

Director's Update

**Visiting Committee on Advanced Technology
October 16-17, 2012**

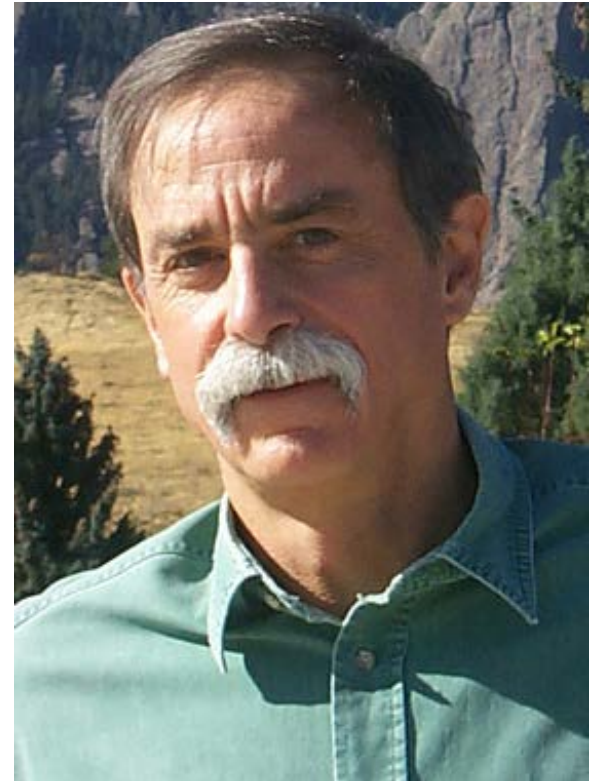
Dr. Patrick Gallagher

**Under Secretary of Commerce for Standards and Technology and
NIST Director**

Congratulations Dr. Wineland! – NIST's 4th Nobel Laureate

On October 9th, 2012, National Institute of Standards and Technology (NIST) physicist David Wineland received a **Nobel Prize in Physics**

- Co-awarded with Serge Haroche, College de France, Paris, France
- "for ground-breaking experimental methods that enable measuring and manipulation of individual quantum systems"
- Award ceremony to be held on December 10th, 2012



Awards

On September 13, 2012, National Institute of Standards and Technology (NIST) physicist Jacob Taylor received a **Samuel J. Heyman Service to America Medal**

- Advanced scientific research, with potential for advances in health care, communications, computing, and technology.
- Presented by Acting Commerce Secretary Rebecca Blank
- Taylor was one of just nine winners chosen from nearly 400 nominees for awards honoring excellence in public service.



Budget Update

FY 2013 Request

- House Mark: \$826M
- Senate Mark: \$830M
- Request includes \$1B mandatory funding for the National Network for Manufacturing Innovation and \$300M for Wireless Innovation Fund

FY 2014 Request

- NIST Request to DOC submitted on June 7

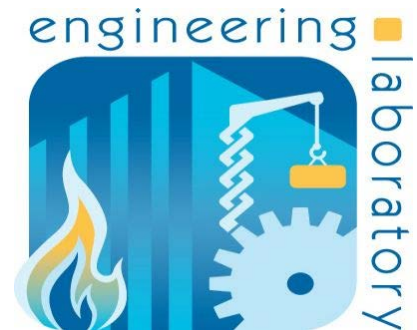
FY 2015 Request

- Planning has started.

Program Updates -- Smart Grid

NIST sponsored Smart Grid Interoperability Panel (SGIP)

- Starting January 1st, will become fully private entity referred to as “SGIP 2.0”
- Tax-exempt, not-for-profit membership organization
- NIST will provide limited funding through cooperative agreement
- NIST will maintain seat on technical committee
- NIST personnel will lead the SGIP Cyber Security Working Group



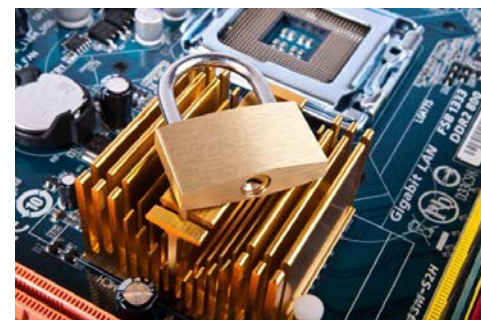
SHA-3 Cryptographic Hash Algorithm Competition

