



NIST
National Institute of
Standards and Technology
U.S. Department of Commerce

<http://nist.gov/osac>

NIST OSAC CSI Subcommittee Update

**Michael P. Kessler, Vice-Chair CSI Subcommittee
Scientific Project Manager**

FIU | National Forensic
Science Technology
Center
FLORIDA INTERNATIONAL UNIVERSITY



2009
**National Academy
of Science Report**

*Strengthening Forensic Science
in the United States: A Path
Forward*


STRENGTHENING
**FORENSIC
SCIENCE**
IN THE UNITED STATES


A PATH FORWARD

NATIONAL RESEARCH COUNCIL
OF THE NATIONAL ACADEMIES

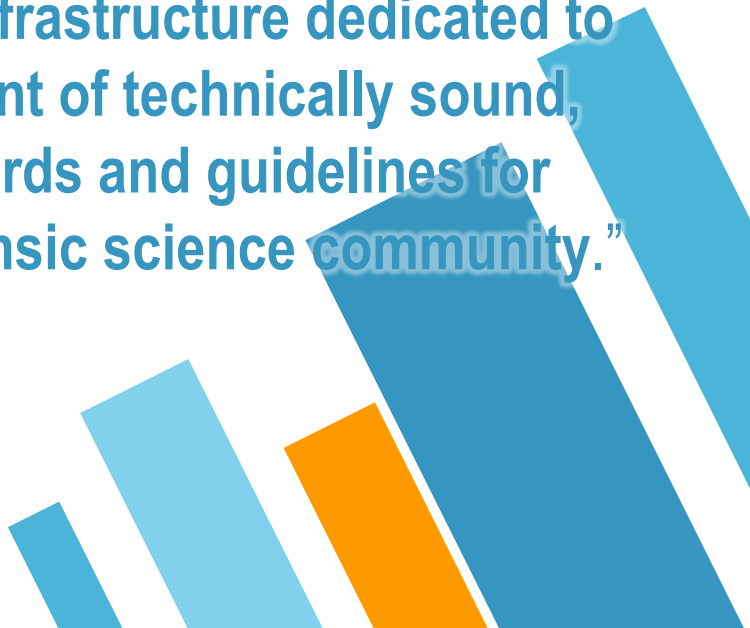


GOALS OF OSAC IN FORENSIC SCIENCE

- » OSAC is a result of the 2009 NAS Report
 - » Joint project of DOJ and NIST to encourage consensus standards in forensic science
 - » Registry of Forensic Science Standards & Guidelines
 - » Identify research needs
- 

