

AMERICAN SOCIETY OF TRACE EXAMINERS

AND

SOUTHERN ASSOCIATION OF
FORENSIC SCIENTISTS
JOINT MEETING 2019
ASHEVILLE, NC



City of Asheville
Office of the Mayor

P.O. Box 7148 Asheville, NC 28802 Phone: (828) 259-5600 www.ashevillenc.gov

April 1, 2019

Welcome to Asheville, American Society of Trace Evidence Examiners and the Southern Association of Forensic Scientists!

Thanks for visiting us! We're glad you are here!

As Mayor I am pleased to extend this official welcome to you on behalf of our citizens. We appreciate your patronage of our local businesses while you are here. Please know that your contribution to our local economy is deeply appreciated. Thank you for choosing to hold your annual meeting in Asheville.

While visiting Asheville I hope that you will find time to enjoy the sights and sounds of our unique mountain town. Asheville has many restaurants serving food grown right here in the mountains, eclectic shops with arts and crafts created by our local artisans, and entertainment venues featuring local and national performers.

Please accept my invitation to visit us again sometime.

Sincerely.

Esther E. Manheimer

Edm E. Holen

Mayor



Hello 2019 SAFS/ASTEE Attendees!

Welcome to the annual Southern Association of Forensic Scientists (SAFS) meeting held in conjunction with the American Society of Trace Evidence Examiners (ASTEE). It is our honor to join together again to offer a number of workshops followed by two days of presentations. These are wonderful opportunities to learn from others, share research results, and stimulate new ideas. I hope you can take advantage of Wednesday night's vendor reception, ASTEE's reception afterwards, and the banquet on Thursday night for networking and continued dialogue.

This is an exciting year for ASTEE as it marks the 10 year anniversary of our founding. ASTEE is significantly younger in comparison to SAFS, one of the oldest of the regional forensic scientist associations with a history dating back at least 53 years. As we reflect on the last 10 years of progress for not only ASTEE, but for trace evidence examiners and forensic science in general, we can see advances in practice and policy. Now, with nearly 350 passionate members, 11 hardworking committees, and more regular publications, ASTEE as an organization has overcome most of its growing pains. We will continue to seek good influences and models, such as SAFS, as we pursue continual improvement and development.

Join me in learning from colleagues and celebrating our anniversary,

Robyn Weimer President American Society of Trace Evidence Examiners



This will be my last time to WELCOME all of you to the SAFS/ASTEE combined meeting in Asheville, NC. As my term as SAFS President draws to a conclusion, I would like to take a moment to say Thank You to the fabulous people on the SAFS Board of Directors and the Committees. All of you made being the President a smooth commitment. Lastly, I would like to thank all the members of SAFS.

A huge shout-out of gratitude goes to our meeting planners who work tirelessly behind the scenes to bring this meeting to fruition: from idea to reality. Countless hours, determination, ingenuity and a good dose of "get it done" are the ingredients to a meeting's success and all of those ingredients surely are present in this meeting, as you will see as the week unfolds. My apologies to anyone that is not specifically listed, as I do know it DOES take an army of people; please know your contribution is extremely appreciated!

My Thanks to the following people who devoted their time and energy to ensure you have an educational and enjoyable experience this week:

Tiffany Vinson- Program Chair

Kathyrn Harper- Social Chair

Danny Kirkpatrick, Kristen Fripp, Tanja Koop- Your SAFS President-Elect, Secretary and Treasurer

Lynn Black- Drug Chemistry Section Chair

Toni Broome-Toxicology Section Chair

Kelly Brinsko Beckert and Jeffrey Dake- Trace Evidence Section Chairs and Past Presidents of ASTEE

Samantha Chit Khin- DNA Section Chair

Nancy Ludwigsen- Exhibitor Coordinator

Lastly, it is with a heavy heart that I inform the membership we lost one of our treasures. Elizabeth "Beth" Horton passed away on March 25 after a battle against cancer. Beth worked in the Trace Evidence unit at the Georgia Bureau of Investigation until her retirement in 2015 and represented SAFS on the American Board of Criminalistics from 2006 until 2015, as the Member Organization Representative and served as Secretary for this organization as well. Beth, you will be missed but NOT forgotten!

Best Regards,

Desirée A. Reid

President 09/17 to 05/19



ASTEE-SAFS JOINT MEETING 2019 ASHEVILLE, NORTH CAROLINA



Meeting information, including the 2019 Annual Meeting Program, can be found on our website safs1966.org

For your convenience, enclosed you will find a printed agenda and a map of the hotel meeting space.

Inside of your swag bag you will find:

- Tickets for door prizes: winners announced at the vendor reception; you must be present to win
- Discount coupons
- Other goodies including a portal charger, beer stein, Andes candies, lanyard, and notepad.

Inside of your name badge you will find lunch tickets if you have registered for both morning and afternoon workshops on the same day. You will need to turn in the ticket to receive the boxed lunch.

- Pink tickets are for Tuesday lunch
- Orange tickets are for Wednesday lunch

If you have any special dietary needs, please let one of us know as soon as possible.

