberg-based measurement of phase modulation on communications signals (2020).

As early as 2014, the team demonstrated the potential for these Rydberg atom-based sensors. It required dedication and several critical breakthroughs to demonstrate practical applications of these sensors for detecting and transmitting communication signals and other electromagnetic signals.

The team has made the U.S. a world leader in Rydberg-atom electromagnetic field sensing. They pioneered new sensors to fully characterize RF electromagnetic signals. More than 65 organizations from industry, academia, and government agencies worldwide have launched Rydberg programs because of the team’s work, representing more than $100M in research investments.
ACKNOWLEDGEMENTS

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Department’s Incentive Awards Program Manager

David A. Logan

Incentive Awards Program Officers of the Department

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Honor Awards Ceremony Volunteers