Updates on SWGDAM, NCFS, OSAC, and Recent NIST Activities

John M. Butler, Ph.D.

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NIST Fellow & Special Assistant to the Director for Forensic Science
Vice-Chair, National Commission on Forensic Science
Member, OSAC Biology/DNA Scientific Area Committee
OSAC Liaison to SWGDAM
Associate Editor, Forensic Science International: Genetics
SWGDAM.org website

Scientific Working Group on DNA Analysis Methods (SWGDAM)

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SWGDAM Mission Statement

The Scientific Working Group on DNA Analysis Methods, known as SWGDAM, serves to develop, improve, and evaluate forensic biology methods, protocols, training, and research to enhance forensic biology services as well as provide recommendations to the FBI Director on quality assurance standards for forensic DNA analysis.

Upcoming Meetings

SWGDAM Regular Meeting
January 12-14, 2016
Preliminary Agenda
SWGDAM meets semi-annually (January & July)
~80 people participating at each meeting
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<tr>
<th>Committees/Working Groups</th>
<th>Primary Focus</th>
</tr>
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<tbody>
<tr>
<td>1  Autosomal STR Interpretation</td>
<td>Revising 2010 guidelines to help mixture interpretation (89 page document with examples is close to completion)</td>
</tr>
<tr>
<td>2  CODIS</td>
<td>Discussing automated hit counting, threshold-based searching, and revisions to database QAS</td>
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<tr>
<td>3  Enhanced Detection Methods &amp; Interpretation (EDMI)</td>
<td>Preparing document on contamination prevention and control</td>
</tr>
<tr>
<td>4  Quality Assurance</td>
<td>Preparing draft revisions to the forensic QAS</td>
</tr>
<tr>
<td>5  Rapid DNA</td>
<td>Reviewing rapid DNA progress (instruments and legislation), discussing potential pilot studies</td>
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<tr>
<td>6  Y-STR</td>
<td>Working on Y-STR mixture guidelines</td>
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<tr>
<td>7  Next-Gen Sequencing WG</td>
<td>Monitoring development of NGS</td>
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<tr>
<td>8  SAFER Sexual Assault WG</td>
<td>Providing recommendations to NIJ on laboratory processing of sexual assault evidence kits</td>
</tr>
<tr>
<td>9  Ad Hoc “Committee of Detail”</td>
<td>Preparing QAS clarification document for NDIS to handle re-interpretation of historical data</td>
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</table>

In my role as OSAC liaison to SWGDAM, I have the opportunity to briefly visit each group and learn about their activities.
Recent SWGDAM Meeting
July 14-16, 2015

• **Main session**: History of FBI DNA activities (Dwight Adams, Tom Callaghan), TWGDAM/SWGDAM (Ken Konzak, Dave Coffman), DNA Identification Act of 1994 (Dawn Herkenham), Quality Assurance Standards (Doug Hares, Jocelyn Carlson)

• **Committee Work (all-day Wednesday)**

• **Roundtable**: FBI allele frequency changes (Tamyra Moretti, John Buckleton), MN missing persons case (Ann Gross), DNA from cartridge cases (Shawn Montpetit), GlobalFiler validation (Jason Kokoszka), TrueAllele test scandal (Ray Wickenheiser), Differential extractions (Bill Hudlow), Familial searching (Gary Molina), New York State Forensic Science Commission (Dawn Herkenham)

• **Committee updates**: CODIS (Darrell Oubre), EDMI (Dixie Peters), Next-Gen (John Tonkyn), QA (Jocelyn Carlson), Rapid DNA (Taylor Scott), Y-STR (Tamyra Moretti), Autosomal STR Interpretation (Joel Sutton)

• **Other updates**: NIJ (Minh Nguyen), ENFSI DNA Working Group (Roman Hardil), NIST Applied Genetics Group (Mike Coble & Pete Vallone), Legislative (Dawn Herkenham), UK Home Office (Adam Shariiff), OSAC-NCFS-NIST (John Butler)

• **12 page meeting report** is available on SWGDAM website at http://media.wix.com/ugd/4344b0_99742207c78344c7b1948225492d1e3e.pdf
Recent SWGDAM Meeting
January 12-14, 2016

- **Main sessions**: Potential QAS revisions discussed (Jocelyn Carlson and members of the QA Committee); SWGDAM guidelines for the processing of sexual assault evidence kits in a laboratory (Amber Carr); review of revised Autosomal STR interpretation guidelines (Joel Sutton and members of the Autosomal STR Interpretation Committee)