Please wear your name badge during all meeting events to ensure entry, including the vendor reception, banquet with cocktail hour and hospitality suite.

Workshop and Conference Attendance Certificates will be emailed to after the completion of the conference meeting.

Enjoy your visit to Asheville!

If you need any help or have any questions, please do not hesitate to find a Board Member and they will be happy to assist you.



2019 Meeting Agenda



Monday, April 29, 2019

3:00 p.m. – 6:00 p.m. Laurel Foyer	Registration
6:00 p.m. – 7:00 p.m. Magnolia Room	SAFS Board Meeting
7:00 p.m. – 9:00 p.m.	"Meet and Greet" at Barley's Taproom and Pizzeria 42 Biltomore Ave, Asheville, North Carolina 28801
9:30 p.m. – 11:00 p.m. Thomas Wolfe Parlor Room 220	Hospitality Suite



⁴ 2019 Meeting Agenda



Tuesday, April 30, 2019

7:00 a.m5:00 p.m. Laurel Foyer	Registration (closed from 12:00-1:00pm)
7:00 a.m. – 8:00 a.m. Biltmore Foyer	Breakfast
8:00 a.m5:00 p.m. Foxfire Room Pisgah Room Magnolia Room	Workshops GCMS Fundamentals of Troubleshooting and Maintenance Fentanyl and Other Synthetics: Synthesis, Prevalence, and Unique Trends
Pilot Room	Forensic Wood Examination The Forensic Analyzing of Knots and Ligatures
8:00 a.m12:00 p.m. Blue Ridge Room	Workshops Not Just Surviving the Trial: How to Prepare for and Provide Effective Courtroom Testimony
10:00 a.m10:30 a.m. Biltmore Foyer	Break
12:00 p.m. – 1:00 p.m. Biltmore Foyer	Lunch (on your own – if not taking a full day or two half day workshops)
12:00 p.m5:00 p.m. Blue Ridge Room	Workshops Why Manage Employees When You Can Lead a Team
3:00 p.m3:30 p.m. Biltmore Foyer	Break
8:00 p.m. – 11:00 p.m. Thomas Wolfe Parlor Room 220	Hospitality Suite



2019 Meeting Agenda



Wednesday, May 1, 2019

7:00 a.m5:00 p.m. Laurel Foyer	Registration (closed from 12:00 pm-1:00 pm)
7:00 a.m. – 8:00 a.m. Biltmore Foyer	Breakfast
8:00 a.m. – 5:00 p.m. Magnolia Room Pilot Room Blue Ridge Room	Workshops Forensic Wood Examination The Forensic Analyzing of Knots and Ligatures Emerging Cell Separation Techniques for Sexual Assaults
8:00 a.m12:00 p.m. Foxfire Room I Pisgah Room Foxfire Room II	Workshops Working with Millennials in the #MeToo Age Combining a Theoretical and Practical Approach to Method Development and Validation in a Forensic Drug Chemistry Laboratory LC-TOF/QTOF for Drug Screening Applications in the Toxicology Lab: Theory, Development and Application
10:00 a.m10:30 a.m. Biltmore Foyer	Break
12:00 p.m. – 1:00 p.m. Biltmore Foyer	Lunch (on your own – if not taking a full day or two half day workshops)



2019 Meeting Agenda



1:00 p.m.-5:00 p.m. Pisgah Room Workshops

Forensic Lamp Analysis

Foxfire Room

Comparison of Vapor Phase Infrared and Mass Spectral Methods for the

Identification of Isometric Synthetic Drugs

2:00 p.m. – 6:00 p.m. Dogwood Room **ABC Exam**

3:00 p.m. – 3:30 p.m.

Break

Biltmore Foyer

6:00 p.m. - 8:00 p.m.

Mitchell/Roan Room

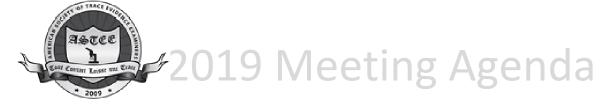
Vendor Reception

8:00 p.m. – 11:00 p.m.

Thomas Wolfe Parlor

Room 220

Hospitality Suite





Thursday, May 2, 2019

7:00 a.m. – 8:00 a.m.	Breakfast
Expo Center	
8:00 a.m. – 12:00 p.m.	Plenary Session
Expo Center	
12:00 p.m. – 2:00 p.m.	Lunch and SAFS Business Meeting
Expo Center	
7:00 p.m10:00 p.m.	Banquet
Expo Center	
10:00 p.m 12:00 a.m.	Hospitality Suite
10:00 p.m 12:00 a.m. Thomas Wolfe Parlor	Hospitality Suite



Friday, May 3, 2019

7:00 a.m. – 8:00 a.m. Pisgah Room **Breakfast**

8:00 a.m.-12:00 p.m. Foxfire Room

Discipline Specific Breakout Sessions Evaluation of the M-Vac as a DNA Collection Method

Jessica McLamb and Mark Kavlick, Counterterrorism and Forensic Science Research Unit, Laboratory Division, Federal Bureau of Investigations Laboratory

Update of the Rapid DNA Program

George Li, Federal Bureau of Investigations Laboratory

Enforcement of HAZMAT Transportation Regulations: Can Trace Evidence Examiners Play a Role?

