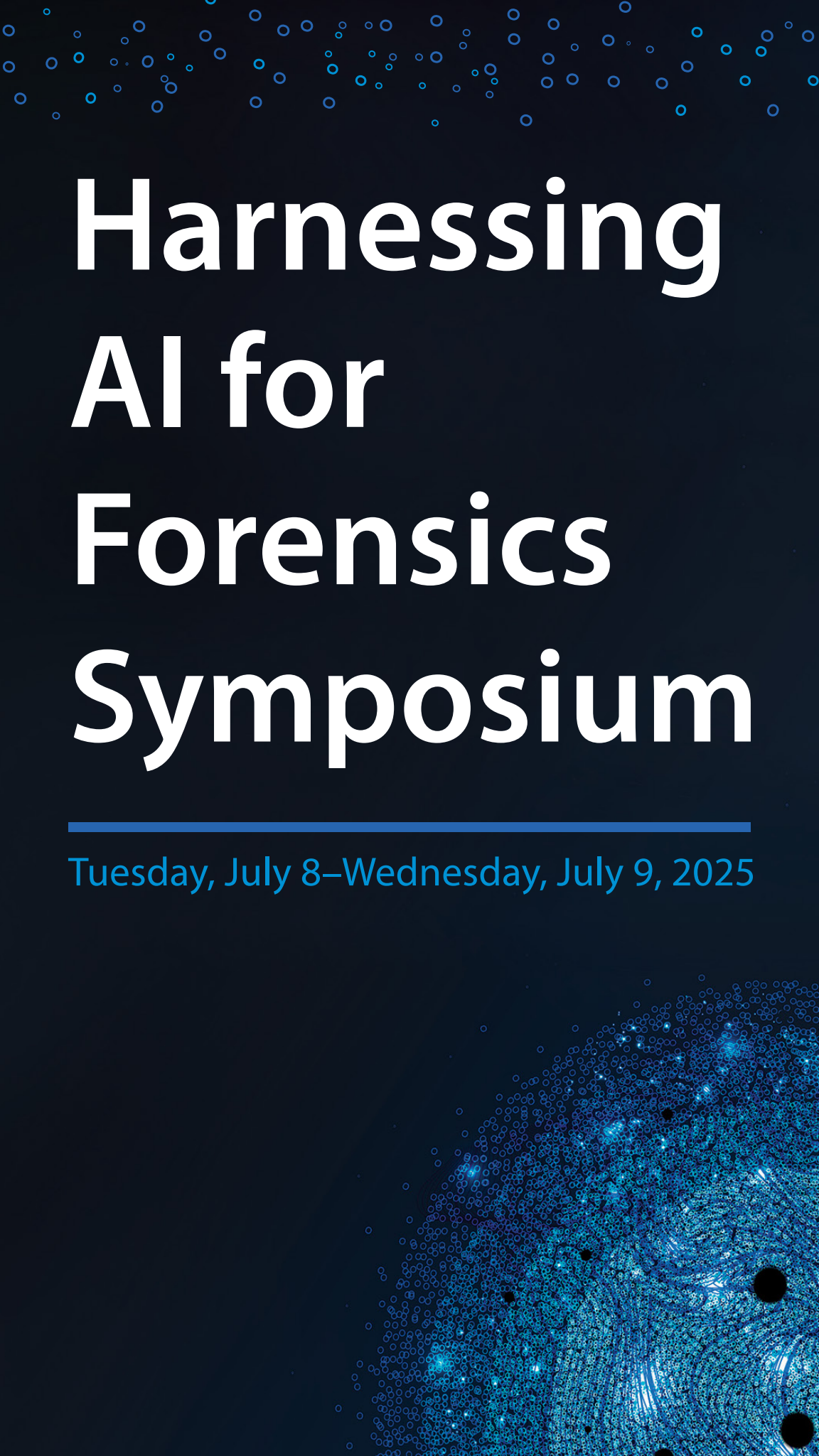
Harnessing AI for Forensics Symposium

Tuesday, July 8–Wednesday, July 9, 2025



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DAY 1 • TUESDAY • JULY 8 • 9:00AM - 5:00PM ET