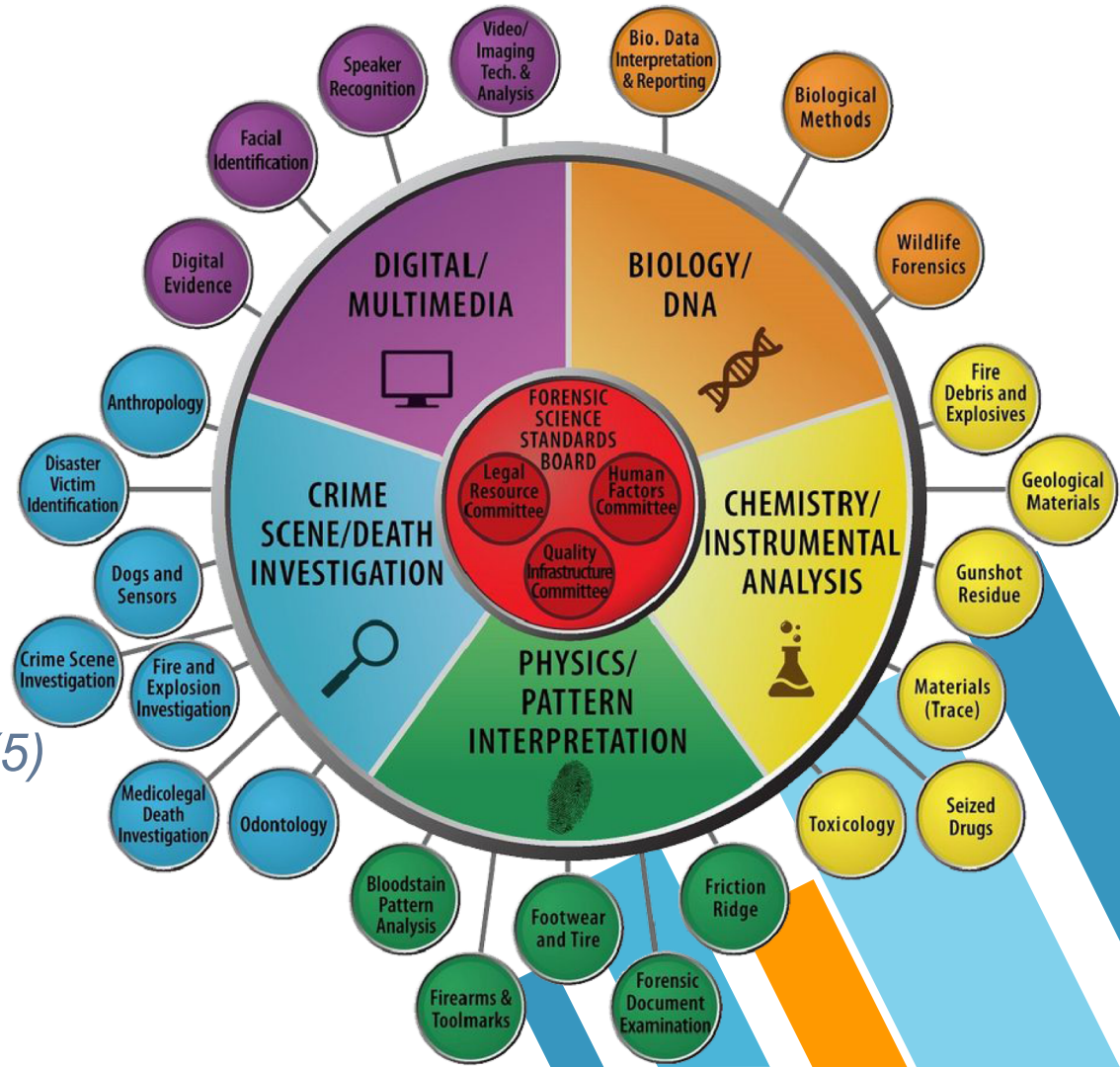


“To create a sustainable organizational infrastructure dedicated to identifying and fostering the development of technically sound, consensus-based documentary standards and guidelines for widespread adoption throughout the forensic science community.”