Vincent Desiderio, United States Postal Inspection Service

Polymeric Evidence-Clear Reporting When Asked "What is This Stuff?"

Andria Mehltretter, Federal Bureau of Investigations

Knot the Brady Bunch

Christina Atrouni, Monroe County Crime Laboratory

You Gotten Be Kitten Me!

Barbara L. Fallon, Federal Bureau of Investigations

Nanoparticles as Trace Evidence

Kelly Brinsko Beckert, Skip Palenik, and Christopher Palenik, Microtrace, LLC.



ASTEE-SAFS ANNUAL MEETING 2019 ASHEVILLE, NORTH CAROLINA PLENARY SESSION



"The Caylee Anthony Investigation" Lieutenant Yuri Melich

Lieutenant Yuri Melich of the Orange County Sheriff's Office was the lead investigator into the 2008 disappearance and murder of 2 ½ year old Caylee Anthony, in Orlando Florida. Investigators from several agencies spent just under three years working this case to its ultimate conclusion in one of Florida's highest profile and most media covered cases in recent history. This complex and bizarre case captured the nation's attention and continues to draw interest from media and law enforcement agencies throughout the nation.

Lieutenant Melich has been in law enforcement for 22 years, eighteen of which with the Orange County Sheriff's Office. Throughout his career, he has had the opportunity to work in several specialty and investigative units to include Homicide, Missing Persons/Child Abuse, Property, and Professional Standards. He is currently assigned to the Training Section.



ASTEE-SAFS ANNUAL MEETING 2019

ASHEVILLE, NORTH CAROLINA PRESENTERS' BIOGRAPHIES



TRISENTERS BIOGRAFINES

Tracey Dawson-Cruz, Ph.D. is the Chair and a Professor of the Department of Forensic Science at Virginia Commonwealth University. Dr. Dawson Cruz earned Bachelor's Degrees in Microbiology & Zoology from North Carolina State University and received her Doctorate of Philosophy in Molecular & Cellular Pathology from the University of North Carolina-Chapel Hill, School of Medicine. Dr. Dawson Cruz currently serves as a Professor & Chair of the Department of Forensic Science at Virginia Commonwealth University in Richmond, VA. At VCU, she maintains an active forensic molecular biology research laboratory, teaches courses in forensic DNA analysis, forensic serology, and forensic lab management/professional practices, and serves on many Department & College committees. As Chair, she oversees all fiscal, personnel, and administrative activities of the Department, and serves as the Department's liaison to the Dean's office. From 2005-2015, she also served as the Department's Director of Graduate Studies for the Department of Forensic Science. Additionally, Dr. Dawson Cruz continues to serve the professional community by working as a technical consultant for forensic/human ID laboratories. Prior to her VCU appointment, Dr. Dawson Cruz worked as an Assistant Director and Technical Leader at Fairfax Identity Laboratories, where she oversaw CODIS lab operations and helped to develop DNA testing strategies for high-throughput forensic casework analysis. Further, from 2002-2003, she served as a Visiting Assistant Professor of Forensic Science at George Washington University. Dr. Dawson Cruz is an active member of ASCLD, IAI, IFSG, is a Fellow of the American Academy of Forensic Sciences, and Distinguished Member and Past-President of MAAFS. She also currently serves on the editorial board of the Journal of Forensic Science and as member of the North Carolina State Crime Laboratory Advisory Board. Previously, Dr. Dawson Cruz served two terms as a FEPAC Commissioner. As an academic, Dr. Dawson Cruz has published more than 28 peer-reviewed articles detailing her research efforts and has been awarded ~\$2.3M in external grant funding. During her 19 years in the field, she has overseen the processing of thousands of convicted offender database samples, provided technical support & oversight for hundreds of forensic and relationship testing cases, developed graduatelevel forensic science curricula, and has directly trained more than 40 graduate-level forensic laboratory professionals in her research laboratory.

Andrew S. Cherepon is a licensed Professional Engineer specializing in accident reconstruction and forensic engineering. He holds a Master of Science in Engineering from Purdue University and a Bachelor of Science in Mechanical Engineering, with a Minor in Biomechanics, from the University of Florida. Andrew has investigated over 1,000 incidents and has extensive training in accident reconstruction, forensic engineering, safety engineering, human factors, traffic engineering, and more. He is recognized by the Accreditation Commission for Traffic Accident Reconstruction (ACTAR) and is a Walkway Auditor Certificate Holder (WACH).

Robert Chisnall B.Sc., B.Ed., M.Ed.

* Independent Forensic Knot Consultant and Researcher since 1983 * Member: AAFS, IAI * Author: "The Forensic Analysis of Knots and Ligatures" (2000) * More than 200 domestic and international cases and dozens of court appearances * Ongoing research interests include handedness of knot tiers, mathematical classification of knots, knot strength and security, knot structure and chirality, case data analysis, combinatorics of factor knots, mathematical modelling of knot security, and other topics.