Time	Presentation Topic
9:00 – 9:05 AM	**Opening Remarks and Welcome** • Nicole Jones, *RTI International* • Michael Rosenblum, *Johns Hopkins Bloomberg School of Public Health*
9:05 – 9:20 AM	**Overview of AI and Forensic Science at RTI International** • Duren Banks, *RTI International*
9:20 – 9:40 AM	**Overview of AI and Forensic Science at NIST** • Craig Schlenoff, *National Institute of Standards and Technology*
9:40 – 10:10 AM	**Keynote: Transformative Potential of AI** • John C. Havens, *Institute of Electrical and Electronics Engineers Planet Positive 2030*
10:10 – 10:25 AM	Break
10:25 – 10:45 AM	**Understanding AI: Concepts, Capabilities, and Standards** • Martin Stanley, *National Institute of Standards and Technology*
10:45 – 11:55 AM	**AI in Action Panel: How AI is Used in Various Industries** • Moderator: Nicole Jones, *RTI International* • Esube Bekele, *In-Q-Tel* • Yaneisy Delgado, *Miami-Dade Sheriff's Office, Forensic and Technology Division* • Emily Hadley, *Microsoft AI Red Team* • Stephanie Stoiloff, *Miami-Dade Sheriff's Office, Forensic and Technology Division* • Dr. Peter Stout, *Houston Forensic Science Center* • Agnes Winokur, *Drug Enforcement Administration Special Testing and Research Laboratory* • Andrew Wong, *Miami-Dade County Information Technology Department*
11:55 – 12:55 PM	**Lunch and Lightning Round Presentations** • *Johns Hopkins University Data Science and AI Institute Faculty*
12:55 – 1:05 PM	Introduction to Breakouts

**All times are listed in Eastern Time (ET)*

DAY 1 • TUESDAY • JULY 8 • 9:00AM - 5:00PM ET

Time	Presentation Topic
1:05 – 1:55 PM	**Breakout 1: Knowledge Sharing** *Introductions, small group knowledge sharing activity, and report out*
1:55 – 2:45 PM	**Introduction to Use Cases, Risk Management Framework, and AI Tools** • Michael Duprey, *RTI International* • Daniel Katz, *Maryland State Police, Forensic Sciences Division* • Dr. Niki Osborne, *The Forensic AI* • Melissa Taylor, *National Institute of Standards and Technology*
2:45 – 3:10 PM	Intro to Breakout 2 and Short Break
3:10 – 4:40 PM	**Breakout 2: Use Case Brainstorming** *Defining AI forensics use cases and identifying potential solutions and prioritization*
4:40 – 5:00 PM	**Day 1 Recap** • Henry Swofford, *National Institute of Standards and Technology*

**All times are listed in Eastern Time (ET)*

DAY 2 • WEDNESDAY • JULY 9 • 9:00AM - 5:00PM ET

Time	Presentation Topic
9:00 – 9:15 AM	**Welcome and Objectives for Day 2** • Melissa Taylor, *National Institute of Standards and Technology*
9:15 – 10:15 AM	**Keynote: High-stakes Decision-making and Court Acceptance** • Moderator: Nicole Jones, *RTI International* • Dana Delger, *National Institute of Standards and Technology* • Reva Schwartz, *Civitaas Insights, LLC* • Hon. (ret) Donald E. Shelton, *Michigan State University and University of Arizona* • Amy Watroba, *Illinois Forensic Science Commission*
10:15 – 10:30 AM	Break
10:30 – 11:30 AM	**Implementing AI Systems for Forensic Science** *Attributes, testing, evaluation and continuous monitoring and policy implication* • Moderator: Michael Duprey, *RTI International* • Andrea Brennen, *In-Q-Tel* • Brandon Epstein, *Magnet Forensics* • Michael Majurski, *National Institute of Standards and Technology* • Michael Rosenblum, *Johns Hopkins Bloomberg School of Public Health*
11:30 -12:30 PM	Lunch
12:30 – 12:45 PM	Introduction to Breakouts and Short Break
12:45 – 1:50 PM	**Breakout 3: Court Admissibility: Reliability and General Acceptance**
1:50 – 2:15 PM	**Breakout 4: Prepare Report Out and Summary Materials**
2:15 – 3:00 PM	Report Out by Breakout Group
3:00 – 3:30 PM	**Synthesize Findings and Opportunity Areas from Breakouts** • Henry Swofford, *National Institute of Standards and Technology*
3:30 – 3:45 PM	Break