- **Committee Work (most of Wednesday)**

- **Roundtable**: Subpopulation corrections (John Buckleton & James Curran), ICMP manufacturer’s elimination database (Tom Parsons), DNA from fired cartridge casings (Shawn Montpetit), retrospective DNA review (Todd Bille), Texas Forensic Science Commission (Elizabeth Morris), familial searching (Gary Molina), Qiagen QIAcube differential extractions (Melissa Suddeth)

- **Committee updates**: Autosomal STR Interpretation (Joel Sutton), CODIS (Darrell Oubre), EDMI (Dixie Peters), Next-Gen (John Tonkyn), QA (Jocelyn Carlson), Rapid DNA (Pete Vallone), Y-STR (John Buckleton), SAFER Sexual Assault Kit WG (Amber Carr), Committee of Detail (Shawn Montpetit)

- **Other updates**: ISFG (Walther Parson), NIST Applied Genetics Group (Pete Vallone & Katherine Gettings), OSAC-NCFS-NIST (John Butler), NIJ (Minh Nguyen), DC Laboratory (Jenifer Smith), Legal Issues (Dawn Herkenham)
FBI Quality Assurance Standards (QAS) and OSAC Registry

• The FBI Director is Congressionally mandated by the DNA Identification Act of 1994 (Public Law 103-322) to set requirements for participation in the National DNA Index System (NDIS), which was done through creation of the QAS in 1998/1999 by the DNA Advisory Board (DAB)
  • When the DAB’s term expired in 2000, SWGDAM was given responsibility for revising the QAS and accompanying audit documents, which has been done in 2009 and 2011

• However, SWGDAM and the FBI are not recognized SDOs (Standards Developing Organizations) nor has the QAS gone through a full SDO-process

• Currently, OSAC has decided that the QAS will not go through the OSAC Registry Approval process as it has to be maintained by the FBI (according to Congressional mandate) and does not meet the SDO-process (as defined by the OSAC Quality Infrastructure Committee)

• The FBI QAS do not prevent the development and implementation of OSAC standards/guidelines that will complement the quality and integrity of the discipline that is currently viewed as the gold standard of forensic science.
NIST Forensic Science Efforts

National Commission on Forensic Science (NCFS)

Department of Justice FACA co-led by NIST setting policy

Organization of Scientific Area Committees (OSAC)

NIST-administered
>540 members of the community establishing standards and best practices

NIST Funded Internal Research Programs

~$7.5M/year invested

NIST Forensic Science Center of Excellence

CoE: ~$4M/year invested for 5 years (2015-2020)

International Symposium on Forensic Science Error Management

432 participants (11 countries)
NIST Research Efforts to Aid Forensic Science

SIX CURRENT FUNDED FOCUS AREAS

1. Ballistics and Associated Tool Marks
2. Digital and Identification Forensics
3. Forensic Genetics (DNA)
4. Toxins
5. Trace
6. Statistics

Internal NIST research will be supplemented by a new NIST Forensic Science Center of Excellence (FSCOE)

http://www.nist.gov/forensics
CSAFE will focus on the following objectives:

- Bring together forensic practitioners and expert statisticians to **develop and apply statistical methods** to: latent prints, ballistics, tire marks, footwear, handwriting, bloodstain pattern, tool marks, computer and information systems, mobile devices, network traffic, social media, and GPS

- **Develop**, in collaboration with NIST scientists, **new methods for forensic evidence**

- Develop new inference techniques that account for various sources of uncertainty

- Establish a **sound base of interpretation for forensic evidence** in judicial settings

- Educate and train forensic practitioners, judges and attorneys, and the next generation of statisticians

Kickoff Meeting held October 26-27, 2015 in Ames, IA
Follow-up to Highly Successful First International Symposium on Forensic Science Error Management (July 21-24, 2015)

• Proceedings being finalized
  • plan to have out before Feb 2016

• Website:
  http://www.nist.gov/director/international_forensics_home.cfm
  • Talk slide PDFs
    (85 available with 2767 slides):
    http://www.nist.gov/director/orals.cfm
  • Recorded Keynote and Plenary Talks
    (7 videos):
    http://www.nist.gov/director/recorded_symposium_sessions.cfm

• Discussing potential 2nd meeting in May 2017 (stay tuned)
U.S. initiatives to strengthen forensic science & international standards in forensic DNA