* Previous Courses and Lectures:

Third Annual Ontario Forensic Identification Officer's Seminar:

C. O. Bick College, Scarborough, Ontario, November 4, 1988.

Seventh Annual Advanced Homicide Investigator's Seminar:

Metropolitan Toronto Police Station, Toronto, Ontario, February 9, 1989.

Canadian Identification Society 12th Annual Conference:

Edmonton, Alberta, July 13, 1989.

Advanced Criminal Investigation Training Homicide Module:

Ontario Police College, Aylmer, Ontario, October 3, 1991.

Forensic 310, Trends in Forensic Science - Forensic Analysis of Knots and Ligatures

Trent University, Ontario, Canada, March 2006, January 2007-2012, 2014-2018 MAFS Fall Meeting - Forensic Analysis of Knots and Ligatures

Midwestern Association of Forensic Scientists, Inc., October 12, 2006.

Forensic Analysis of Knots and Ligatures - Five-Day Course

Chemistry and Physics Laboratory, Health Sciences Authority, Singapore, May 19-23, 2014.

Forensic Analysis of Knots and Ligatures, Review - One-Day Course

Chemistry and Physics Laboratory, Health Sciences Authority, Singapore, October 28, 2016.

Dr. C. Randall Clark, Gilliland Professor of Medicinal Chemistry, Harrison School of Pharmacy, Auburn University. Clark received his B.A. in biology and chemistry from Berry College in Rome, Georgia and Ph.D. degree in medicinal chemistry from the University of Mississippi. Professor Clark has conducted extensive research in designer drug characterization, chromatographic techniques, mass spectrometry and isomeric drug synthesis and analysis. He has taught courses in separation science, mass spectrometry, pharmaceutical analysis and drug chemistry at the undergraduate and graduate level for over 40 years. He has presented short courses and lectures to international, federal, state, industrial, and academic institutions. Clark's current research interests are forensic drug chemistry and analytical methods for the differentiation of drug molecules from related regioisomeric substances. He is the author of over 250 scientific publications in the field of drug chemistry and analysis.

Amy Curtis has been Counsel for the Virginia Department of Forensic Science since December 2014. As Department Counsel, she advises the Department on non-litigation issues, including regulatory law, procurement, employment law, court orders, FOIA responses, and subpoena *duces tecum* responses. She acts as the Department's liaison to local and state law enforcement agencies, the courts, the Office of the Attorney General, state and federal prosecutors, criminal defense attorneys and civil attorneys. Amy assists the Director and Chief Deputy Director with the Department's Forensic Science Board and Scientific Advisory Committee. She is the Department's regulatory coordinator, drafting regulations and advising on their promulgation, and assists the Chief Deputy Director with legislative matters by advising on proposed legislation affecting the Department. Amy provides training and legal updates to the Department's personnel, the Forensic Science Academy, and agencies serviced by the Department. Amy was previously a prosecutor in Henrico County for 12 years, handling cases ranging from contested traffic matters to homicides. Prior to that, she was an associate in a Chesterfield law firm for 7 years in general practice, handling mostly criminal and family law matters.

She is a graduate of James Madison University with a B.S. in Political Science and a 1995 graduate of the T.C Williams School of Law at the University of Richmond. For 16 years, Amy taught legal research, family law, investigations and criminal law to paralegal students as an adjunct faculty member for the School of Professional and Continuing Studies at the University of Richmond.

Andrea Headrick F-ABC, Chemistry Discipline Chief, Alabama Department of Forensic Sciences, has been with the Alabama Department of Forensic Sciences since 2000. She holds a Bachelors of Science degree from Auburn University and has successfully completed all requirements for certification as a Fellow of the American Board of Criminalistics in the General Criminalistics specialty area. She became the Chemistry Discipline Chief for the Department in December 2009 where she was made responsible for technical operations within the Drug Chemistry and Fire Debris Disciplines. Prior to becoming the Chemistry Discipline Chief, she served as the Assistant Drug Chemistry Section Chief of the Birmingham Regional Laboratory.

Tara Hetzel is the General Counsel for the Alabama State Personnel Department. Prior to joining the State Personnel Department, Tara was with the Alabama Department of Corrections, Legal Division. Before joining State service, she was employed at Prestwood and Associates, which specialized in employment law. Before beginning her legal career, Tara taught mathematics in Chilton and Elmore counties. Tara graduated from the University of Mobile with a B.S. in Mathematics and History. She has a M. Ed. in the areas of Mathematics and History from the University of Montevallo

and J.D. from the Jones School of Law.

Dr. Jason Hudson, **PH.D.**, **F-ABFT** is employed as the Forensic Toxicology Section Chief at the Alabama Department of Forensic Sciences, Birmingham Laboratory. He holds a Bachelor of Science in Forensic Chemistry from the University of Mississippi, a Master's degree in Chemistry, and a Ph.D. in Chemistry and Biophysical Chemistry from the University of Alabama at Birmingham. He is certified as a Fellow with The American Board of Forensic Toxicology and a member of The Society of Forensic Toxicologists (SOFT) and The International Association of Chemical Testing (IACT). His responsibilities as the Toxicology Section Chief include managing the scientific staff, reporting and reviewing analytical data, serving as an expert witness in court proceedings, and conducting research and development on QQQ and QTOF instrumentation.