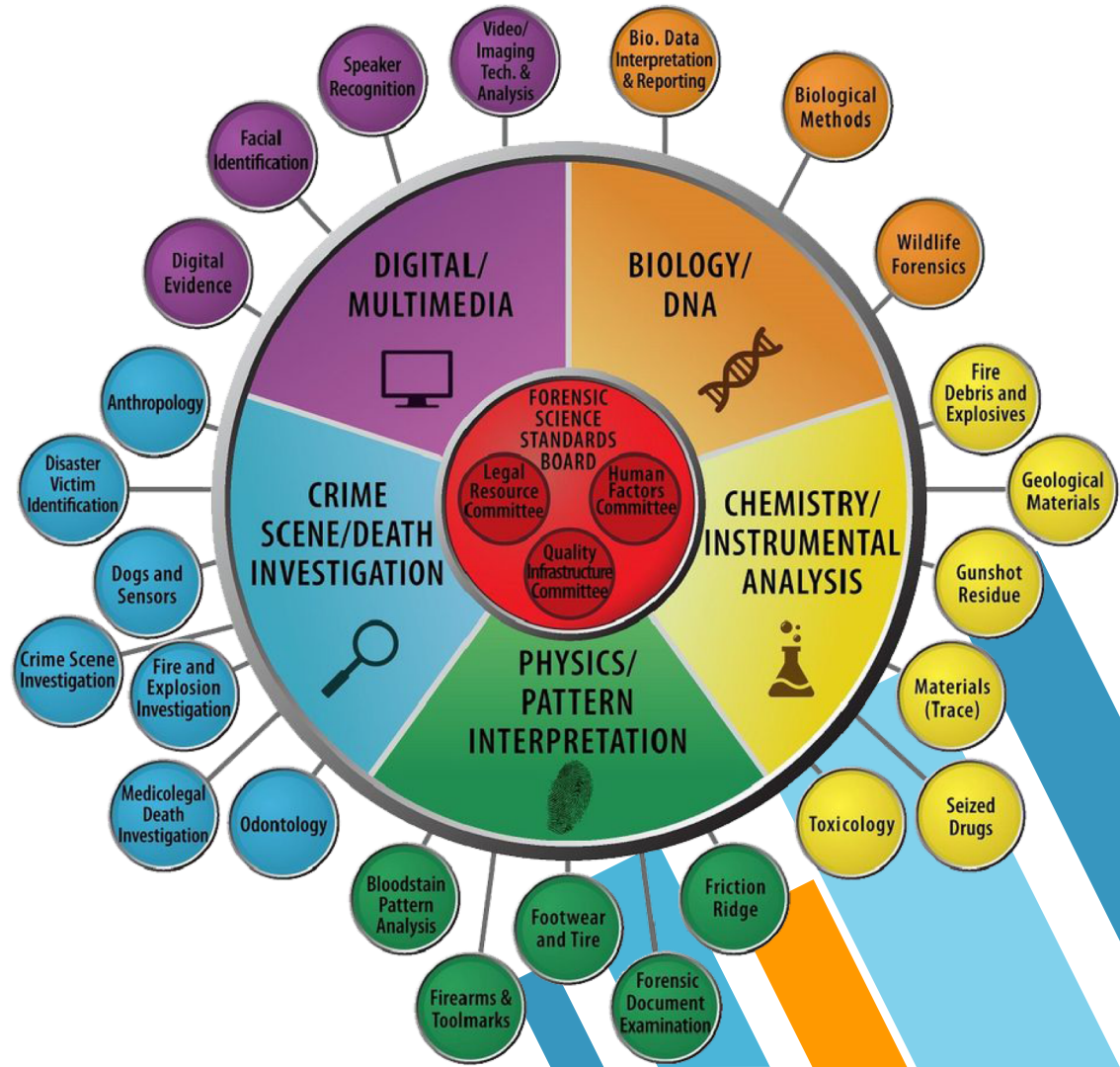
OSAC STRUCTURE

- » *Forensic Science Standards Board*
- » *Resource Committees (3)*
- » *Scientific Area Committees (5)*
- » *Subcommittees (25)*
- » *Task Groups*