**All times are listed in Eastern Time (ET)*

DAY 2 • WEDNESDAY • JULY 9 • 9:00AM - 5:00PM ET

Time	Presentation Topic
3:45 – 4:45 PM	**Closing Panel: Path Forward for AI in Forensic Science** • Moderator: Marc Canellas, *Maryland Office of the Public Defender* • Moderator: Melissa Taylor, *National Institute of Standards and Technology* • Ted R. Hunt, *Federal Bureau of Investigation Laboratory* • Hon. (ret) Donald E. Shelton, *Michigan State University and University of Arizona* • Stephanie Stoiloff, *Miami-Dade Sheriff's Office, Forensic and Technology Division* • Dr. Peter Stout, *Houston Forensic Science Center*
4:40 – 5:00 PM	**Day 2 Recap** • Nicole Jones, *RTI International* • Melissa Taylor, *National Institute of Standards and Technology*

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PRESENTER INFORMATION

Duren Banks

Senior Vice President
Justice Practice Area,
RTI International

Duren Banks is the Senior Vice President for the Justice Practice Area at RTI International. The Justice Practice Area includes more than 150 scientists, project managers, engineers, technicians and analysts representing criminology, information sciences, public health, economics, public policy, forensics, and other disciplines. The Justice Practice Area engages in research, evaluation, quality assurance, standards development and testing, technical assistance, and knowledge translation to examine and advance strategies that promote safety, accountability, and resilience for public safety agencies, communities, and individuals impacted by crime and abuse. Dr. Banks has more than 20 years of experience conducting research and evaluation of criminal justice programs. She is an expert in judicial case processing, criminal justice system sentencing practices and impact, alternative system response to community risk factors, at-risk children and delinquency prevention, juvenile justice, and school safety. Prior to joining RTI International, Dr. Banks was a unit chief at the Bureau of Justice Statistics (BJS), U.S. Department of Justice, where she oversaw all court-related data collection activities and publications, as well as the agency's research on criminal justice administration in Indian country. She has conducted national studies of multiagency collaboration at local and state levels to build infrastructure, coordinate services, and develop effective responses to local community concerns related to criminal justice, victimization, and school safety.

PRESENTER INFORMATION

Esube Bekele

Vice President of Technology
In-Q-Tel

Esube Bekele is a Vice President of Technology at In-Q-Tel, where he leads investments and strategic insights in applied artificial intelligence (AI) and generative AI as well as Quantum software with tangential interest in advanced and NextGen compute. Before joining In-Q-Tel, he was a National Research Council fellow at the U.S. Naval Research Laboratory (NRL) working on machine learning and computer vision combined with cognitive computing for security applications. As part of this, he built a reasoning and explanation framework for person attributes and re-identification AI models as well as view-dependent learning of objects with self-supervision similar to how children learn new objects in their developmental years.

He received a Ph.D. from Vanderbilt University with a research focus on building, testing, and performing clinical feasibility studies for intelligent robotic and virtual reality-based autism and schizophrenia therapy adaptive systems. He was also a computer vision engineer at Universal Logic (*startup for logistics robotics*) and an intern at NRL while studying for his Ph.D.

He remains active in the research community, serving as co-organizer of workshops at the largest AI and computer vision conferences, serving as reviewer at AI and computer vision conferences and journals. He is also serving as Associate Editor-in-Chief of the *Pattern Recognition Journal*. He was previously a co-organizer of the Black in AI workshops at NeurIPS until 2019. He also served as Logistics Chair for ICLR 2020 and Virtual Experience Chair for ICCV 2021.

