

23RD ANNUAL FORENSIC DNA CONFERENCE

**BODE
2024**

JUNE 25-28
ATLANTA, GA



PROGRAM

Detailed Conference Agenda

(schedules subject to change)

Tuesday, June 25

7:00 am – 4:00 pm **Registration**

7:00 am – 8:00 am **Breakfast, sponsored by NicheVision (for workshop participants)**

8:00 am – 10:00 am **Unraveling the Daniel Ray Skaggs Case**

Speakers:

Ryan Berry, Assistant District Attorney in the 20th Circuit District

Deedra Hughes, Assistant Director/State CODIS Administrator for the Mississippi Forensics Laboratory

Teresa Vreeland, Director of Forensic Genealogy Services, Bode Technology

The Daniel Ray Skaggs case presents a complex web of circumstances, spanning decades of roadblocks and hard work. This workshop offers a rare opportunity to dissect the methodologies, challenges and breakthroughs encountered over the three-decade effort to identify the unknown male; led by key players in the case resolution from the initial investigation through prosecution.

The collaborative approach and importance of interdisciplinary cooperation will be highlighted from the collection of evidence, DNA testing and CODIS upload, forensic investigative genetic genealogy, victim communications to case prosecution/resolution.

This workshop will encourage, educate, and provoke thoughts on the fascinating intersection of DNA and criminal investigations.

10:00 am – 10:15 am Break, sponsored by Thermo Fisher Scientific

10:15 am – 12:15 pm Thermo Fisher Scientific Workshop

Saving time and optimizing resources is critical for all justice agencies, and the world leader in developing innovative technologies to serve science will detail strategies for doing just that. You'll hear valuable insights from forensic DNA experts who are utilizing cutting-edge workflow solutions to boost laboratory efficiency and streamline crime-solving.

12:15 pm – 1:00 pm Lunch (for workshop registrants)

1:00 pm – 3:00 pm Promega Tech Tour

Get tips from leaders in the forensics community on successfully processing challenging samples, while improving laboratory efficiencies through forensic workflow enhancements. Absorb the latest advances in STR analysis and hear firsthand how agencies are using Promega products in innovative ways.

3:00 pm – 3:15 pm Break, sponsored by NicheVision

3:15 pm – 5:15 pm NicheVision Forensics Workshop

Learn about critical steps for implementing massively parallel sequencing (MPS) methods for forensic DNA analysis. Covered topics include:

- Validating laboratory analytical thresholds and stutter ratios
- Analyzing MPS data, with special emphasis on mixed samples
- Interpreting mixed samples using binary analysis within MixtureAce™ and exporting profiles for interpretation by probabilistic genotyping using STRmix NGS™
- Analyzing mixed mitochondrial samples
- Library preparation using IDseek™ reverse complement PCR, including the OmniSTR™ autosomal STR kit, and the mYSTR™ YSTR kit.

Software implementing these processes will be demonstrated. Covered software includes:

- MixtureAce™ QT for establishing analytical thresholds
- StutterModeler™ for establishing stutter ratios and allele-specific stutter models
- MixtureAce™ for analyzing single source and mixed STR profiles
- MixtureAce™ MT for analyzing mixed mitochondrial profiles.

The streamlined IDseek™ library preparation technique will be demonstrated via video. The IDseek™ technology workflow is much simpler than traditional workflows and generates well balanced profiles.

5:30 pm – 7:30 pm Welcome Reception

We're thrilled you've joined us for Bode 2024, our 23rd annual national forensics conference. Join us for hors d'oeuvres and drinks and get to know your fellow forensic, law enforcement and justice experts.

Wednesday, June 26

7:15 am – 12:00 pm Registration

7:00 am – 8:00 am Breakfast (included with General Session registration)

8:00 am – 12:00 pm General Session

8:00 am – 8:15 am Welcome and Opening Remarks

8:30 am – 10:00 am Keynote Speaker – Amanda Knox, “Truth Matters”

Few people know better how important DNA evidence can be – or how devastating faulty forensics can be. Exonerated after spending eight years on trial and four years in an Italian prison for a murder she didn’t commit, Amanda will share her incredible story of how DNA forensics played a role in her conviction, and led to her exoneration.

10:00 am – 10:30 am Break, sponsored by Promega

10:30 am – 11:00 am

Greg Hampikian, Ph.D., Director of the Forensic Justice Project at Boise State University and Co-Director of the Idaho Innocence Project, explores technical aspects of the DNA in Amanda Knox’s case, as well as current lab practices that can lead to wrongful convictions.

11:00 am – 11:30 am

Tim Kalafut, Associate Professor of Forensic Science at Sam Houston State University, will explore how secondary transfer research is progressing in the United States appeals court system, where cases have been overturned because activity level was not addressed.

11:30 am – 12:00 pm Promega Presentation

12:00 pm – 1:00 pm Lunch, sponsored by Thermo Fisher Scientific (included with General Session registration)

1:00 pm – 1:30 pm Thermo Fisher Scientific Presentation

1:30 pm – 2:00 pm

Follow the latest DNA legal and legislative forensic action through updates from Lisa Hurst, North America Director for GTH DNA, the world’s foremost expert on forensic DNA database policy, law, and project development.

2:00 pm – 2:30 pm

Hear critical CODIS/NDIS updates from Lisa Grossweiler, National DNA Index System Program Manager in the Federal Bureau of Investigation’s CODIS Unit.