SHA-3 competition originally announced on November 2nd, 2007 in response to advances in the cryptanalysis of hash algorithms

- Received 64 submission from cryptographers from around the world by October, 2008
- Through internal review and public feedback, 5 finalists announced on December 9th, 2010

NIST/ITL Announces KECCAK as winner on October 2nd

- Will augment algorithms currently specified in FIPS 180-4, Secure Hash Standard



National Cybersecurity Center of Excellence

- **National Cybersecurity Center of Excellence (NCCoE)**
 - Center will undertake carefully developed use cases and associated technology implementations for the proposed solutions to resolve cybersecurity challenges through teams of public and private sector experts
 - \$10M received in FY2012 to establish a private-public partnership to operate the center
 - \$10M for FY2013/2014 planned
 - Currently exploring a Federally Funded Research and Development Center (FFRDC) as possible governance structure



Program Updates -- National Strategy for Trusted Identities in Cyberspace (NSTIC)

- National Strategy for Trusted Identities in Cyberspace (April 2011)
- National Program Office (interagency)
- Identity Ecosystem Steering Group (private sector)

September 20th, over \$9M in pilot awards to 5 organizations

- The American Association of Motor Vehicle Administrators (AAMVA) (Va.): \$1,621,803
- Criterion Systems (Va.): \$1,977,732
- Daon, Inc. (Va.): \$1,821,520
- Resilient Network Systems, Inc. (Calif.): \$1,999,371
- University Corporation for Advanced Internet Development (UCAID) (Mich.): \$1,840,263

New Issues -- Center for Advanced Communications Technology (CACT)

- NIST is in planning stages with DOC to create a center for Advanced Communications
- The Center will provide unique infrastructure available to Government and industry partners for the testing research, and standards capabilities needed to address spectrum sharing and other advanced communication technology challenges
- A potential role of the Center being discussed is the coordination of a National test-bed infrastructure, that would align multiple federal test-range capabilities to meet national need

