

AMERICAN ACADEMY OF FORENSIC SCIENCES

Marshall University Forensic Science Presentations

Seattle, WA, February 17-22, 2014

The AAFS

For sixty-six years, the American Academy of Forensic Sciences (AAFS) has served a distinguished and diverse membership. Its 6,653 members are divided into eleven sections spanning the forensic enterprise. Included among the Academy's members are physicians, attorneys, dentists, toxicologists, physical anthropologists, document examiners, digital evidence experts, psychiatrists, engineers, physicists, chemists, criminalists, educators, and others. Representing all 50 United States, Canada, and 6R other countries worldwide, they actively practice forensic science and, in many cases, teach and conduct research in the field as well. Each section provides opportunities for professional development, personal contacts, awards, and recognition. Many sections publish periodic newsletters and mailings which keep their members abreast of activities and developments in their fields.

As a professional society dedicated to the application of science to the law, the AAFS is committed to the promotion of education and the elevation of accuracy, precision, and specificity in the forensic sciences. It does so via the *Journal of Forensic Sciences* (its internationally recognized scientific journal), newsletters, its annual scientific meeting, the conduct of seminars and meetings, and the initiation of actions and reactions to various issues of concern. For its members and affiliates, AAFS provides placement services as well as scientific reference studies. As the world's most prestigious forensic science organization, the AAFS represents its membership to the public and serves as the focal point for public information concerning the forensic science profession. Founded in 1948, the AAFS is headquartered in Colorado Springs, CO.

The AAFS Annual Meeting

Each February, the AAFS scientific meeting gathers together approximately 4,000 world-renowned professionals to present the most current information, research, and updates in their fields. More than 900 scientific papers, seminars, workshops, and other special sessions are presented. In addition, approximately 166 exhibitors will be present to showcase the cutting-edge technology and services of this ever-changing profession. The AAFS 66th Annual Scientific Meeting will be held in Seattle, WA, February 17-22, 2014.

Key

Green indicates “Marshall”

* indicates presenter

** indicates Agency Affiliate

** indicates Forensic Science Graduate/Alumnus

WORKSHOPS

Tuesday February 18th

Effective Curricular Design and Improvement for Forensic Science Educational Programs

8:45 a.m. - 9:00 a.m.

Interactive Exercise

Catherine G. Rushton, MS

10:45 a.m. - 11:15 a.m.

Course Design

Catherine G. Rushton, MS

2:15 p.m. - 3:15 p.m.

Evaluation and Survey Research as Assessment Tools

Catherine G. Rushton, MS

4:45 p.m. - 5:00 p.m.

Crime Scene House: Improving Your Program and Community Ties

Pamela J. Staton, PhD; Dennis J. DeLuca, PhD

5:00 p.m. - 5:30 p.m.

Merits of a Professional Doctorate Degree in Forensic Science

Barry K. Logan, PhD; Pamela J. Staton, PhD; Lawrence Quarino, PhD

Novel Psychoactive Substances (NPS): Pharmacology, Toxicology, and Case Reports

11:00 a.m. - 11:30 a.m.

“Bath Salts:” Cathinones and Related Toxicology

Lauren L Richards-Waugh, PhD

SCIENTIFIC SESSION PRESENTATIONS

Thursday February 20th

11:25 a.m. - 11:45 a.m.

B12

Forensic Analysis of Data Transience Applications in iOS® and Android™

*Cindy Wu, BS**; *Chris Vance, BS***; *Robert J. Boggs***; *Terry Fenger, PhD*

*** West Virginia State Police*

11:30 a.m. - 11:45 a.m.

A95

The Simultaneous Development of Latent Prints on the Adhesive and Non-Adhesive Sides of Tape Using a Rhodamine 6G in Tween 20 Solution After Cyanoacrylate Fuming

*Aldo Maldonado**; *Stephen C. King***; *Catherine G. Rushton, MS*

*** West Virginia State Police*

3:10 p.m. - 3:25 p.m.