John M. Butler*

National Institute of Standards and Technology, Gaithersburg, MD, USA

- This review article covers recent U.S. activities to strengthen forensic science including the formation of the National Commission on Forensic Science and the Organization of Scientific Area Committees
- DNA documentary standards and guidelines from organizations around the world are also included

Butler, J.M. (2015) U.S. initiatives to strengthen forensic science & international standards in forensic DNA. *FSI Genetics* (volume 18, pp. 4-20)
A Renewal MOU Was Recently Signed between DOJ and NIST and is publicly available on the NCFS website

MEMORANDUM OF UNDERSTANDING BETWEEN
THE DEPARTMENT OF JUSTICE
AND
THE NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY
IN SUPPORT OF
THE NATIONAL COMMISSION ON FORENSIC SCIENCE AND THE
ORGANIZATION OF SCIENTIFIC AREA COMMITTEES

X. Signatures:

For the Department of Justice:

[Signature]
Date: 04 August 2015

For the National Institute of Standards and Technology:

[Signature]
Date: 05 August 2015
Organization of Scientific Area Committees (OSAC)

Forensic discipline-specific “guidance groups” administered by NIST

http://www.nist.gov/forensics/osac/index.cfm
Organization of Scientific Area Committees (OSAC)

Forensic Science Standards Board (FSSB)

- Legal Resource Committee (LRC)
- Quality Infrastructure Committee (QIC)
- Human Factors Committee (HFC)

**Biology/DNA SAC**
- Biological Data Interpretation and Reporting Sub
- Biological Methods Sub
- Wildlife Forensics Sub

**Chemistry/Instrumental Analysis SAC**
- Fire Debris and Explosives Sub
- Geological Materials Sub
- Gunshot Residue Sub
- Materials (Trace) Sub
- Seized Drugs Sub
- Toxicology Sub

**Crime Scene/Death Investigation SAC**
- Anthropology Sub
- Disaster Victim Identification Sub
- Dogs and Sensors Sub
- Fire and Explosion Investigation Sub
- Medicolegal Death Investigation Sub
- Odontology Sub
- Crime Scene Sub

**Digital/Multimedia SAC**
- Digital Evidence Sub
- Facial Identification Sub
- Speaker Recognition Sub
- Video/Imaging Technology and Analysis Sub

**Physics/Pattern Interpretation SAC**
- Bloodstain Pattern Analysis Sub
- Firearms and Toolmarks Sub
- Footwear and Tire Sub
- Forensic Document Examination Sub
- Friction Ridge Sub

**Currently 542 total members**

364 active projects

14 of 26 are ASTM standards

364 active projects

14 of 26 are ASTM standards

13 active projects

364 active projects

- 6
- 4
- 8
- 3

*Added Dec 2015*

FSSB = Forensic Science Standards Board
SAC = Scientific Area Committee
Sub = Subcommittee

SAC = Scientific Area Committee
Sub = Subcommittee
# SAC Biology Membership and Initial Terms (2, 3, or 4 years)

<table>
<thead>
<tr>
<th>Members (Term)</th>
<th>Role</th>
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</thead>
<tbody>
<tr>
<td>George Herrin (4)</td>
<td>Chair</td>
</tr>
<tr>
<td>Angelo Della Manna (3)</td>
<td>Vice-Chair</td>
</tr>
<tr>
<td>DeeDee Hawk (2)</td>
<td>Exec Sec</td>
</tr>
<tr>
<td>Kim Murga (2)</td>
<td>SC Chair</td>
</tr>
<tr>
<td>Robyn Ragsdale (4)</td>
<td>SC Chair</td>
</tr>
<tr>
<td>Kathy Moore (2)</td>
<td>SC Chair</td>
</tr>
</tbody>
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<table>
<thead>
<tr>
<th>Members (Term)</th>
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</tr>
</thead>
<tbody>
<tr>
<td>John Butler (3)</td>
<td>QIC Liaison, SWGDAM Liaison</td>
</tr>
<tr>
<td>Tom Callaghan (3)</td>
<td></td>
</tr>
<tr>
<td>Robin Cotton (4)</td>
<td>LRC Liaison</td>
</tr>
<tr>
<td>Phillip Danielson (4)</td>
<td>HFC Liaison</td>
</tr>
<tr>
<td>Bruce Weir (3)</td>
<td></td>
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<tr>
<td>Simone Gittelison (2)</td>
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</tr>
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</table>