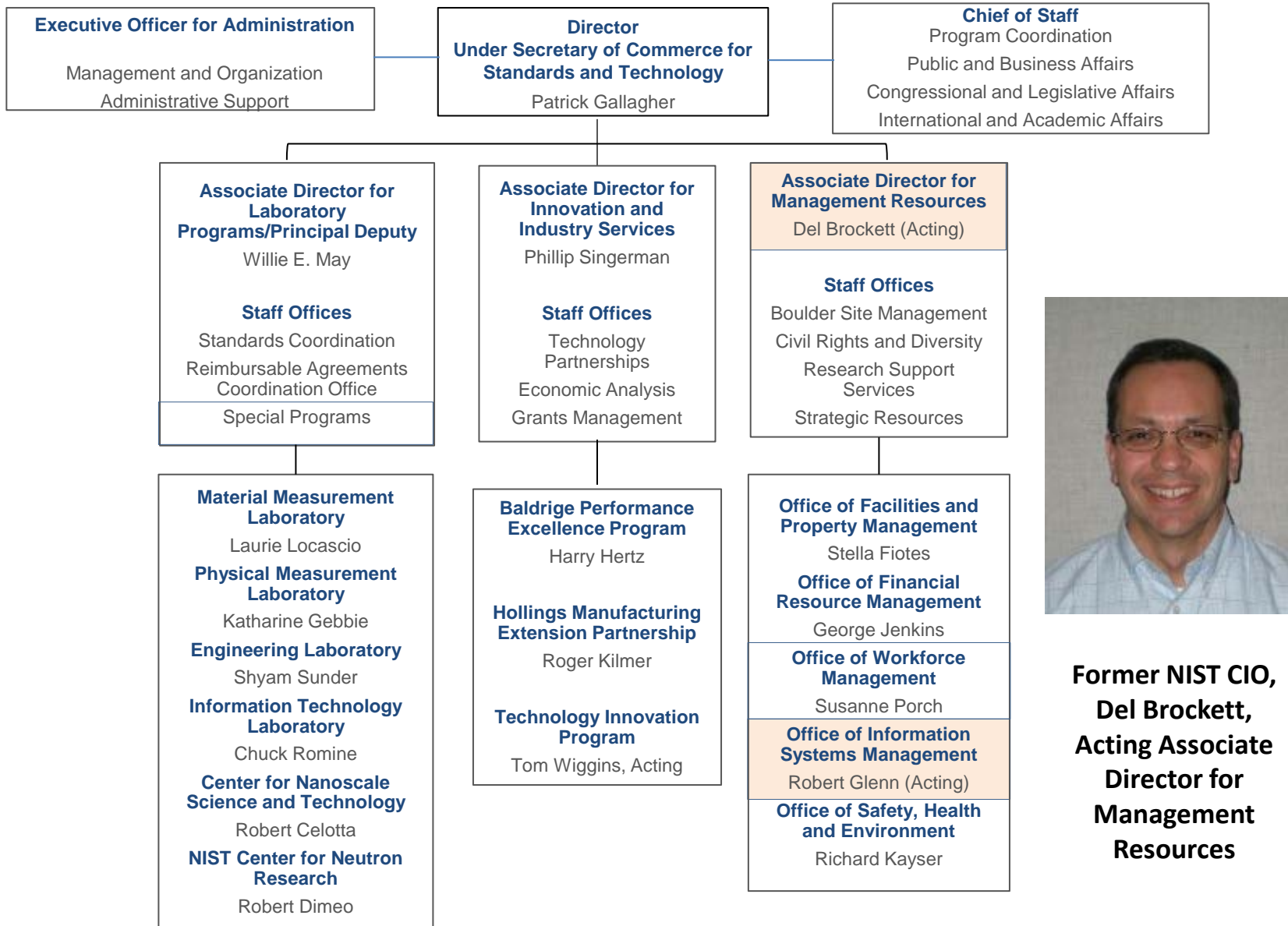


Manufacturing portfolio



- MEP program
- NIST Laboratory Program
- NRC review
- Mission alignment
- Baldrige
- AMTech
- NNMI

Organization



**Former NIST CIO,
Del Brockett,
Acting Associate
Director for
Management
Resources**

New Issues -- Business of NIST

- “Safety-like” transformation of NIST business practices involving fund transfers: acquisitions, grants, and interagency agreements.
- Revision of the NIST working capital fund collection to provide a budget for indirect funded activities
- New budget planning process for indirect accounts, and new service level agreements for programs.
- Plan to make changes starting this fiscal year (2013)



VCAT Meeting Agenda Review

Day 1

- **Call to Order, Announcements, VCAT Business**
Vinton Cerf, VCAT Chair
- **Agenda Review and NIST Update**
Pat Gallagher, Under Secretary of Commerce for Science and Technology and NIST Director
- **Review Activities of the VCAT Subcommittee on Safety**
Tony Haymet, Chair, VCAT Subcommittee on Safety
- **Visit by David Wineland 2012 Nobel Laureate in Physics**
- **NIST on a Chip: Revolution in Measurement Services**
Thomas O'Brian, Chief, Time and Frequency Division and Quantum Physics Division, Physical Measurement Laboratory (PML), NIST
- **NIST Chip-scale Atomic Sensors**
Thomas O'Brian, Chief, Time and Frequency Division and Quantum Physics Division, Physical Measurement Laboratory (PML), NIST

VCAT Meeting Agenda Review

Day 1 Con't

- **Tour of Quantum Voltage Laboratory**

Samuel Benz, NIST Fellow, Quantum Electronic and Photonics Division, PML, NIST

- **Tour of the Public Safety Communications Research Demonstration Network**

Dereck Orr, Program Manager, Public Safety Communications Research, Law Enforcement Standards Office, NIST

- **Update on NIST Centers of Excellence Program**

Jason Boehm, Director of the NIST Program Coordination Office

- **Update on Technology Transfer**

Phillip Singerman, Associate Director for Industry and Innovation Services, NIST

- **Tour of NIST Precision Measurement Laboratory**

Mike Kelley, Acting Director, NIST Boulder Laboratory Operations

VCAT Meeting Agenda Review

Day 2

- **Overview of NIST Portfolio of Manufacturing Programs**
Pat Gallagher, Under Secretary of Commerce for Science and Technology and NIST Director
- **Summary of National Research Council's (NRC) Report on A Review of the Manufacturing-Related Programs at NIST**
Kanti Jain, Chair, NRC Panel on Review of the Manufacturing-Related Programs at NIST
- **Update on the Administration's Advanced Manufacturing Initiatives**
Phillip Singerman, Associate Director, Innovation and Industry Services, NIST
- **Discussion of White Paper and Potential Recommendations**
Moderated by Pat Gallagher and Alan Taub
- **Wrap Up and Discussion of Recommendations and Path Forward for the 2012 Annual Report**
Vint Cerf, VCAT Chair