PRESENTER INFORMATION

Andrea Brennen

Senior Vice President
Applied Research, In-Q-Tel

With a background in mathematics, data visualization, and human-centered design, **Andrea Brennen** has spent most of her career helping domain experts understand what to do with the uncertain output of complex models. She is a Senior Vice President at In-Q-Tel, working with partners across the United States intelligence community to understand critical technology gaps and managing a portfolio of applied research projects that explore the risks and opportunities of deploying artificial intelligence (AI) in high-stakes situations. Originally trained as an architect, Andrea is interested in how design can help us think critically and creatively about emerging technologies. She received a Master of Architecture from Massachusetts Institute of Technology and bachelor's degrees in Mathematics and Studio Art from Grinnell College.

PRESENTER INFORMATION

Marc Canellas

Public Defender
Forensics Division, Maryland Office of the Public Defender

Marc Canellas is a public defender specializing in forensics, with a Ph.D. in aerospace and cognitive systems engineering, and is a nationally recognized expert on artificial intelligence (AI) and criminal law. He is a public defender in the Forensics Division of the Maryland Office of the Public Defender (OPD), where he supports attorneys statewide on complex forensic evidence, including face recognition systems, synthetic (*AI-generated*) media, DNA software, ShotSpotter, and ballistics-matching software. He has argued multiple appellate cases, including challenges to the admissibility of DNA software under Daubert, and regularly consults on forensic AI cases across federal and state courts nationwide.

Before joining Maryland OPD, Marc was a trial public defender in Arlington County, Virginia, representing juveniles and adults charged with serious felonies. His litigation and consulting work now spans forensic DNA, AI-generated child sexual abuse material, facial recognition, and proprietary algorithmic evidence. Dr. Canellas earned his J.D. from New York University School of Law and his Ph.D. in Aerospace Engineering from the Georgia Institute of Technology, where his research focused on human-machine interaction in complex sociotechnical systems in the military and aviation domains. Prior to becoming a lawyer, he served as an Institute of Electrical and Electronics Engineers (IEEE) USA legislative fellow for U.S. Representative Derek Kilmer (D-WA), managing a legislation and appropriations portfolio spanning justice, defense, homeland security, commerce, space, science, and AI.

A leader in AI governance, Dr. Canellas serves on the Advisory Board and is the past Chair of the IEEE-USA AI Policy Committee, where he advises state and federal policymakers on AI governance on behalf of over 140,000 U.S.-based engineers and technologists. Marc has published widely on forensic software, AI governance, autonomous weapons, autonomous vehicles, and voting machines in both law reviews and peer-reviewed scientific journals, including *AI Magazine, IEEE Computer, IEEE Transactions on Human-Machine Systems*, and the *University of Virginia Journal of Law and Politics* (*forthcoming*). He also trains attorneys from New York and Pennsylvania to Texas on forensic software, expert testimony, and AI-generated evidence.

PRESENTER INFORMATION

Yaneisy Delgado

Criminal Intelligence and Records Manager
Forensic and Technology Division,
Miami-Dade Sheriff's Office

Ms. Yaneisy Delgado is a Criminal Intelligence and Records Manager currently overseeing the Forensic Intelligence Section (FINS) located inside the Miami-Dade Sheriff's Office (MDSO) Forensic and Technology Division. She has been employed by the MDSO for over nine years, including one year as a Real-Time Crime Center Specialist and almost six years assigned to the Forensic Intelligence Section. She is responsible for generating Crime Gun Event Reports that translate the information generated from forensic analyses to actionable intelligence. Her work assists in disrupting the cycle of violence by identifying key subjects connected to gun crime events linked through the National Integrated Ballistic Information Network along with additional forensic data. Ms. Delgado serves on multiple multi-jurisdictional task forces composed of investigators, high-ranking law enforcement personnel, federal and state prosecutors, and other criminal justice stakeholders. Her expertise in combining traditional and forensic data sets has been a transformative force in the way gun crimes are investigated in Miami-Dade County.

PRESENTER INFORMATION

Dana Delger

Consultant
Forensic Science Standards Program, National Institute of Standards and Technology

Dana M. Delger is an attorney who works as a consultant to the Forensic Science Standards Program at the National Institute of Standards and Technology. Between 2014 and 2020, she served as Senior Staff Attorney in the Strategic Litigation Unit at the Innocence Project. Ms. Delger previously represented clients in state and federal criminal proceedings at the Neighborhood Defender Service of Harlem and at Morvillo Abramowitz Grand Iason & Anello PC. She also served as a law clerk to the Honorable Rosemary S. Pooler on the United States Court of Appeals for the Second Circuit. Ms. Delger graduated from New York University in 2007 and Columbia Law School in 2010.