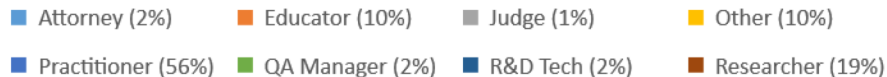


OSAC CORE PRINCIPLES

- » *Openness*
- » *Balance*
- » *Consensus*
- » *Harmonization*



OSAC MEMBER CURRENT JOB CLASSIFICATION



OSAC SNAPSHOT February 2017

Makeup

565 Members

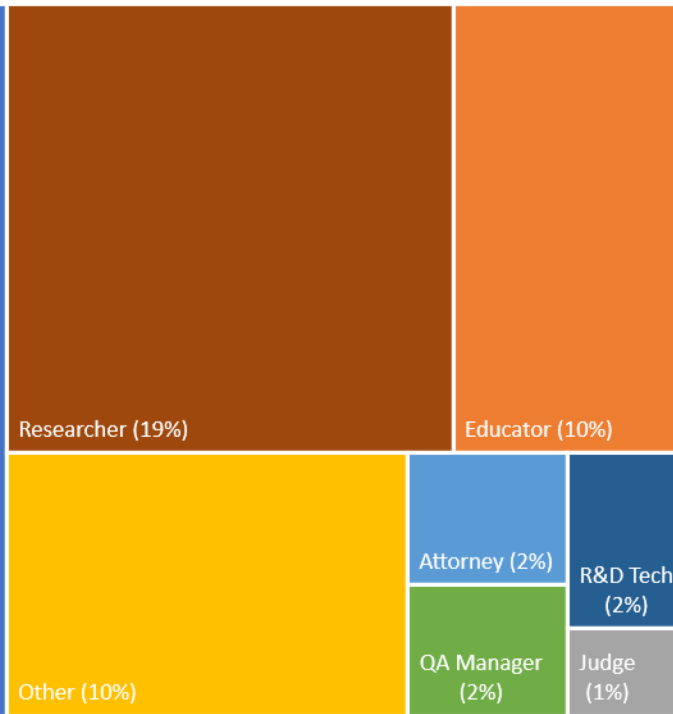
266 Affiliates

50 States represented

239 Task groups

2,470 Applications

Practitioner (56%)





WHAT OSAC REALLY DOES

- » Evaluates existing standards published by SDOs for placement on the OSAC Registry
- AND**
- » Introduces draft documents into existing SDOs for formal development – drafts go through the SDO's consensus process
- 



OSAC REGISTRY PLACEMENT MEANS

OSAC Registry

Serves as a trusted repository of high-quality, science-based standards and guidelines for forensic practice.

Criteria

Standards and guidelines must have been developed using a **consensus-based process** and must pass OSAC review of **technical merit** by forensic practitioners, academic researchers, statisticians, and measurement scientists.

Endorsement

Elevating a standard to the official OSAC Registry is an endorsement of the high quality of the document and encourages its adoption by all relevant agencies and practitioners.

STANDARDS DEVELOPMENT ORGANIZATIONS

ASB

American Academy of
Forensic Sciences – AAFS
Standards Board

ASTM

International

American Section of the
International Association
for Testing Materials

NFPA

National Fire Protection
Association

ADA

American Dental
Association

NIST

National Institute of
Standards and Technology

ISO

International Organization
for Standardization



OSAC HAS NO AUTHORITY TO ENFORCE STANDARDS

Endorse Standards

OSAC endorses standards and promotes their adoption by forensic science service providers and by accrediting bodies that audit participating agencies for compliance.

Fill the Gap

While accredited forensic service providers are currently audited to general laboratory standards, there are very few discipline-specific standards that the laboratories can be audited against.

Facilitate Development

The ultimate goal of OSAC is to facilitate the development of science-based standards for each of 25 distinct forensic science disciplines and to promote their widespread adoption.



OSAC STANDARDS: IMPLEMENTATION PATHWAYS

Self Adoption

Forensic Services
providers incorporate
OSAC standards in SOPs

Professional Associations

Issue policy statements
encouraging adoption

Criminal Justice (Courts)

Attorneys begin demanding
forensic practitioners use
OSAC standards

Accrediting Bodies

ISO 17025/20
supplemental standards or
checklists

Funding Bodies

Offer funding incentive to
implement standards

Funding Bodies

Require OSAC standards
implementation to access
funding

OSAC NEWSLETTER

Released monthly and includes notification of public comment periods, R&D needs, OSAC vacancies, OSAC meetings, and feature articles.