During his graduate studies he conducted drug development research that was focused on the interaction of small molecules, derived from natural products, with DNA and proteins for the prevention and treatment of cancer. After receiving his Ph.D., he accepted employment as a Forensic Toxicologist at the Virginia Department of Forensic Science in Richmond, VA. There he conducted analysis of biological specimens for the presence of drugs and alcohol, carried out method development and validation for LC-MSMS instrumentation, conducted data technical reviews, prepared certificates of analysis, and testified in court as an expert witness approximately 220 times.

Kirk E. Lokits, Agilent Technologies, GCMS Applications Scientist

Kirk received his B.S. in Forensic Science and Chemistry under Dr. Robert Fraas from Eastern Kentucky University in 1983 and began working as a Forensic Drug Chemist in the Miami Valley Regional Crime Laboratory in Dayton, Ohio. In 1985 he moved his family to Orlando, Florida where he worked as a Forensic Toxicologist for the Florida Department of Law Enforcement in the Orlando Regional Crime Laboratory. In 1987 Kirk became the Crime Analyst Supervisor in the Pensacola Regional Crime Laboratory and started Toxicology services for the Florida panhandle. In January 1990 Kirk left the forensic realm and began his tenure with Hewlett Packard/Agilent Technologies, working as a Customer Service Engineer (CE) supporting the LC, GC, LCMS, GCMS, and ICPMS products. In 2003, Kirk earned his M.S. in Chemistry from Middle Tennessee State University, under Dr. Gale Clark, working on *Alternative Approaches in* the Analysis of Flammable Compounds Using Atomic Emission Detection, SPME, and Fast Chromatography. In 2005 Kirk left Agilent Technologies to attend the University of Cincinnati and earned his Ph.D. in Analytical Chemistry under Dr. Joseph Caruso, where he worked with Interfacing Conventional and Capillary LC Flow to Argon Plasma: Developing *Elemental Detection for Bio-Analytical Applications*. After receiving his Ph.D., Kirk was employed by the Midwest Research Institute (MRI) in Kansas City, MO where he worked as a Principal Chemist and Sr. Program Manager on Department of Defense projects, staffing, designing, and building remote laboratories for deployments throughout the world which included two deployments to Afghanistan. In 2012 Kirk moved to Charlottesville, VA to manage a new MRI research facility. In April of 2014, Kirk re-joined Agilent Technologies as an Applications Scientist for the GC/MS product lines consisting of single quadrupole, triple quadrupole and time of flight mass spectrometer platforms. When not on the road, Kirk enjoys working on his house in the mountains of VA and spending time with his 9 kids and 6 grandkids.

Larry Peterson is a retired Trace Evidence Micro analyst with the Georgia Bureau of Investigation in which he served as Trace Evidence Technical Leader from 1999-2008. Mr. Peterson is also a retired Trace Evidence Chemist with the U.S. Army Criminal Investigation Laboratory. Larry received his B.S in Forensic Science from the University of Central Florida in 1977. Mr. Peterson has served in several capacities in different forensic science organizations to include: Diplomate Emeritus of The American Board of Criminalistics, Emeritus Member of the American Society of Trace Evidence Examiners, retired member of The American Academy of Forensic Scientists, retired member and past President of the Southern Association of Forensic Scientists, member of The State Microscopical Society of Illinois, and current member and past President of The Georgia Microscopical Society. During his tenure, he has received the SAFS-AAFS Special Recognition Award for Significant Contribution to Forensic Science, Governors Award for Outstanding Service in State Government, and State Microscopical Society of Illinois Award for Achievement and Contribution to Microscopy.

Mark A. Pevey, D-ABFT-FA currently serves as the Birmingham Regional Laboratory Director of the Alabama Department of Forensic Sciences. He obtained a B.S. Chemistry from Berry College in 1986. He has worked in the field of Forensic Toxicology for the past 30+ years in Georgia, South Carolina, and presently Alabama. The experiences of

his own development from Scientist to Supervisor have instilled in Mark a passion for personal growth and leadership development. He has been married to his wife, Cathi for 33 years, and celebrates being an Ultra-marathoner, cancer survivor, and dad. His mission is to leave people better than he found them.

Justin E. Sanders was previously the Forensic Toxicology Section Chief for the Alabama Department of Forensic Sciences (ADFS). Currently, Justin Sanders is the Drug Chemistry Section Chief and is charged with overseeing the day-to-day operations for 16 analysts, conducting periodic employee appraisals, managing productivity and efficiency, serving as the quality control officer, and assisting with training. Drug Chemistry's mandate is to analyze suspicious materials in order to identify controlled substances, non-controlled substances, precursor chemicals, and other chemicals used in the manufacture of illegal drugs. Justin Sanders has a Master's of Science in Forensic Science and a Master's of Business Administration both from the University of Alabama at Birmingham. He is a full member of the Society of Forensic Toxicology and holds board certification as a Fellow of the American Board of Forensic Toxicology (F-ABFT). In the past, Justin Sanders has served as an adjunct professor at the University of Alabama at Birmingham (UAB) in the Department of Justice Sciences and a visiting lecturer at Birmingham Southern, Miles College, University of West Alabama and Jefferson State Community College. As a Toxicologist, Justin Sanders has testified on the effects of alcohol and other drugs in approximately 80 cases during his tenure at Alabama.