2:30 pm – 3:00 pm Break, sponsored by Invita

3:00 pm – 3:30 pm Invita Presentation

3:30 pm – 4:00 pm

Jennifer Snedeker, graduate assistant in the Department of Forensic Science at Sam Houston State University, details an ongoing study, “DNA Analysis of Chemically Treated Human Remains.” Thousands of human remains are unidentified in the U.S., including many damaged by household chemicals. Yet limited research addresses DNA recovery from chemically treated human remains. This research study exposes intact fragments of remains (rather than isolated tissues) and exposed them to five chemicals, including bleach, drain opener and others. Subsequent DNA analysis will establish insight into the quantity and quality of DNA recovered from these challenging remains to aid identification.

4:00 pm – 5:00 pm Special Event

We have a special event that you will not want to miss! Stay tuned for more information.

Open Night

Explore the iconic Buckhead District at your own pace, including upscale shops, restaurants and bars, magnificent mansions and historic homes, Lenox Square and Phipps Plaza.

Thursday, June 27

7:00 am – 8:00 am **Breakfast, sponsored by NicheVision (included with General Session registration)**

8:00 am – 12:00 pm **General Session**

8:00 am – 8:15 am **Opening Remarks**

8:15 am – 9:00 am

Brian Whidby, Special Agent in Charge, and Christina Kanner, Assistant Special Agent in Charge, detail the creation of Georgia Bureau of Investigation's newly formed cold case unit and their case selection process. The unit was created after Georgia passed the Coleman-Baker Act in 2023, which mandates state and local law enforcement agencies review unsolved homicides.

9:00 am – 9:30 am

Doug Hares, the Rapid DNA Implementation Program Advisor for the FBI's Biometric Analysis Section, will detail the use of Rapid DNA in accredited laboratories, booking areas and crime scenes.

9:30 am – 10:00 am **ANDE Presentation**

10:00 am – 10:30 am **Break, sponsored by QIAGEN/Verogen**

10:30 am – 11:00 am

Kelli Dixon, Forensic DNA Section Chief at the Arkansas State Crime Laboratory, discusses the Property Crimes Program, including program overview, success rates and case examples.

11:00 am – 11:30 am

Katey Nori, Assistant Director of the New York City Office of Chief Medical Examiner, shares how the department's Forensic Biology Lab achieved a turnaround time of less than 30 days for gun crime testing and analysis, prompted by a 535% increase in gun evidence submissions between 2013 and 2023.

11:30 am – 12:00 pm **QIAGEN/Verogen Presentation**

12:00 pm – 1:00 pm **Lunch, sponsored by Promega (included with General Session registration)**

1:00 pm – 4:30 pm **General Session**

1:00 pm – 1:30 pm **NicheVision Presentation: Calculating Analytical Thresholds in Forensic MPS Profiles**

Analytical threshold (AT) values are crucial for forensic DNA analysis using PCR-MPS. These values are impacted by various factors including the sequencing run's composition and other variables. Understanding the AT setting's nuances and assessing PCR-MPS methods' strengths and weaknesses are essential. Current approaches mostly rely on instrumental analysis from noise baselines in negative control samples, effective for PCR-CE methods with fluorescent baselines but challenging for PCR-MPS without such baselines. We present and compare methods for AT value calculation using both negative and positive controls.

1:30 pm – 2:00 pm

Heather Edgar, Forensic Anthropologist at the Office of the Medical Investigator in New Mexico, and Michelle Graham, State CODIS Administrator and Technical Leader at the NMDIS, will discuss their collaboration and early success with their first unidentified human remains (UHR) project, solving several missing and unidentified cases throughout the State of New Mexico.

2:00 pm – 2:30 pm

Sgt. Tom Orzechowski of the New Castle County, Del., Police Department discusses the effectiveness and successes of BodeHITS, a localized databasing program which allows law enforcement agencies to maintain control over which samples are submitted and allows participation in expanded search opportunities.

2:30 pm – 3:00 pm Break, sponsored by Gentueri**3:00 pm – 3:30 pm Gentueri Presentation****3:30 pm – 4:00 pm**

Derek Coats, Law Enforcement Specialist and SAKI TTA with RTI International, will discuss what “SAK tested to completion” really means, and share a Utah SAKI DNA success story in which a 2006 cold case sexual assault was finally solved after being “tested to completion.”

4:00 pm – 4:30 pm

Jillian Echard, DNA Supervisor and Training Coordinator at the Connecticut Division of Scientific Services, will discuss the phases of addressing the sexual assault backlog in the state of Connecticut, first testing all kits, then revisiting serology negative and partially tested kits, followed by testing of secondary evidence, and finally, harnessing the power of FIGG.

4:30 pm – 5:00 pm

Bode Technology’s Sarah Cavanaugh, Senior Research Scientist, discusses the National Institute of Justice’s Forensic Investigative Genetic Genealogy (FIGG) study. Comparative Evaluation of Genotyping Technologies for Investigative Genetic Genealogy in Sexual Assault Casework.

6:00 pm – 10:00 pm Group Event/Dinner: The Painted Pin

Bode hosts a private event at Atlanta’s hottest upscale boutique bar, bowling and entertainment venue in an industrial warehouse deep in the heart of Buckhead's trendy Miami Circle. Enjoy bowling, classic interactive table games, buffet dinner, drinks, outdoor activities and more.

Friday, June 28

7:00 am – 8:00 am Breakfast (for workshop registrants)**8:00 am – 12:00 pm Workshop with ANDE**

ANDE is a global leader in Rapid DNA, currently deployed in more than 25 countries.

12:30 pm Conference Concludes