American Academy of Forensic Sciences
February 22, 2014
Seattle, WA

Overview of NIST Activities in the Forensic Sciences

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NIST FORENSIC SCIENCES
AAFS Presentation Overview

- NIST Presentations at AAFS in Seattle – 2014
- Memorandum of Understanding between NIST & DOJ
- National Commission on Forensic Science (NCFS)
- Organization of Scientific Area Committees (OSAC)
- Forensic Science Publications and Research Projects
- Training, Workshops, Symposia, Conferences
NIST Presentations at AAFS – 2014

36 Presentations, including:
• 7 Scientific posters in 3 poster sessions
• 29 Platform presentations in 17 Moderated Sessions in AAFS Sections, including:
  – Criminalistics
  – Questioned Documents
  – Jurisprudence
  – General
  – Digital and Multi-Media
NIST/DOJ Memorandum of Understanding

• MOU between NIST and USDOJ signed Feb 2013
  • Announced at the AAFS Meeting in Washington, DC
  • Established two entities responsive to the NAS Report calling for national leadership in forensic science
    • National Commission on Forensic Science (NCFS)
      • Inaugural meeting held in Washington, DC, Feb 3-4, 2014
    • Organization of Scientific Area Committees (OSAC)
      • Presentation and webcast at AAFS Forum, Feb 18, 2014
      • Slides and webcast posted on www.nist.gov/forensics
National Commission on Forensic Science

• NCFS Charter available at:

• 6 Objectives in NCFS Charter:
  a. To recommend priorities for standards development to the Attorney General;
  b. To review and recommend that the AG endorse guidance identified or developed by subject-matter experts;
  c. To develop proposed guidance concerning the intersection of forensic science and the courtroom;
  d. To develop policy recommendations, including a uniform code of professional responsibility and minimum requirements for training, accreditation and/or certification;
  e. To consider the recommendations or the National Science and Technology Council's Subcommittee on Forensic Science;
  f. To identify and assess the current and future needs of the forensic scientists to strengthen their disciplines and meet growing demands.
National Commission on Forensic Science

• **NCFS Leadership:**
  - Co-Chair: Patrick Gallagher, Director, NIST
  - Co-Chair: James Cole, Deputy Attorney General, USDOJ
  - Vice Chair for DOJ: Nelson Santos, Director, DEA Laboratory
  - Vice Chair for NIST: John Butler, Special Assistant to the Director in Forensic Science
  - Designated Federal Official: Brette Steele, USDOJ

• **Applications for NCFS:**
  - Notice posted in the Federal Register in 2013
  - 330+ applications received for the NCFS
National Commission on Forensic Science

• NCFS membership announced in Jan 2014
  – 30 voting Commissioners
  – 7 ex-officio members
  – (Includes 16 AAFS members)
• NCFS news release announcing Commissioners available at:
• NCFS is a Federal Advisory Committee under DOJ to make policy recommendations to strengthen forensic science
Organization of Scientific Area Committees (OSAC)

- Organizational framework development from 2013 and continuing to evolve
- NIST actively sought public comment (we listen)
  1. June 18, 2013 - meeting with current SWG Chairs
     - Received 82 responses and 337 pages of comments
     - Available on NIST website at: www.nist.gov/forensics
  3. Feb 18, 2014 – Open Forum at AAFS Meeting
- OSAC is under NIST guidance and designed for standards development and to improve practice
Individual SWGs vs. Organized Effort

- Funded support
- Enforceable standards
- Unified effort
- Greater influence and impact
Planned Presentations

April 14 – 17, 2014
Bode West

May 3-8, 2014
ASCLD Symposium

May 5-9, 2014
CAC Spring 2014

May 11-16, 2014
AFTE 2014

May 13-15, 2014
International Crime Scene Investigation Association

May 15-18, 2014
NACDL

May 19-23, 2014
MAAFS

May 19-22, 2014
Bode East

July 28-30, 2014
Green Mountain DNA Conference

Aug. 10-16, 2014
The IAI 2014 Conference

Aug. 31/Sept. 4, 2014
ANZFSS

Sept. 19-23, 2014
NAME 2014

Sep. 23-26, 2014
SAFS

Sept. 29/Oct. 2, 2014
International Symposium for Human Identification

Oct. 6-10, 2014
MAFS

Oct. 11-17, 2014
IAFS

Oct. 19-23, 2014
SWAFS

Oct. 19-24, 2014
SOFT

Oct. 20-24, 2014
NWAFS

Nov. 3-6, 2014
NEAFS
Technical Working Group on Biological Evidence Preservation

• The Handbook on Biological Evidence Preservation published January 2013, provides recommendations on:
  • Packaging and storage of biological evidence
  • Tracking the evidence
  • Maintaining the chain of custody
  • Practicing biological safety procedures
  • Disposition
• Developing reports that contain recommendations on:
  • Legislative issues
  • Increasing technology awareness
The Expert Working Group on Human Factors in Latent Print Analysis conducted a scientific assessment of the effects of human factors on forensic latent print analysis and to develop recommendations to reduce the risk of error.

It provides a comprehensive discussion of how human factors relate to all aspects of latent print examinations including communicating conclusions to all relevant parties through reports and testimony.

Released Feb 9, 2012

www.nist.gov/oles/
Latent Print Process Map

[With permission from Todd Weller]
Updated Forensic Facilities Planning Guide

- Originally published in April 1998.
- Update Released June 2013
Updated NIJ Crime Scene Guide

- Originally published in January 2000
- Released: September 17, 2013
Crime Scene Investigation: Guide for Law Enforcement

- Arriving at the Scene: Initial Response/ Prioritization of Efforts
- Preliminary Documentation and Evaluation of the Scene
- Processing the Scene
- Completing and Recording the Crime Scene Investigation
- Crime Scene Equipment

Principle, Policy, Procedure, Summary
ABFO #2 Photo Scale Surveillance Testing Report

- Five rulers were purchased from ten distributors to test the accuracy of the ruler against the established tolerances.
- 1988 JFS Article lists measurement specifications
- Published Report: August 2013
Working Group on Presenting Forensic Science Evidence Using Quantitative and Qualitative Terms (QQWG)

• **Mission:** To recommend best practices for reporting conclusions of forensic examinations, when expressed using quantitative or qualitative terms.

• **Background:** Forensic science findings are sometimes presented qualitatively and sometimes quantitatively. These include some level of uncertainty. We want to report the findings along with any uncertainty in a fair, transparent, and comprehensible way.

• **Deliverable:** A report with recommendations for forensic scientists, attorneys, and judges on the presentation and comprehension of quantitative and qualitative terminology in the legal system. These recommendations will be useful in standardizing and optimizing the presentation of forensic science evidence to law enforcement and jurors.
Training, Workshops, Symposia, Conferences

• **Measurement Science and Standards in Forensic Handwriting Analysis**
  – Partnered with: AAFS-QD, ASQDE, ABFDE, FBI, NIJ & SWGDOC
  – June 4-5, 2013

• **Emerging Trends in Synthetic Drugs Workshop**
  – Partnered with: DEA
  – April 30 – May 1, 2013
Training, Workshops, Symposia, Conferences

• DNA Mixture Interpretation Workshop
  – April 12, 2013 (8 hours)

• Forensics@NIST 2012 Symposium
  – November 28-30, 2012

• Measurement Science and Standards in Forensic Firearms Analysis
  – Partnered with AFTE & SWGGUN
  – July 10-11, 2012
Save the Date

- Forensics@NIST 2014 – Symposium At NIST in Gaithersburg, MD Dec 3-4, 2014
Questions?

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www.nist.gov/forensics