*Sign Up at
www.nist.gov/osac*



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Feature Article:

OSAC Publishes the Standards/Guidelines Registry Approval Process

One aim of the OSAC is to identify and promote existing technically sound, consensus-based, and fit-for-purpose documentary standards that are based on sound scientific principles. This is achieved through the *OSAC Registry of Approved Standards* and the *OSAC Registry of Approved Guidelines*. A standard or guidelines that is posted on the registry demonstrates that the methods it contains have been judged by forensic practitioners, academic researchers, measurement scientists, and statisticians, to be valid.

Once populated, forensic scientists and practitioners will be able to refer to the *OSAC Registry of Approved Standards* and the *OSAC Registry of Approved Guidelines* for a uniform set of high quality standards on how to produce scientifically sound and statistically valid test results, laboratory results, and courtroom testimony. These standards should help to increase confidence in the criminal justice system and the testimony put forth by practitioners.



The OSAC has recently developed and launched the *OSAC Registry Approval Process of Published Standards and Guidelines*, which is a rigorous process that includes checklist criteria against which existing standards and guidelines are to be analyzed before they are posted to the registries. This includes an analysis of technical merit, the openness of the development process (to ensure balanced interests are represented), consensus,

... Continued page 4



OSAC ANNUAL REPORT

*Summary of OSAC activities from
February 2016 to February 2017
including OSAC unit profiles.*

*Available at
[https://www.nist.gov/sites/default/
files/documents/2018/01/11/osac
_annual_report_2017.pdf](https://www.nist.gov/sites/default/files/documents/2018/01/11/osac_annual_report_2017.pdf)*

OSAC Technical Series 0001



**Annual Report
February 2016 – February 2017**

Annual Report Working Group
Organization of Scientific Area Committees for Forensic Science (OSAC)

<http://dx.doi.org/10.29325/OSAC.TS.0001>





LEXICON

» OSAC has created a lexicon of over 4,000 terms organized by forensic discipline. New terms will be added, revised or removed, as sources are verified and as new standards are published.

» <https://lexicon.forensicosac.org/>

Crime Scene/Death Investigation SAC

*Consists of seven
subcommittees.*





**Crime Scene
Investigation**

CSI

SUBCOMMITTEE

<https://www.nist.gov/topics/forensic-science/crime-scene-investigation-subcommittee>



CSI

Subcommittee

16 Subject Matter Experts

- » Crime Scene Investigators
- » Sexual Assault Nurse Examiners
- » CSI/Trace Examiners
- » Laboratory Managers
- » Firearms Examiner
- » Academic Researchers
- » Independent Practitioners
- » R&D/Industry Representatives






CSI Subcommittee Officers

- » **Adam Becnel**, Chair, Louisiana State Police
 - » **Michael P. Kessler**, Vice Chair, NFSTC@FIU
 - » **Kimberlee Sue Moran**, Executive Secretary, Rutgers University
- 




CSI Subcommittee Members

- » **Charles DeFrance**, Federal Bureau of Investigation
 - » **Teresa Devitt-Lynch**, Intrepid Forensics
 - » **Karen Green**, Green Forensics, Inc.
 - » **Michael Haag**, Albuquerque Police Department Crime Laboratory
 - » **Guy Nutter**, Michigan State Police Forensic Science Division
 - » **Christine Pinto**, Los Angeles County Sheriff's Department
 - » **Ryan Rezzelle**, Leica Geosystems
 - » **Kim Shapiro**, San Bernardino County Sheriff Scientific Invest. Div.
 - » **Joyce Williams**, Stevenson University
 - » **Troy E. Wilson**, Texas Dept. of Public Safety – Texas Rangers
 - » **Neil Zielinski**, Palm Beach County Sheriff's Office
 - » **2 Vacancies**, pending appointment
- 




PRIORITIES

- » Education, Credentials, Training
 - » Crime Scene Administration-report writing, evidence testing requests, data management, etc.
 - » Human Factors/Contextual Bias-detective v crime scene investigator, hospital/nurse
 - » On Scene Activities-response, safety, documentation, evidence search, packaging/collection, final considerations
 - » Crime Scene Reconstruction
 - » Specialty Areas of Crime Scene Investigation
- 