First public SAC meeting was held **February 16, 2015 7-10pm** at the AAFS meeting

Monthly conference calls are conducted to get subcommittee updates

Second public SAC meeting was **October 15, 2015 7:30-8:45am** at the ISHI meeting

Next public SAC meeting will be **February 22, 2016 10:15am-12pm** at AAFS meeting
Biology/DNA
Scientific Area Committee

3 SWGDAM participants

George Herrin (chair)

Not pictured: Bruce Weir & Simone Gittelson

SAC Biology/DNA Activity

Task Groups

- Terminology (Buei)
- Validation/Method (Weitz)
- Education/Training (Kadash)
- Sample Id & Collection (Zervos)
- Terminology (Westring)
- Statistical Interpretation (Zabell)
- Probabilistic Genotyping (Sutton)
- Software Validation (Kehl)
- Mixture Interp Verification (Sobieralski/Montpetit)
- Terminology (Baker/Hoofer)
- Standards and Guidelines (O’Brien/Giles)
- Report Writing (Trail/Giles)
- Validation (Lindquist/Hoofer)

Subcommittees

- Biological Methods (Murga)
- Biological Data Interpretation and Reporting (Ragsdale)
- SAC Biology (Herrin)
- Terminology (Della Manna)
- Wildlife Forensics (Moore)

Scientific Area Committee

- Biological/DNA (Herrin/Petrovich/Ragsdale/Wright)
- Mixture Interpretation (Sobieralski/Montpetit)
- Software Validation (Kehl)
- Probabilistic Genotyping (Sutton)
- Statistical Interpretation (Zabell)
- Sample Id & Collection (Zervos)
- Validation/Method (Weitz)
- Education/Training (Kadash)
- Terminology (Buei/Baker/Hoofer)
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- Report Writing (Trail/Giles)
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<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
<th>Source</th>
<th>Document</th>
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<tbody>
<tr>
<td>Accredited Laboratory</td>
<td>A DNA laboratory that has received formal recognition that it meets or exceeds a list of standards, including the FBI Director’s Quality Assurance Standards, to perform specific tests, by a nonprofit professional association of persons actively involved in forensic science that is nationally recognized within the forensic community in accordance with the provisions of the Federal DNA Identification Act (42 U.S.C. § 14132) or subsequent laws.</td>
<td>QAS</td>
<td></td>
</tr>
<tr>
<td>Accuracy</td>
<td>The degree of conformity of a measured quantity to its actual (true) value.</td>
<td>QAS; SWGDAM</td>
<td>Validation Guidelines for Forensic DNA Analysis Methods</td>
</tr>
<tr>
<td>Additional Amplification Cycles</td>
<td>One or more amplification cycles beyond what the laboratory had validated in the Standard Method of its STR kit.</td>
<td>SWGDAM - Modified by OSAC terminology</td>
<td>Guidelines for STR Enhanced Detection Methods</td>
</tr>
</tbody>
</table>
OSAC Biology/DNA SAC Summary

• Regular conference calls (virtual meetings)
  • SAC and subcommittees each meet at least monthly
  • Task groups meet sometimes multiple times per month
• A public SAC meeting/public comment session was held as part of the ISHI meeting in Grapevine, Texas on October 15, 2015
• The next public SAC meeting is February 22, 2015 as part of the AAFS meeting in Las Vegas, Nevada
• Several documents are close to being completed for submission to a Standards Developing Organization (SDO)
• AAFS is standing up an SDO; the current plan is to use this route for SAC Biology/DNA documents
No documents reside on the OSAC Registry of Standards or Registry of Guidelines yet.
OSAC Quality Infrastructure Committee (QIC) has developed worksheets for documenting efforts.

1. Technical Merit Worksheet
2. Harmonization Worksheet
3. Impact Worksheet
4. Standard Development Process Worksheet
Recent or Upcoming OSAC Events

• **January 25-29, 2016** – Second in-person meeting of OSAC subcommittees (Leesburg, VA)

• **February 22-23, 2016** – Second public meeting with presentations by SAC and subcommittee chairs in Las Vegas, NV as part of AAFS

January 2016 – first posting to OSAC Registry of Approved Standards
One of the ways to solicit public comment on standards and guidelines up for consideration on the OSAC Registries

http://nist.gov/forensics/osac/osac-newsletter.cfm
Based on current funding
OSAC in-person meetings are on a ~9 month cycle
(January – July/August – April – January …)

