

Introduction to the Forensic Toxicology Council and the Scientific Working Group on Toxicology

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NAS Report on Strengthening Forensic Science in the United States.

- Congress called for the creation of an independent forensic science committee at the National Academy of Science (NAS) to identify the needs of the forensic science community
- The project was funded by NIJ (08/2006 through 06/2009)
- A committee was tasked with the following objectives:

NAS Report Commission Directive.

1. Assess the present and future resource needs of the forensic science community
2. Make recommendations for maximizing the use of forensic technologies and techniques to solve crimes
3. Identify potential scientific advances that may assist law enforcement
4. Make recommendations for programs that will increase the number of qualified forensic scientists and medical examiners

NAS Commission Directive.

5. Disseminate best practices and guidelines concerning the collection and analysis of forensic evidence
6. Examine the role of the forensic community in the homeland security mission
7. Examine the interoperability of Automated Fingerprint Information Systems (AFIS)
8. Examine additional issues pertaining to forensic science as determined by the committee

The NAS Report and Toxicology.

- “Although some of the techniques used by the forensic science disciplines—such as DNA analysis, serology, forensic pathology, toxicology, chemical analysis, and digital and multimedia forensics—are built on solid bases of theory and research, many other techniques have been developed heuristically. That is, they are based on observation, experience, and reasoning without an underlying scientific theory, experiments designed to test the uncertainties and reliability of the method, or sufficient data that are collected and analyzed scientifically.”

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- “Wide variability is found across forensic science disciplines not only with regard to techniques and methodologies ... with regard to reliability, error rates, reporting, research foundations, general acceptability, and published material. Some of the disciplines are laboratory based (e.g., nuclear and mitochondrial DNA analysis, toxicology and drug analysis, and analyses of fibers and fire debris)”

The NAS Report and Toxicology.

- “Others are based on expert interpretation of observed patterns (e.g., of fingerprints, writing samples, toolmarks, bite marks, and hairs). The briefings and materials that informed this report illustrate that the level of scientific development and evaluation varies substantially among the forensic science disciplines..”

The NAS Report and Toxicology.

- “In recent years, some judges have struggled to understand increasingly complex scientific evidence. Sophisticated epidemiology and toxicology studies often are introduced in mass tort litigation..”
- “Only one-third have in-house toxicology capabilities to identify drugs present in the deceased that either contributed to or were the primary cause of death.”

NAS Report on Strengthening Forensic Science in the United States.

1. Create a National Institute of Forensic Sciences (NIFS)
2. Standardize terminology and reporting practices
3. Expand research on the accuracy, reliability, and validity of the forensic sciences
4. Remove forensic science services from the administrative control of law enforcement agencies and prosecutors’ offices
5. Support forensic science research on human observer bias and sources of error

NAS Report on Strengthening Forensic Science in the United States.

6. Develop tools for advancing measurement, validation, reliability, information sharing, and proficiency testing and to establish protocols for examinations, methods, and practices.
7. Require the mandatory accreditation of all forensic laboratories and certification for all forensic science practitioners
8. Laboratories should establish routine quality assurance procedures
9. Establish a national code of ethics with a mechanism for enforcement

NAS Report on Strengthening Forensic Science in the United States.

10. Support higher education in the form of forensic science graduate programs, to include scholarships and fellowships
11. Improve the medico-legal death investigation system
12. Support AFIS interoperability through the development of standards
13. Support the use of forensic science in homeland security

Congressional Activity

- Summer of 2009, the Senate Judiciary Committee begins meetings and hearings.
- The White House Office of Science and Technology Policy (OSTP) convenes a committee and proposes Intergovernmental Working Groups.
- Testimony has been received from the CFSO, The NDAA, NACDL, The Innocence Project, and others.

CFSO

- Represents seven forensic science professional organizations:
- AAFS
- ASCLD
- ASCLD-LAB
- FQS-I
- IAI
- SOFT/ABFT
- NAME



CFSO

• The mission of the CFSO is to speak with a single forensic science voice in matters of mutual interest to its member organizations, to influence public policy at the national level and to make a compelling case for greater federal funding for public crime laboratories and medical examiner offices. The primary focus of the CFSO is local, state and national policymakers, as well as the United States Congress.



The Formation of the FTC

- “The purpose of the FTC is to monitor congressional and legislative activity on policies that would impact forensic toxicology, to ensure that our CFSO representatives have support for providing congress with reliable information on which to base policy, and to promote activities that support and benefit all the organizations and the discipline of forensic toxicology as a whole”.



Membership of the FTC

AAFS:

- Ranking AAFS Board Member
- Section Chair
- Section Secretary



SOFT:

- President
- Vice President
- CFSO Representative



ABFT:

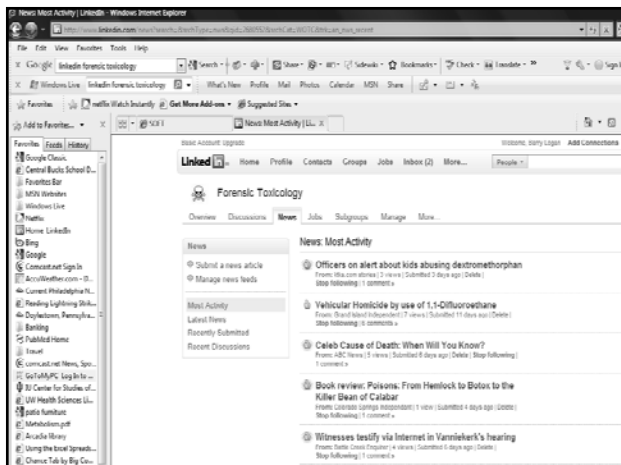
- President
- Secretary
- CFSO Representative



SWG-TOX Co-chairs are Ad Hoc members

Activities of the FTC

- Support and inform the toxicology representatives to CFSO, through regular meetings.
- Update the SWG-TOX chairs on the areas of interest of Congressional and White House committees.
- Identify opportunities through its member organizations to promote Forensic Toxicology.
- Promote Educational and Policy initiatives through SOFT, AAFS, and ABFT consistent with the NAS report and follow up.
- Keep the Forensic Toxicology Community informed about regulatory activities and issues affecting our profession.



The FTC and SWG-TOX.

- FTC is the Sponsoring Organization of SWG-TOX
- FTC appoints Co-Chairs of SWG-TOX
- FTC solicits financial sponsorship for activities of SWG-TOX
- FTC Promotes SWG-TOX as the authority on technical issues in forensic toxicology.
- FTC Provides guidance to SWG-TOX on policy priorities and areas of guidance needed for Congress and other policy makers.

The FTC and SWG-TOX.

- The SWG-TOX Chairs are autonomous in their appointments of SWG-TOX members, and advisers.
- SWG-TOX committees are working in developing policies and programs in the areas of:
 - *Standards and practice;*
 - *Education and training;*
 - *Certification and accreditation;*
 - *Validation and Ethics.*

Questions?