RESEARCH & DEVELOPMENT NEEDS

- » Assessing the Culture of Contextual Bias in Forensic Scene Evidence Collection, Handling, and Processing
 - » Assessment of Level of Personal Protective Equipment (PPE) Required at Crime Scenes
 - » Crime Scene Research: Creation of a Centralized Searchable Database
 - » Decontamination of Crime Scene Equipment
 - » Laboratory Techniques and Technologies at the Crime Scene
 - » Use of Technology for Crime Scene Documentation
 - ◇ <https://www.nist.gov/topics/forensic-science/osac-research-development-needs>
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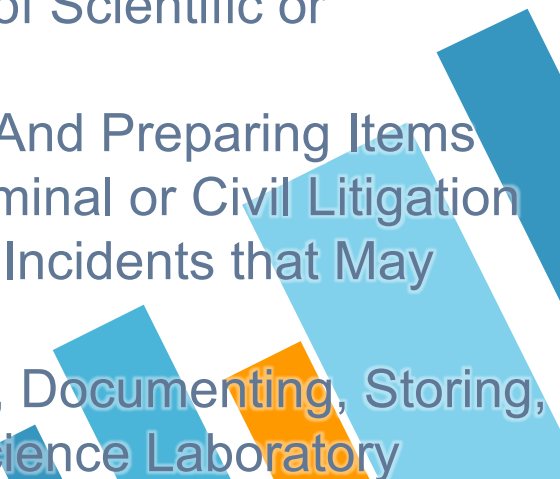


STANDARDS IN DEVELOPMENT

- » Standard Practice for Crime Scene Investigator Training, Continuing Education, Professional Development, Certification, and Accreditation (Submitted to Crime Scene & Death Investigation SAC)
 - » Shooting Reconstruction Task Group
 - » Sexual Assault Investigation Task Group
- 




EXISTING ASTM STANDARDS UNDER CONSIDERATION


- » E620 – Standard Practice for Reporting Opinions of Scientific or Technical Experts
 - » E678 – Standard Practice for Evaluation of Scientific or Technical Data
 - » E860 – Standard Practice for Examining And Preparing Items That Are Or May Become Involved In Criminal or Civil Litigation
 - » E1020 – Standard Practice for Reporting Incidents that May Involve Criminal or Civil Litigation
 - » E1492 – Standard Practice for Receiving, Documenting, Storing, and Retrieving Evidence in a Forensic Science Laboratory
- 



EXISTING ASTM STANDARDS UNDER CONSIDERATION

continued

- » E1188 – Standard Practice for Collection and Preservation of Information and Physical Items by a Technical Investigator
 - » E1492 – Standard Practice for Receiving, Documenting, Storing, and Retrieving Evidence in a Forensic Science Laboratory
 - » E1459 – Standard Guide for Physical Evidence Labeling and Related Documentation
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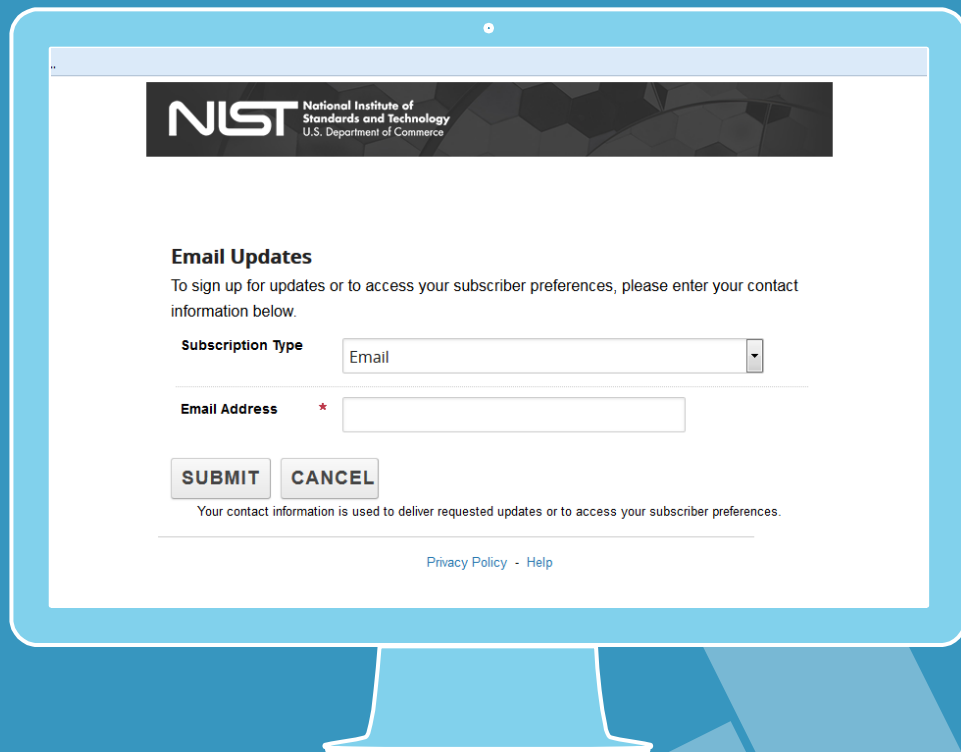