PRESENTER INFORMATION

Michael Duprey

Research Data Scientist
RTI International

Michael Duprey is a Research Data Scientist at RTI International, specializing in mathematical modeling and responsible artificial intelligence (AI). With over a decade of experience, his work bridges applied mathematics, risk-aware AI deployment, and systems modeling—grounded in real-world constraints and guided by a commitment to safety, alignment, and public benefit. He leads RTI International's responsible AI and red teaming initiatives, designing evaluation protocols to surface vulnerabilities and failure modes in high-impact AI systems through adversarial simulation, pre-deployment testing, and mitigation planning. His work draws from federal policy and the National Institute of Standards and Technology AI Risk Management Framework, and emphasizes transparency, accountability, and safety in frontier-scale model governance. In parallel, he leads teams developing National Institutes of Health-funded agent-based and AI machine learning models that address complex public health challenges such as opioid epidemic response in the United States, global cervical cancer control, and communicable disease dynamics in Sub-Saharan Africa.

PRESENTER INFORMATION

Brandon Epstein

Technical Forensic Specialist
Magnet Forensics

Brandon Epstein is an experienced digital forensics examiner, educator, researcher, and retired law enforcement officer. Mr. Epstein holds a Master of Science in Recording Arts – Emphasis Media Forensics as well as numerous digital forensic certifications. He is the Chair of the Scientific Working Group on Digital Evidence and is a member of the International Association for Identification's Forensic Video Certification Board, the International Association of Chiefs of Police's Cybercrime and Digital Evidence Committee, and the Organization of Scientific Area Committees for Forensic Science Video/Imaging Technology and Analysis Subcommittee. He is also a fellow with the American Academy of Forensic Sciences. Prior to joining Magnet Forensics, Mr. Epstein was a co-founder of Medex Forensics, where he helped digital forensic examiners and investigators determine the trustworthiness of digital evidence, establish when a video has been edited or modified, and recognize original camera video from synthetically produced media.

PRESENTER INFORMATION

Emily Hadley

Security Researcher
AI Red Team, Microsoft

Emily Hadley is a Security Researcher for the Microsoft Artificial Intelligence (AI) Red Team. In this role, she works closely with cybersecurity experts to assess AI tools for potential risks and harms. Ms. Hadley also has nearly seven years of prior experience as a data scientist for RTI International where she worked on data science and AI projects in criminal justice, public health, and education for several federal clients. She has experience with a wide variety of data types and technical approaches, including machine learning, natural language processing, large language models, Bayesian modeling, and forecasting. Ms. Hadley has numerous peer-reviewed papers and conference presentations and has been quoted in major news outlets including *The New York Times* and *The Washington Post* for research on COVID reinfections. Her current research interests include exploring technical and policy approaches for building and deploying trustworthy AI systems. Ms. Hadley holds a B.S. in Statistical Sciences with a second major in Public Policy from Duke University and a M.S. in Analytics from North Carolina State University.

PRESENTER INFORMATION

John C. Havens

Global Staff Lead
Institute of Electrical and Electronics Engineers (IEEE) Planet Positive 2030

John C. Havens was the Founding Executive Director of the Institute of Electrical and Electronics Engineers (IEEE) Global Initiative on Ethics of Autonomous and Intelligent Systems which was responsible for creating *Ethically Aligned Design: A Vision for Prioritizing Human Well-being with Autonomous and Intelligent Systems* that was utilized by the United Nations, the Organization for Economic Cooperation and Development, International Business Machines, and dozens of organizations to create their artificial intelligence (AI) principles, policies, and technology. Mr. Havens helped create the IEEE 7000 Standards Series, the largest suite of international standards focused on AI and ethical/societal issues to date.

Mr. Havens is currently the Global Staff Director for the IEEE Planet Positive 2030 Program that produced the Compendium document, *Strong Sustainability by Design: Prioritizing Ecosystem and Human Flourishing with Technology-Based Solutions*, that inspired the creation of the IEEE 7800 Standards Series focused on sustainability.