Dr. Erin Shonsey, Director of Research at the Alabama Department of Forensic Sciences, started her career with the Alabama Department of Forensic Sciences (ADFS) in 2008 serving as the Director of Research. Academically, Erin obtained a BS degree in Chemistry from Creighton University and a PhD in Pharmacology and Toxicology from the University of Alabama at Birmingham.

Lewis Smith retired in 2016 from his position in drug analysis as a Forensic Scientist II with the NJ State Police Office of Forensic Sciences South Regional Laboratory in Hammonton NJ after 29 years. Has continued to be a Forensic Chemist part-time for Cape May County Forensic Laboratory at Cape May County Courthouse NJ since 2017.

He received his BS in Chemistry from Richard Stockton State College, NJ in 1983. Upon graduation, he worked as an Infrared Spectroscopist for Sadler Research Laboratories in Philadelphia collecting spectra of pure reference materials to expand their continuing spectral databases. In the four years served at Sadtler Research (Philadelphia, Pa.), he acquired many Infrared Vapor Phase spectra of compounds at elevated temperature to be used for GC/IR spectral interpretation. Cooperation with Sadtler continued over the years with the creation of Forensic Spectral Research which served for band studies and building infrared/Raman databases, some of which were published by Biorad Informatics.

Dr. Sarah Williams is an Assistant Professor in the Forensic Science Program at Virginia Commonwealth University in Richmond, Virginia. Prior to joining VCU, she worked for four years as a Forensic Scientist in the Forensic Biology Section of the Virginia Department of Forensic Science. In addition to teaching, she performs research in forensic biology, with a focus on improving the beginning of the evidence workflow through body fluid ID and cell separation methods.



ASTEE- SAFS ANNUAL MEETING 2019

ASHEVILLE, NORTH CAROLINA EXHIBITOR INFORMATION



GE Healthcare's Life Sciences business delivers breakthroughs in tools for drug discovery and biopharmaceutical manufacturing and the latest in cellular technologies, enabling scientists and specialists around the world to discover new and better ways to predict, diagnose and treat disease earlier. The Life Sciences business also makes systems and equipment for the purification of biopharmaceuticals.





Cayman is a leader in the field of emerging drugs of abuse, providing high-purity Schedule I-V Controlled Substances to federally-licensed laboratories and qualified academic research institutions for forensic analyses. We are certified by ANAB Accreditation Services with dual accreditation to ISO/IEC 17025:2005 and ISO Guide 34:2009, providing a range of analytical standards, including synthetic cannabinoids, cathinones, phenethylamines, amphetamines, indanes, opioids,

benzodiazepines, tryptamines, and phytocannabinoids, among many others.



Customer success is our mission. Waters creates business advantages for laboratory-dependent organizations by delivering practical and sustainable scientific innovation to enable significant advancements in such areas as healthcare delivery, environmental management, food safety, water quality, consumer products, and high value-added chemicals. Bringing keen understanding and deep experience to those responsible for laboratory infrastructure and performance, Waters helps customers make profound discoveries, optimize lab operations, deliver product performance, and

ensure regulatory compliance. Pioneering a connected portfolio of separation and analytical science, laboratory informatics, and mass spectrometry, Waters' technology breakthroughs and laboratory solutions provide an enduring platform for customer success.



Agilent Technologies Agilent is a leader in life sciences, diagnostics and applied chemical markets. The company provides laboratories worldwide with instruments, services, consumables,

applications and expertise, enabling customers to gain the insights they seek. Agilent's expertise and trusted collaboration give them the highest confidence in our solutions.



Barnett Technical Services distributes products for material characterization and manipulation to include the Micro Support Micromanipulator.

\ avantor* Avantor is a global manufacturer and distributor of high-quality products, services and solutions to professional in the life sciences and advanced technologies industries. Avantor's mission: setting science in motion ot create a better world.



Restek is a leading developer and manufacturer of chromatography columns and accessories. Restek provide analysts around the world with the innovative tools they need to monitor the quality of air, water, soil, foods, pharmaceuticals, chemical, and petroleum products.



IonSense Corporation is the leading provider of Open Air Ionization (AI) sources, systems and integrated solutions for the \$4B Mass Spectrometry (MS) marketplace. Headquartered in Saugus, MA the company manufactures, sells and markets the DART (Direct Analysis in Real Time) ionization source, the first open air ionization product to be patented and sold commerically.

foster+freeman

Foster & Freeman offers a range of equipment for use at the crime scene and in the laboratory. Products include instruments for examination of questioned documents and trace evidence, crime-lite light sources, shoeprint databases, latent pritn photography systems and superglue fuming cabinets. All backed by comprehensive technical support and training.