Internal OSAC Meetings
(Leesburg, VA) – January 25-29, 2016

• (Jan 25) FSSB meeting
• (Jan 26) 5 SACs, 3 Resource Committees & several subcommittees
• (Jan 27) full OSAC plenary followed by 24 SCs, 3 RC meetings
• (Jan 28) 24 SCs, 3 RC meetings
• (Jan 29) ½ day 24 SCs
Public OSAC Meetings (at AAFS, Las Vegas, NV)

**February 22, 2016 (Monday)**

(8 am – 10 am) **Digital/Multimedia SAC**
- Digital Evidence
- Facial Identification
- Video/Imaging Technology and Analysis
- Speaker Recognition

(10:15 am – 12 pm) **Biology/DNA SAC**
- Biological Methods
- Biological Data Interpretation & Reporting
- Wildlife Forensics

(1 pm – 5 pm) **Crime Scene/Death Investigation SAC**
- Anthropology
- Disaster Victim Identification
- Dogs and Sensors
- Fire and Explosion
- Medicolegal Death Investigation
- Odontology

**February 23, 2016 (Tuesday)**

(8:30 am – 12 pm) **Physics/Pattern Interpretation SAC**
- Bloodstain Pattern Analysis
- Firearms and Toolmarks
- Footwear and Tire
- Forensic Document Examination
- Friction Ridge

(1 pm – 5 pm) **Chemistry/Instrumental Analysis SAC**
- Fire Debris and Explosives
- Geological Materials
- Gunshot Residue
- Materials (Trace)
- Seized Drugs
- Toxicology

5 SAC chairs and 24 subcommittee chairs will present; will be webcast
National Commission on Forensic Science (NCFS)

www.justice.gov/ncfs

Policy-focused

NCFS Leadership

Sally Q. Yates
Deputy Attorney General
DOJ Co-Chair

Willie E. May
Director of NIST
NIST Co-Chair

Nelson A. Santos
Vice-Chair (DOJ)

John M. Butler
Vice-Chair (NIST)

32 voting and 8 ex-officio members

Last meeting (8th): Dec 7-8, 2015
Next meeting (9th): March 21-22, 2016
New Commissioners for Second Term

1. **Thomas D. Albright, Ph.D.**, Professor and Conrad T. Prebys Chair, The Salk Institute for Biological Studies, La Jolla, California

2. **Arturo Casadevall, M.D., Ph.D.**, Bloomberg Distinguished Professor and Alfred and Jill Summer Professor and Chair of Molecular Microbiology and Immunology, Bloomberg School of Public Health, Johns Hopkins University, Baltimore, Maryland

3. **Gregory C. Champagne**, Sheriff, St. Charles Parish, Louisiana

Will be looking for a new digital evidence member…

5. **Deirdre M. Daly**, United States Attorney for the District of Connecticut

6. **Sunita Sah, M.D., Ph.D.**, Assistant Professor of Management and Organizations, Johnson Graduate School of Management, Cornell University, Ithaca, New York

Current NCFS Subcommittees

http://www.justice.gov/ncfs/subcommittees

where much of the Commission work occurs...

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<th>NCFS Subcommittee</th>
<th># Commissioners</th>
<th># Non-Commissioners</th>
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<td>1. Accreditation &amp; Proficiency</td>
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<td>Testing</td>
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<td>2. Human Factors</td>
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<td>3. Interim Solutions</td>
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<td>4. Medicolegal Death Investigation</td>
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<td>5. Reporting &amp; Testimony</td>
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<tr>
<td>6. Scientific Inquiry &amp; Research</td>
<td>12</td>
<td>5</td>
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<tr>
<td>7. Training on Science &amp; Law</td>
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<td>5</td>
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Most Commissioners are on multiple subcommittees

57 non-Commissioners contributing to the process

Subcommittee products are discussed and voted on by the full Commission prior to being recommended to the Attorney General.
Timeline for Commission Activities

Federal Advisory Committees exist on a 2-year renewal cycle

New Commission charter signed on April 23, 2015
Includes digital evidence

While we hope that a new charter will be signed in April 2017 extending the NCFS, a new administration will begin January 20, 2017 and may have different priorities

- Announcement at AAFS 2013 meeting (February 21, 2013)
- Commission charter filed (April 23, 2013)
- Commission membership named (January 10, 2014)