A104

Development of an Expert System for Classifying Ignitable Liquid Residues in Fire Debris by ASTM E1618

*J. Graham Rankin, PhD**; *Katelyn Timmons***; *David Eckre, MS***; *Kelsey L. Rusbarsky, MS***; *Nicholas D. Petraco, PhD*

*** Marshall University MSFS Student*

*** Marshall University Alumnus – Texas Department of Public Safety Crime Laboratory*

*** Marshall University Alumnus – Iowa Division of Criminal Investigation Criminalistics Laboratory*

4:00 p.m. - 4:15 p.m.

A82

Predicting the Quality of DNA Profiles Through the Evaluation of the ParaDNA® Screening Instrument

*Miranda Aufiero, BS**; *Julie Conover Sikorsky, MS***; *Amy McGuckian, MSFS*; *Stacey K. Anderson, MFS*; *Pamela J. Staton, PhD*

*** Marshall Forensic Science Alumnus- Palm Beach Sheriff's Office, West Palm Beach, FL*

SCIENTIFIC SESSION MODERATORS

Thursday February 20

1:00 p.m. – 2:30 p.m.

A72-A76

More Challenging Samples

Pamela J. Staton, Ph.D.

Friday February 21

10:35 a.m. – 12:35 p.m.

B31-B36

General Digital & Multimedia Forensics II

*John E. Sammons, M.S.***

***Marshall Integrated Science & Technology*

POSTER SESSION

Wednesday February 19th

11:30 a.m. - 1:00 p.m.

A6

Optimization of Development of Latent Fingerprints on Unfired and Fired Brass Cartridge Casings

*Katie Sullivan**; *Kimberly Gerhardt, MS***; *Catherine G. Rushton, MS*; *Pamela J. Staton, PhD*

*** Marshall University Alumnus- Rapid City Police Department Crime Scene Unit*

11:30 a.m. - 1:00 p.m.

A15

Detection of URB Series Synthetic Cannabinoids

*Jennifer Sulcebarger**; *Lauren McCormick***; *J. Graham Rankin, PhD*

***Kentucky State Police Crime Laboratory*

11:30 a.m. - 1:00 p.m.

A19

GC/MS and GC/IR Analysis of Methcathinone Analogs

*James Z. Dawson**; *Carrie I. Ozalas, BS***; *Lauren L. Richards-Waugh, PhD*; *Pamela J. Staton, PhD*

*** West Virginia State Police*

11:30 a.m. - 1:00 p.m.

A20

Development of an Identification and Derivatization Method for Synthetic Cathinones by GC/MS Using Perfluoroacyl Anhydrides

*Michelle Ball**; *Carolyn Trader, MS***; *Larry G. Boggs, BS***; *J. Graham Rankin, PhD*; *Lauren L. Richards-Waugh, PhD*

*** Marshall University Alumnus – Kentucky State Police Crime Laboratory*

*** Kentucky State Police Crime Laboratory*

11:30 a.m. - 1:00 p.m.

A22

Mobile Crime Scene Applications: An Evaluation of Their Use and Future Direction

Nadine J. Borovicka, MS; *Catherine G. Rushton, MS*; *Pamela J. Staton, PhD*; *Miranda L. Davis**; *Dave Castle, BS***

*** Huntington Police Department Crime Scene Unit*

11:30 a.m. - 1:00 p.m.

D1

Evaluation of Alumni Contact in Forensic Science Programs

*Catherine G. Rushton, MS**

11:30 a.m. - 1:00 p.m.

D34

Analysis of Cyanoacrylate Fumigation's Effects on the FTIR Classification and Comparison of Polymers

*Andre R. Velez, BS**; *Micheal A. Villarreal, BA***; *Candice Bridge, PhD***

*** U.S. Army Criminal Investigation Laboratory*

Thursday February 20th

11:30 a.m. - 1:00 p.m.

A59

**Internal Validation of the Promega PowerPlex® Fusion System Using the Applied Biosystems®
3130xl Genetic Analyzer**

*Roy Al Ahmar, BS**; *Joshua Stewart, MSFS*; *Jason Chute, MSFS*; *Pamela J. Staton, PhD*

ALUMNI RECEPTION

Wednesday February 19th

7:00 p.m. – 9:00 p.m.

Marshall University Forensic Science Alumni Reception

Location: Sheraton Madrona

~Light Refreshments~