



**National Science and Technology Council  
Committee on Science  
Subcommittee on Forensic Science**

Initial Overview Briefing



**Subcommittee on Forensic Science**

- ▶ The National Science and Technology Council, Committee on Science, chartered the Subcommittee on July 7, 2009
- ▶ The overarching goal of the Subcommittee is to coordinate federal agency activities as they lead national efforts to improve the science and application of forensics
  - ▶ Collaboration with non-federal forensic entities is a crucial component of this work
  - ▶ This is a critical first step in our nation's efforts to improve the scientific foundation of forensic science, as called for in the National Research Council report *Strengthening Forensic Sciences in the United States – a Path Forward*, as well as other studies

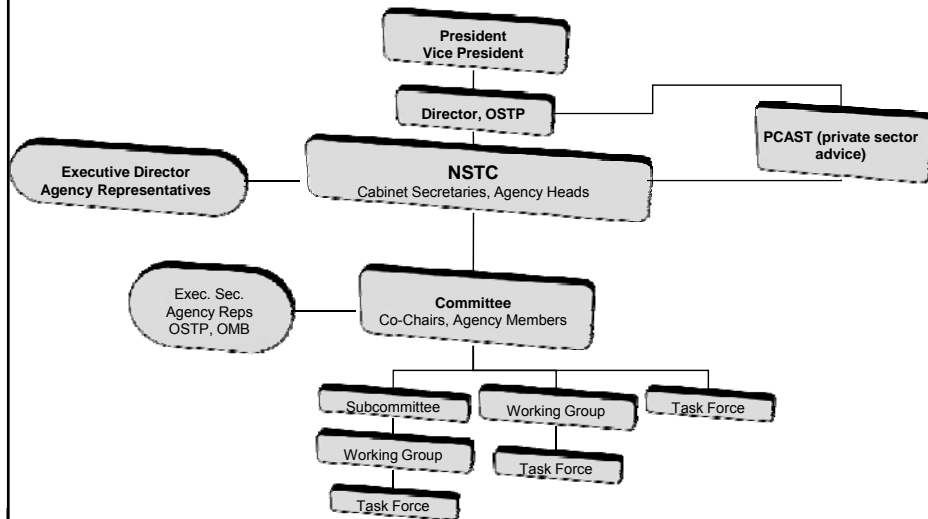


# NSTC Overview

- ▶ The NSTC was established via Executive Order 12881, which was issued by President Clinton in 1993
- ▶ The principal functions of the Council are, to the extent permitted by law:
  - ▶ to coordinate the science and technology policy-making process;
  - ▶ to ensure science and technology policy decisions and programs are consistent with the President's stated goals;
  - ▶ to help integrate the President's science and technology policy agenda across the Federal Government;
  - ▶ to ensure science and technology are considered in development and implementation of Federal policies and programs; and
  - ▶ to further international cooperation in science and technology.
- ▶ All executive department and agencies, whether or not represented on the Council, shall coordinate science and technology policy through the council and shall share information on research and development budget requests with the council.



# NSTC Organizational Framework



NATIONAL SCIENCE AND TECHNOLOGY COUNCIL



| COMMITTEE ON ENVIRONMENT & NATURAL RESOURCES |  |  |
|--|--|--|
| AIR QUALITY RESEARCH (SC)                    | GLOBAL CHANGE RESEARCH/<br>CLIMATE CHANGE SCIENCE (SC) | US GROUP ON EARTH<br>OBSERVATIONS (SC) |
| DISASTER REDUCTION (SC)                      | OCEAN SCIENCE &<br>TECHNOLOGY (SC)                     | WATER AVAILABILITY & QUALITY<br>(SC)   |
| ECOLOGICAL SYSTEMS (SC)                      | TOXICS AND RISK (SC)                                   |  |