**Term 1** (April 23, 2013 – April 23, 2015):
- *First* meeting (February 3-4, 2014)
- *Second* meeting (May 12-13, 2014)
- *Third* meeting (August 26-27, 2014)
- *Fourth* meeting (October 28-29, 2014)
- *Fifth* meeting (January 29-30, 2015)

**Term 2** (April 23, 2015 – April 23, 2017):
- *Sixth* meeting (April 30-May 1, 2015)
- *Seventh* meeting (August 10-11, 2015)
- *Eighth* meeting (December 7-8, 2015)
- **Ninth meeting (March 21-22, 2016)**
- *Tenth* meeting (June 20-21, 2016)
- *Eleventh* meeting (Sept 12-13, 2016)
- *Twelfth* meeting (January 9-10, 2017)
- *Thirteenth* meeting (April 10-11, 2017)
<table>
<thead>
<tr>
<th>Meeting</th>
<th>Topics</th>
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<tbody>
<tr>
<td>1</td>
<td>Background on NRC 2009 report, 2009 census of public labs, &amp; SoFS efforts</td>
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<td>2</td>
<td>Ethics and Forensic Science</td>
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<td>2, 3</td>
<td>Cognitive Bias and Human Factors (part 1 &amp; part 2)</td>
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<tr>
<td>3</td>
<td>Latent Print Automated Fingerprint Identification System (AFIS) Interoperability</td>
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<td>3</td>
<td>Role of Accreditation in Forensic Science</td>
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<td>4</td>
<td>Assessing Eyewitness Identification (NRC report)</td>
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<td>5</td>
<td><strong>Documentary Standards</strong></td>
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<td>5</td>
<td>Judicial Training</td>
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<td>5</td>
<td>Accreditation and Certification within the MDI Community</td>
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<td>6</td>
<td>Evidence Preservation and Retention</td>
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<td>6</td>
<td>OSAC Update and Priority Action Report</td>
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<td>6</td>
<td>Disaster Victim Identification within the MDI Community</td>
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<td>7</td>
<td><strong>Exploring Issues Related to Proficiency Testing</strong></td>
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<tr>
<td>8</td>
<td>Translation of Scientific Research into Forensic Practice</td>
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<tr>
<td>8</td>
<td>AAAS Forensic Science Assessments: A Quality &amp; Gap Analysis</td>
</tr>
</tbody>
</table>
Designated Federal Official (DFO) for the National Commission on Forensic Science

Andrew J. Bruck
Counsel to the Deputy Attorney General
950 Pennsylvania Avenue NW
Washington, DC 20530
Andrew.J.Bruck@usdoj.gov
(202) 305-3481
Subcommittee on Procedures and Operations (SPO) – formerly Bylaws

- **Purpose**: to define/refine process documents and bylaws governing Commission activities

- **SPO Membership**:
  - DFO: Andrew Bruck
  - Vice-Chairs: Nelson Santos & John Butler
  - OSTP representative: Meredith Drosback (replaced Tania Simoncelli)
  - Commission representatives (4):
    - Marilyn Huestis (researcher)
    - Dean Gialamas (practitioner)
    - Pam King (defense attorney ➔ **MN district judge**)
    - Matt Redle (prosecuting attorney)
Commission Work Products

• The Commission is a Department of Justice Federal Advisory Committee and therefore only has direct authority to make recommendations to the Attorney General.

  DOJ has promised to respond to NCFS work products within two meetings

• It is hoped that Commission work products will be considered and adopted by other Federal agencies and within state and local jurisdictions.

  Voting is conducted electronically with a two-thirds majority required to pass
NCFS Work Products Page

http://www.justice.gov/ncfs/work-products
NCFS Meetings Page

MEETINGS

Meeting One | Meeting Two | Meeting Three | Meeting Four | Meeting Five | Meeting Six | Meeting Seven | Meeting Eight | Meeting Nine

The first meeting of the National Commission on Forensic Science was held February 3 - 4, 2014 in Washington, DC. On February 3, the meeting was called to order at 9:00 a.m. The meeting began with communicating administrative, operational, and procedural information to the Commission members. Welcoming remarks were delivered by the co-chairs, Deputy Attorney General James M. Cole and Under Secretary of Commerce for Standards and Technology and NIST Director Patrick D. Gallagher. Dr. John Holdren, Science Advisor to the President and Director of the Office of Science and Technology Policy also provided welcoming remarks to the Commission. The afternoon included presentations from Judge Harry Edwards on reflections from the NRC report on "Strengthening Forensic Science in the United States" and Matt DuRose of the Bureau of Justice Statistics on the Census of Publicly Funded Crime Laboratories. Background presentations on accreditation, certification, proficiency testing, and research were also provided to the Commission. The afternoon closed with a one-hour public

http://www.justice.gov/ncfs/meetings
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We Encourage Public Comments

