




Think Tank on the Leading Edge of Forensic Science

2/18/2020 American Academy of Forensic Science, Anaheim, CA

Chair: Dr. Laura Liptai, Biomedical Engineering, Mechanism and Causation of Trauma


Co-Chair: Dr. Zeno Geradts, Digital and Biometric Traces, University of Amsterdam

Think Tank Chair – Specialty BioMedical Engineering: Mechanism and Causation of Trauma




Laura L. Liptai, PhD BioMedical Engineering PhD, MS; Mech Eng, BS
VSTG Professor University of California at Davis 2016-2019
President of the International Board of Forensic Engineering Sciences
Past Board Member: University of California, Davis BME, AAFS; SFES Past President
AAFS Reference Series Editor 2011, 2012 and 2013

Managing R&D in a Forensic Lab in a Fast-Changing World




Dr. Annemieke de Vries is the Director of Science and Technology at the Netherlands Forensic Institute (NFI) of the Ministry of Justice and Security in the Netherlands since 2018. At present, she is the acting Managing Director at the NFI. Dr. De Vries has a history of working in (inter)national academic research, and is skilled in molecular biology, specifically in new genetic and omics technologies. For the last 15 years, she fulfilled several management positions within the government.

Emerging Drug Threats and Drug Intelligence




Dr. Jeri Roper Miller is the Acting Director and Chief Scientist for RTI International's Applied Justice Research Division. She is a Board-certified Forensic Toxicologist with Diplomate status on the American Board of Forensic Toxicology (F-ABFT). She has more than 20 years of experience conducting research, training, technology transfer, and evaluations in forensic science and criminal justice.

Example of Bayesian Approach in Forensic Reports



Dr. Ivo B. Alberink, PhD, Scientific Researcher in Forensic Science at the Netherlands Forensic Institute. Dr. Alberink advises and performs investigations on cases that have a statistical component. His research interests are in quantification of uncertainty in biometrics and chemical casework, and general application of the likelihood ratio framework for evaluation of forensic evidence.

Technology Rules OK?



Sheila Willis, B.Sc. M.Sc. (Mgt) Ph.D. is former Director General of Forensic Science Ireland and now a guest researcher at National Academy of Standards and Technology (NIST), Gaithersburg, Maryland, USA. She is particularly interested in the interpretation of evidence and proud of her connection with the ENFSI guideline on Evaluative Reporting.

Most Important Legal Technology Developments in 2019-20



Judge Stephanie Domitrovich, Ph.D., J.D. is a state trial judge for 30 years in Erie County, PA. She is Chair of Forensic Science Committee of Judicial Division of American Bar Association. She serves as a Public Director for Forensic Specialties Accreditation Board Inc. (FSAB). She is an affiliate with Organization of Scientific Area Committees for Forensic Science (OSAC) on Speaker Recognition regarding validity of voice data. She is Past Chair of Jurisprudence Section of American Academy of Forensic Sciences (wherein she is a Fellow).



Aquatic Death/Abuse Investigations Need to Stop Breaking Basic Scene Investigation Standards and Need to Have Specialized Training

Andrea Zaferes, a medicolegal death investigator, works on aquatic death cases from the scene to the courtroom. She trains law enforcement, medical examiners, coroners, and jurisprudence members to recognize, document, investigate, and prosecute aquatic homicide, death, assault, and abuse cases. and has developed standards for their investigation.



New Developments in Forensic Analytical Chemistry

Prof. Arian van Asten has been appointed professor of Forensic Analytical Chemistry and On-Scene Chemical Analysis at the University of Amsterdam's (UvA) Faculty of Science. The chair was established on behalf of the Netherlands Forensic Institute (NFI). Arian van Asten focuses on developing methods for forensic chemical identification and for the chemical characterization of evidence.



Integrating Robotics into Forensics

Dr. Kevin W.P. Miller, MS, PhD, Senior Market Segment Leader, Government | Regulated Laboratories. Dr. Miller is the Senior Market Segment Leader for Government and Regulated Laboratories at Hamilton Company in Reno, NV, where he provides thought leadership towards automated solutions throughout all aspects of the forensic market.



Veterinary Forensics

Dr. Martha Smith-Blackmore, DVM, President of Forensic Veterinary Investigations, LLC, Adjunct Professor Cummings School of Veterinary Medicine at Tufts University, founding board member of the International Veterinary Forensic Sciences Association (IVFSA). Dr. Smith-Blackmore has been assisting law enforcement with investigations into questioned animal injuries and deaths since 1997.



Think Tank Co-Chair with the Presidential Closing Remarks – Forensic Digital Biometrics/Big Data

Dr. Zeno Geradts is a senior forensic scientist at the Netherlands Forensic Institute of the Ministry of Security and Justice at the Forensic Digital Biometrics Traces department in the area of forensic (video) image processing and biometrics. His specialties are program manager big data and cyber forensics, forensic ict, digital evidence and multimedia, face comparison, biometrics, video analysis, R&D coordination.