CRAIC Technologies manufactures superior microspectrophotometers for science and industrial applications. They specialize in the UV, visible and NIR regions and pride themselves in making the finest tools for the finest minds. Since CRAIC's founding, their mission has been to become the leading provider of superior quality optical toolsand superior support for the customers who use those tools.



JusticeTrax is a leading developer of software tools for forensic labs and provides information services for law enforcement agencies worldwide. JusticeTrax create and expand a sustainable partnership with their customers, supporting their goals by delivering products and services that make them more efficient.



InnoGenomics Technologies is dedicated to the development of innovative genetic testing solutions that solve crimes and save lives. With the support of the National Science Foundation SBIR grants, the company has developed novel patented technology that is scalable across a wide range of applications including forensic and missing person identification, relationship and ancestral ethnogeographic establishment, and molecular diagnostics.



RIT International is an independent, non-profit research institute dedicated to improving the human condition. Clients rely on them to answer questions that demand an objective and multidisciplinary approach-one that integrates expertise across the social and laboratory sciences, engineering, and international development. Combining scientific rigor and technical proficiency, RTI International deliver reliable data, thorough analysis, innovative methods, novel technologies, and sustainable programs that help clients inform public policy and ground practice in evidence. They scale their approach to fit the demands of each project, delivering the power of a global leader and the passion of a local partner.



Thermo Fisher Scientific is the world leader in serving science. Their mission is to enable their customers to make the world healthier, cleaner and safer. Thermo Fisher Scientific help their customers accelerate life sciences research, solve complex analytical challenges, improve patient diagnostics, deliver medicines to market and increase laboratory productivity.

CDS Analytical, Inc.

CDS Analytical is a leading global provider of innovative thermal sample preparation instrumentation for the analytical laboratory. For over 35 years, their exclusive focus has been on conceiving, designing, manufacturing, and supporting leading edge instruments. CDS offers a complet suite of diverse front-end GC equipment including pyrolyzers, purge and trap, headspace, and thermal desorption systems. These robust, field-tested products provide the entire range of temperature, heating rate, and multiple step manipulations required by today's most demanding analytical laboratories.

Systems, Inc.

M-Vac Systems, Inc. has created innovative surface sampling

M-Vac Systems, Inc. has created innovative surface sampling

technology that can improve forensic DNA collection, especially from porous surfaces and when the DNA material is in small quantities such as in touch DNA scenarios. The M-Vac enhances or replaces swabs, sponges, excision and other traditional collection methods, especially after failures. Improved sampling enables better detection results. Specific fields of sample acquistion for the technology include: forensic evidence DNA collection, drug and chemical residue sampling, food safety monitoring, routine quality control testing, environmental bio-hazard and biological weapons detection, secure chain-of-custody and diverse research applications. They are committed to providing high quality equipment and superior customer service and support.



Leeds manufactures and sells comparison microscopes and imaging systems, made in the USA of U.S. parts and imported parts, to forensic laboratories in the U.S. and around the world. Acclaimed domestically and internationally, Leeds comparison microscopes and imaging systems are setting the standards for quality and performance in forensic laboratories everywhere.

LIPOMED is a private Swiss Health Care Company. We are one of the leading companies for Reference Standards worldwide and specialized in the research, development and manufacturing of ethical pharmaceuticals and products for the treatment of rare diseases. Since 1993 Lipomed is dedicated to providing products and services of outstanding quality and expertise. We have our



own GMP/GDP and ISO 9001 certified pharmaceutical production facilities in Arlesheim near Basel. We are also ISO/IEC 17025 accredited for testing of analytical reference standards and ISO Guide 34 accredited for the production of reference material. Our innovative products are marketed and distributed with offices and partners in more than 50 countries around the world.

Analytical Solutions and Providers (ASAP Analytical) was established in 1998 to provide customers with single source solutions for their analytical needs. ASAP manufactures the IRD 3 a vapor phase FTIR instrument engineered and designed to interface with a gas chromatograph, the IRE-1 an OEM product that provides a customized interferometer for your product needs, a PTV inlet for Agilent GC's that can make injections up to $500\mu L$ and a Peltier cooling option that provides sub-ambient temperature control of the TITAN XL without the use of LN2 or CO2. ASAP provides in-house, field and OQ service for Agilent and Hitachi products along with a complete list of consumables for these products. ASAP is a family owned small business and



we take pride in giving customers the highest level of individual attention to meet and exceed their expectations.



To raise the level of competence in Forensic Science through peer-based certification and promotion of professional development. The ABC is dedicated to the highest standards and programs for scientists involved in the administration of justice.



INFORMATION ABOUT THE SOUTHERN ASSOCIATION OF FORENSIC SCIENTISTS

On September 9, 1966, forensic scientists from the southern region of the United States met in Atlanta, Georgia and adopted the first constitution of the organization known as the Southern Association of Forensic Scientists. This was not the first meeting of this group, which had met previously in Baton Rouge, Louisiana and Auburn, Alabama. There were 47 original or charter members. As of this writing, there are approximately 325 SAFS members.

SAFS is the oldest of the regional forensic scientist associations with the exception of the California Association of Criminalists.