- Individuals wishing to submit written public comment regarding draft work products should do so by going to [www.regulations.gov](http://www.regulations.gov)

- Work products are made available to Commissioners and to the general public at least 15 days before the next meeting and public comments can also be provided 15 days after a meeting (30 days total).
NCFS Meeting 7 Topics
August 10-11, 2015

• Subcommittee Reports & Work Product Discussion
  • Five final work products were approved

• Briefing on Ethics and the Special Government Employee

• Panel on Exploring Issues Related to Proficiency Testing
  • Speakers: Brady Mills, Christopher Czyryca, Jesse Brown

• Presentation on The Netherlands Register of Court Experts: Experiences and Challenges toward a Forensic Science Quality System
  • Speaker: Michael Smithuis

NCFS Meeting 8 Topics
December 7-8, 2015

• Subcommittee Reports & Work Product Discussion
  • Three final work products were approved

• OSAC Update
  • Speaker: Jeremy Triplet

• Panel on Translation of Scientific Research into Practice
  • Speakers: Molly Dix (RTI), Fen Zhao (NSF), Peter Marks (FDA), Jennifer Shieh (NIH)

• Presentation on AAAS Forensic Science Assessments
  • Speakers: Mark Frankel and Deborah Runkle

Work Products Adopted by the Commission

1. Survey of Law Enforcement Forensic Units
2. Accreditation of Medical Examiner and Coroner Offices
3. Certification of Medicolegal Death Investigators
4. Scientific Literature in Support of Forensic Science and Practice
5. Inconsistent Terminology
6. Universal Accreditation
7. Forensic Science and Related Terms
8. Automated Fingerprint Identification System (AFIS) Interoperability
9. Root Cause Analysis (RCA) in Forensic Science
10. Pretrial Discovery of Forensic Materials
11. Increasing the Number, Retention, and Quality of Board-Certified Forensic Pathologists
12. Electronic Networking of Medical Examiner and Coroner Offices
13. Documentation, Case Record and Report Contents
14. Ensuring that Forensic Analysis is Based Upon Task-Relevant Information
15. Forensic Science Curriculum Development
Department of Justice
Office of Public Affairs

FOR IMMEDIATE RELEASE

Justice Department Announces New Accreditation Policies to Advance Forensic Science

Deputy Attorney General Sally Quillian Yates announced today that the Justice Department will, within the next five years, require department-run forensic labs to obtain and maintain accreditation and require all department prosecutors to use accredited labs to process forensic evidence when practicable. Additionally, the department has decided to use its grant funding mechanisms to encourage other labs around the country to pursue accreditation.

The new policies arose out of recommendations made by the National Commission of Forensic Science (NCFS), which was established to advance the field of forensic science and make suggestions to the Attorney General on how to ensure that reliable and scientifically valid evidence is used when solving crimes. The Attorney General made the decision to implement several of the commission’s recommendations last week and the Deputy Attorney General, who serves as co-chair of the NCFS, announced their adoption at a meeting of the commission today.

MEMORANDUM FOR HEADS OF DEPARTMENT COMPONENTS

FROM: Loretta E. Lynch
Attorney General

SUBJECT: Recommendations of the National Commission on Forensic Science Announcement for NCFS Meeting Eight

Our justice system depends on reliable, scientifically valid evidence. For the past two years, the National Commission on Forensic Science (NCFS) has developed recommendations for how the Department of Justice can strengthen the field of forensic science. The Department is reviewing those recommendations on a rolling basis, and will continue to evaluate proposals as they are approved by the NCFS.
NCFS Work Products – Drafts were open for public comment (Nov 23 – Dec 22, 2015)
Will be voted on at the March 21-22, 2016 NCFS meeting

1. Proficiency Testing in Forensic Science
2. Critical Steps to Accreditation
3. National Code of Professional Responsibility
4. Transparency of Quality Management System Documents
5. Testimony Using the Term “Reasonable Degree of Scientific Certainty”
6. Funding for Post-Doctoral Projects to Facilitate Translation of Research into Forensic Science Practice
7. Establishing the Foundational Literature within the Forensic Science Disciplines
NCFS Work Products/Topics Under Development