| COMMITTEE ON HOMELAND & NATIONAL SECURITY      |  |                |
|--|--|----------------|
| DECONTAMINATION STANDARDS<br>& TECHNOLOGY (SC) | HUMAN FACTORS (SC)                             | STANDARDS (SC) |
| DOMESTIC IMPROVISED<br>EXPLOSIVE DEVICES (SC)  | INFRASTRUCTURE (SC)                            |                |
| FOREIGN ANIMAL DISEASE<br>THREAT (SC)          | NUCLEAR DEFENSE RESEARCH<br>& DEVELOPMENT (SC) |                |

| COMMITTEE ON SCIENCE                      |                                  |   |
|---|----------------------------------|---|
| AQUACULTURE (SC)                          | HUMAN SUBJECTS RESEARCH<br>(SC)  | RESEARCH BUSINESS MODELS<br>(SC)                        |
| BIOTECHNOLOGY (SC)                        | LARGE SCALE SCIENCE (SC)         | SCIENCE TO SUPPORT FOOD &<br>AGRICULTURAL RESEARCH (TF) |
| DIGITAL DATA (IWG)                        | PHYSICS OF THE UNIVERSE<br>(IWG) | SCIENTIFIC COLLECTIONS (IWG)                            |
| DOMESTIC ANIMAL GENOMICS<br>(IWG)         | PLANT GENOMES (IWG)              | SOCIAL BEHAVIORAL<br>ECONOMIC SCIENCES (SC)             |
| EDUCATION & WORKFORCE<br>DEVELOPMENT (SC) | PRION SCIENCE (IWG)              |   |

| COMMITTEE ON TECHNOLOGY                      |   |  |
|--|---|--|
| AERONAUTICS (SC)                             | HYDROGEN & FUEL CELLS (IWG)                   | NANOSCALE SCIENCE,<br>ENGINEERING & TECH. (SC) |
| BIOMETRICS & IDENTITY<br>MANAGEMENT (SC)     | INNOVATION &<br>COMPETITIVENESS (SC)          | NETWORKING & INFORMATION<br>TECHNOLOGY (SC)    |
| BUILDINGS TECHNOLOGY<br>RESEARCH & DEV. (SC) | MANUFACTURING RESEARCH &<br>DEVELOPMENT (IWG) |  |

October 2008

## Example NSTC Activities



- ▶ Information exchange
- ▶ Identify and Prioritize Needed Research
- ▶ Coordinate prioritized research (\$\$)
- ▶ Standards development, policy, adoption
- ▶ Messaging/Outreach coordination
- ▶ Private-Public Collaboration
- ▶ Developing long-term vision

## Subcommittee on Forensic Science



### ► Co-Chairs

- Duane Blackburn: Policy Analyst, OSTP
- Ken Melson: Acting Director, ATF
- Mark Stolorow: OLES Director, NIST

### ► Executive Secretary

- Frank Shults: ATF

### ► Members

Department of Commerce  
Department of Defense  
Department of Energy  
Department of Homeland Security  
Department of the Interior  
Department of Justice  
Department of Labor  
Department of the Treasury  
Environmental Protection Agency  
Intelligence Community

National Institutes of Health  
National Science Foundation  
Smithsonian Institution  
United States Postal Service

Domestic Policy Council  
Office of Management and Budget  
Office of Science and Technology Policy  
National Security Council  
White House Counsel

## Interagency Working Groups



### ► Research, Development, Test and Evaluation

- Co-chairs: Terry Hess (DoD), Greg Klees (ATF), Lois Tully (NIJ)

### ► Standards, Practices and Protocols

- Co-chairs: Sue Ballou (NIST), Gerry LaPorte (NIJ), Michael Wiens (FBI)

### ► Education and Ethics

- Co-chairs: Rob Lesnevich (TIGTA), Jeffrey H. Comparin (DEA)

### ► Certification, Accreditation and Licensing

- Co-chairs: Patricia Manzolillo (USPS), Chris Taylor (DoD)

### ► Outreach

- Co-chairs: Cary Oien (FBI), Frank Shults (EOUSA), Eric Steel (NIST)