SAFS is an organization of practicing forensic scientists and forensic science college and university educators. There are three types of membership offered: regular, retired, and student affiliate. To gain voting membership in SAFS it is essential that a prospective member has given expert testimony in some court of the criminal justice system, or has advanced the cause of forensic science in some significant manner. Additionally, regular membership requires attendance at one or more of the annual meetings. Student affiliate membership is renewable on an annual basis and the applicant must be engaged in science studies with a forensic science career goal. Membership applications of all types are considered at the Business Meeting of the SAFS. The Annually SAFS Training and Business Meeting is held at various locations in the southern region of the United States. Meeting locations are selected about two years in advance.



SOUTHERN ASSOCIATION OF FORENSIC SCIENTISTS OFFICERS AND BOARD MEMBERS

Desirée Reid: President (2017-2018 Term)

Desirée A. Reid was voted into SAFS in 1989 as the "token Yankee" and has been extremely proud to represent this organization in the forensic community at large, in addition to acting as the SAFS Board of Directors representative to the American Board of Criminalistics since 2006. Desirée has presented several papers at numerous SAFS meeting, presided as the Drug Chemistry Chair for the inaugural Joint Association Meeting in Orlando, FL in 2004 and the 50th Anniversary Meeting in Sarasota, FL. She was the Program Chair (and Zumba instructor!) for the second Joint Association Meeting in Orlando, FL in 2009. Desirée is the Program Chair for the upcoming third Joint Association Meeting in Atlanta, GA in 2020. She is humbled to be sitting as the current President of the organization and thanks each and every member for their confidence in her ability to steer SAFS towards another year of success. Desirée has been married to her husband Anthony for 12 years and has 5 furry kids. She and her husband volunteer weekly for Rescue Ridge, a non-profit, no kill animal rescue. She annually plans a Zumba charity event to raise much needed funds for the rescue and has been known to show up in costume! She still lives in NJ and works in the Drug Analysis unit of the NJ State Police East Regional Lab. She is looking forward to being able to retire from this system in 2020 and become a full time Southerner. Positive advice and hints are quite welcome!

Danny Kirkpatrick: President Elect (2017-2018 Term)

Danny Kirkpatrick has been in Forensics for 33 years. He began his career in the Dallas County Medical Examiner's office in 1982 in the Toxicology section and then moving over to the Drug Chemistry section. He moved home to Alabama in 1990 to begin working at the Alabama Department of Forensic Sciences in the Drug Chemistry section. While with Alabama he has been a section chief and Laboratory Director in the Tuscaloosa Laboratory and now is in the Birmingham laboratory as the analyst for Fire Debris. He has had memberships in the American Academy of Forensic Sciences; Southwestern Association of Toxicologists; Northeast Association of Forensic Scientists and Midwestern Association of Forensic Scientists. He has been a member of SAFS for over 25 years, serving on the Board of Directors for the past 3 years.

Tanja Kopp, B.S.: Treasurer (2017-2020 Term)

Tanja earned her Bachelor of Science degree in Chemistry with a minor in Physics from Armstrong Atlantic State University in Savannah, Georgia. She has been employed as a Forensic Scientist with the Georgia Bureau of Investigation since 1999. She has analyzed approximately 19,000 Drug Chemistry cases. She has been accepted as a Forensic Drug Chemist in Superior Court in various Georgia counties as well as Federal Court. She is certified in Clandestine Laboratory Response and previously assisted in the training of officers and agents in this area. She has also taught the Marijuana Identification Course. She is an Instrument Specialist for gas chromatography/mass spectrometry and liquid chromatography for the Coastal Regional Lab. Tanja has been a member of SAFS since 2002 and was elected Treasurer in 2014 and 2017. She was program chair for the 2014 Annual meeting held in Savannah, Georgia.

Kristen Fripp: Secretary (2017-2020 Term)

Kristen Fripp is the Assistant Laboratory Manager at the Georgia Bureau of Investigation (GBI) Coastal Regional Crime Laboratory supervising the chemistry and biology sections, where she has worked since 1999. She is a qualified Forensic Serologist and Forensic DNA Analyst. She has also served as the statewide Forensic Biology Technical Leader from 2006 to 2010. Ms. Fripp serves as the GBI's representative on the DNA Forensic Science Technology Working Group (TWG). She is also an affiliate of the Organization of Scientific Area Committees for Forensic Science (OSAC), serving on two task forces in the biological data interpretation and reporting subcommittee of the Biology/DNA Scientific Area Committee. Ms. Fripp has a master's of public safety administration from Columbus State University, a master's degree from Georgia Institute of Technology and a bachelor's degree from Long Island University. Kristen has been a member of SAFS since 2001 and has served as secretary since 2014. She was the workshop chair for the 2014 SAFS Annual meeting held in Savannah, Georgia.

Board of Directors

Nicole Astor, Members-at-Large (2016-2018)

Lynn Black, Members-at-Large (2016-2018)

Mike Healy, Members-at-Large (2017-2019)

Karlie McManaman, Members-at-Large (2017-2019)

Diana Williams, Past President (2017-2018)