1. Accessibility of Scientific Literature
2. Evaluating the Effectiveness of Scientific Procedures and Practices
3. Validation of Test Methods
4. Role of Accreditation in Forensic Education
5. Training Assessment Tools
6. Training on Notification
7. Assessment of Context Management Systems
8. Checklists to Reduce Bias
9. National Call Center
10. Model Legislation for Medical Examiner and Coroner Jurisdictions
11. Medicolegal Autonomy and Independence
12. Uniform Policies and Procedures for Accreditation Programs
13. Analyst Certification
14. Need for Research to Improve Quality of Proficiency Tests
15. Data Collection and Collaboration with Proficiency Test Providers
16. Accreditation and Digital Evidence
17. Presentation of Expert Testimony
18. Access to Expert Witnesses by Defense
19. Judicial Vouching
20. Notice and Demand Rules
21. Probabilistic Statements
22. Pretrial Discovery
23. Report Content – Case File
24. Evidence Preservation and Retention
NCFS Meeting Dates

• Meeting 8: December 7 – 8, 2015
  • Location: House of Sweden, Washington, DC

FUTURE DATES – LOCATIONS TBD
• Meeting 9: March 21 – 22, 2016
• Meeting 10: June 20 – 21, 2016
• Meeting 11: September 12 – 13, 2016
• Meeting 12: January 9 – 10, 2017
• Meeting 13: April 10 – 11, 2017

CONTINGENT UPON CHARTER RENEWAL
• Meeting 14: July 17 – 18, 2017
• Meeting 15: November 6 – 7, 2017
Other Past and Future NIST Activities
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New Book by Law Professor Erin Murphy

400 pages

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The Diane Rehm Show
(in NPR studio on Dec 16, 2015)

John M. Butler
NIST

Daniele Podini
GWU Forensic Science Program

Also on air via phone or Skype
Erin Murphy (NYU School of Law)
Mitch Morrissey (Denver DA)

https://thedianerehmshow.org/shows/2015-12-16/new-questions-about-the-use-of-forensic-dna (listen to broadcast or read transcript)
Information Does Exist Beyond the First Page of Your Google® Search!
Tools and Strategies for Forensic Science Literature Searching and Use

Chair: John M. Butler
Co-Chair: Matthew R. Wood
Transformation: Embracing Change
An International Panel Discussion on the Impact of Recent Forensic Science Initiatives and the Response of the Global Community

NCFS Co-Chair

Sally Q. Yates, JD
U.S. Department of Justice
Washington, DC

Gillian Tully, PhD
Forensic Science Regulator,
UK Home Office
UNITED KINGDOM

Alastair Ross, AM
National Institute of Forensic Science,
Retired
AUSTRALIA

Willie E. May, PhD
National Institute of Standards and Technology
Gaithersburg, MD

Gillian Tully, PhD
Forensic Science Regulator,
UK Home Office
UNITED KINGDOM

Plenary Program Speakers

NCFS Co-Chair

Victor W. Weedn, MD, JD
AAFS President
George Washington University
Department of Forensic Sciences
Washington, DC

Moderator:
John M. Butler, PhD
NIST

Reinout Woittiez, PhD
Netherlands Forensic Institute
NETHERLANDS

NCFS Vice-Chair

NCFS Co-Chair

Reinout Woittiez, PhD
Netherlands Forensic Institute
NETHERLANDS
Talk Planned for AAFS 2016

LW1: Last Word Society
American Academy of Forensic Sciences
Las Vegas, NV (February 25, 2016)

The Best Forensic Scientist
You’ve Never Heard Of

Kristen M. Frederick-Frost, PhD
Robert M. Thompson, BS
John M. Butler, PhD
Dr. Wilmer Souder and the National Bureau of Standards Identification Laboratory (1935)

Photo taken April 11, 1935
(rediscovered August 5, 2015 within National Archives NBS collections)
When no one else can solve a mystery, Government heads put in a call for Dr. Souder

Washington's Detective X

Condensed from This Week Magazine

Emile C. Schurmacher
Biannual Conference to Showcase NIST Research

Previous Meetings:
November 28-30, 2012 at NIST
December 3-4, 2014 at NIST

Next Meeting:
November 8-9, 2016
Gaithersburg, MD


www.nist.gov/forensics

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