“Laboratory accreditation and individual certification of forensic science professionals should be *mandatory*, and all forensic science professionals should have access to a certification process.”

STAY INFORMED

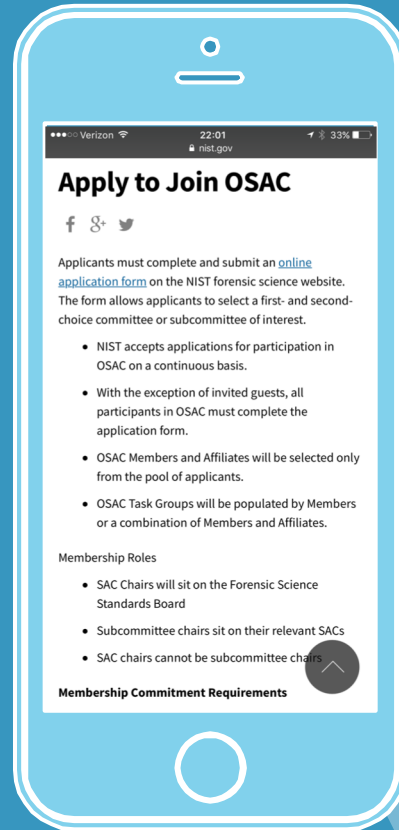
<https://www.nist.gov/topics/forensic-science>

FOLLOW FORENSIC SCIENCE
AT NIST

A screenshot of a web browser displaying the NIST email update form. The browser's address bar is empty. The page header features the NIST logo and the text "National Institute of Standards and Technology, U.S. Department of Commerce". The main content area is titled "Email Updates" and includes a sub-header: "To sign up for updates or to access your subscriber preferences, please enter your contact information below." The form contains two input fields: "Subscription Type" with a dropdown menu currently set to "Email", and "Email Address" with a red asterisk indicating a required field. Below the fields are two buttons: "SUBMIT" and "CANCEL". A small disclaimer states: "Your contact information is used to deliver requested updates or to access your subscriber preferences." At the bottom right of the form area, there are links for "Privacy Policy" and "Help".

TO APPLY

www.nist.gov/topics/forensic-science/osac-application





THANKS!

Any questions?

You can find me at

» mkessler@fiu.edu

Web addresses

To apply


» www.nist.gov/topics/forensic-science/osac-application

Research & Development Needs

» <https://www.nist.gov/topics/forensic-science/osac-research-development-needs>

Stay informed

» <https://www.nist.gov/topics/forensic-science>



FOLLOW FORENSIC SCIENCE
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