## Overarching IWG Responsibilities



- ▶ Inventory and Analyze Forensic Science Challenges and Activities
  - ▶ Catalog internal and external recommendations on how to improve the methods and implementation of local, state and federal forensic science services;
  - ▶ Identify existing and planned private and governmental efforts whose goals are to improve the methods and implementation of forensic science services;
- ▶ Develop strategic plans for the improvement of forensic science capacity, infrastructure, standards and quality management, including:
  - ▶ Prioritization of and increased support for research, development, testing and evaluation activities;
  - ▶ Development of uniform standards for collection, terminology, reporting, and other practices
  - ▶ Implementation of laboratory "Best Practices," with a focus, as deemed appropriate, on accreditation and certification;
  - ▶ Assuring that forensic laboratories have an appropriate degree of independence from prosecutors and law enforcement agencies;
  - ▶ Improving education and training;
  - ▶ Enhancing technology transfer to state/local/tribal and independent forensic science service providers; and
  - ▶ Address other items identified through the Subcommittee's analysis

## Potential IWG Activities



- ▶ RDT&E
  - ▶ Identify and prioritize needs
  - ▶ Identify costs of RDT&E
  - ▶ Catalog current/future plans
  - ▶ Gap Analysis
  - ▶ Identify research facilities
  - ▶ Research coordination

## ***Potential IWG Activities***



- ▶ Standards, Practices and Protocols
  - ▶ Identify Standard Development Organizations (SDOs)
  - ▶ Inventory existing standards
  - ▶ Analyze standards' abilities to meet needs
  - ▶ Develop standards development/adoption cost estimates
  - ▶ Gap analysis
  - ▶ Coordinate USG efforts in SDOs and other processes
  - ▶ Design and implement process for determining which standards to use

## ***Potential IWG Activities***



- ▶ Education and Ethics
  - ▶ Education
    - Formal degree programs
    - Continuing education for forensic examiners, prosecutors, defenders and judges
    - Classroom and Online
    - Educating the population
  - ▶ Develop and/or work with external groups to develop/select a Code of Ethics.
  - ▶ Develop terminology and definitions for expert conclusions and opinions

## ***Potential IWG Activities***



- ▶ Accreditation and Certification
  - ▶ Identify accreditation bodies for forensic science labs
  - ▶ Identify recognition bodies for laboratory accreditation organizations
  - ▶ Identify non-accredited laboratories, forensic science units and crime scene units
  - ▶ Identify existing proficiency tests and proficiency test providers
  - ▶ Gap analysis
  - ▶ Develop standards for proficiency test development and administration
  - ▶ Identify costs to meet accreditation and proficiency testing requirements
  - ▶ Identify certification organizations
    - Gap analysis
  - ▶ Identify accreditation bodies for certification organizations
    - Gather existing certification standards
    - Analyze existing standards' abilities to meet needs
  - ▶ Identify recognition bodies for certification accreditation bodies
  - ▶ Determine costs to meet certification requirements

## ***Potential IWG Activities***



- ▶ Outreach/Communications (DOJ)
  - ▶ Develop general messaging strategy and talking points
  - ▶ Assist members in determining suitability of conference participation, and developing talks
  - ▶ Lead subcommittee efforts to host conference(s), if needed
  - ▶ Websites
    - [www.forensicscience.gov](http://www.forensicscience.gov)
    - [www.forensiccatalog.org](http://www.forensiccatalog.org)



## External Collaboration

- ▶ External collaboration is critical for success.
  - ▶ Prosecutors/Defense, laboratories, researchers, statisticians, legal scholars, etc.
- ▶ The best method(s) to achieve this is unknown
  - ▶ Existing Technical/Scientific Working Groups
  - ▶ FACA organizations
  - ▶ Conferences and workshops
  - ▶ Online collaboration
  - ▶ Etc.
- ▶ We are interested in your thoughts on how to do this properly!



## For More Information

- ▶ Press/Legislative inquiries
  - ▶ Rick Weiss (OSTP): 202-456-6037, [rweiss@ostp.eop.gov](mailto:rweiss@ostp.eop.gov)
- ▶ Subcommittee and IWG
  - ▶ Subcommittee Executive Secretary
    - Frank Shults (DOJ): (202) 648-7215, [frank.shults@usdoj.gov](mailto:frank.shults@usdoj.gov)