Previously, Mr. Havens was an Executive Vice President of Social Media at Porter Novelli and was a professional actor for over 15 years. John has written for *Mashable* and *The Guardian* and is author of the books, *Heartificial Intelligence: Embracing Our Humanity To Maximize Machines, Hacking Happiness: Why Your Personal Data Counts and How Tracking it Can Change the World*, and *Tactical Transparency: How Leaders Can Leverage Social Media to Maximize Value and Build their Brand*. He is also an expert with AI and Faith.

PRESENTER INFORMATION

Ted R. Hunt

Senior Scientist and Senior Policy Advisor
Federal Bureau of Investigation Laboratory

Ted R. Hunt is a Senior Scientist at the Federal Bureau of Investigation (FBI) Laboratory in Quantico, Virginia. In that role, he serves as Senior Advisor for the FBI's Laboratory Division. Prior to his current position, Mr. Hunt was Special Counsel for the FBI's Science and Technology Branch, where he served as legal counsel to the Executive Assistant Director. From 2017 to 2021, Mr. Hunt was Senior Advisor on Forensic Science to the Deputy Attorney General at the United States Department of Justice, where he served as the Department's senior official on issues involving forensic policy and practice.

Prior to joining the Department of Justice, Mr. Hunt served as Chief Trial Attorney at the Prosecutor's Office in Kansas City, Missouri. During that time, he supervised a variety of specialized trial units and focused his work on investigating and prosecuting cold cases with DNA evidence. As a prosecutor, Mr. Hunt won convictions in over 100 felony jury trials, most of which involved the litigation of DNA evidence. Mr. Hunt is a former member of the National Commission on Forensic Science, the American Society of Crime Laboratory Directors Laboratory Accreditation Board (ASCLD/LAB) Board of Directors, the Missouri Crime Laboratory Review Commission, the Organization of Scientific Area Committees, and is a fellow in the Jurisprudence Section of the American Academy of Forensic Sciences.

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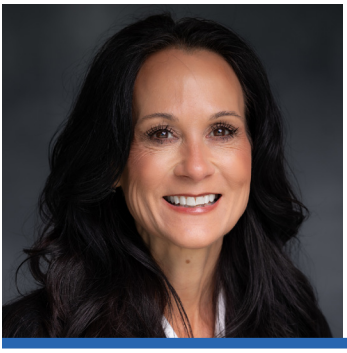

Nicole Jones

Director
Investigative Sciences Program,
RTI International

Ms. Nicole Jones is the Director of the Investigative Sciences Program at RTI International and a Certified Cyber Crime Examiner (3CE). Ms. Jones holds a Bachelor of Science in Chemistry from Ohio University, a Master of Science in Forensic Science Administration from Loyola University, and a Master of Science in Digital Forensics and Cyber Investigation from the University of Maryland.

Ms. Jones serves as the Principal Investigator for RTI International on the NIST Artificial Intelligence Safety Institute Consortium (AISIC) to establish a new measurement science to enable the identification of proven, scalable, and interoperable measurements and methodologies to promote development of trustworthy artificial intelligence (AI) and its responsible use. She serves on the AISIC Working Groups for synthetic content and capability evaluations to address current AI issues including risk management, the development of science-backed standards, best practices, and evaluation and auditing capabilities to support the development of safe, secure, and trustworthy AI technologies. She also serves on the Scientific Working Group on Digital Evidence Quality Committee, the Artificial Intelligence and Forensics Committee, and the ASTM E30 Subcommittee on AI and Machine Learning in Forensic Science. She has served as the Task Leader for the NIJ Forensic Science Technology Working Group, the NIJ Forensic Laboratory Needs Technology Working Group, and the Federal Bureau of Investigation Technical Working Group on Three-Dimensional Toolmark Technologies. Since 2013, she has served on the Interpol Forensic Science Managers Committee on behalf of the Drug Enforcement Administration and on the Interpol Working Group on Digital Forensics. In addition, she is the Executive Program Manager and Quality Assurance Program Manager for the NIJ National Missing and Unidentified Persons System Program and was the Associate Director for the NIJ Forensic Technology Center of Excellence.

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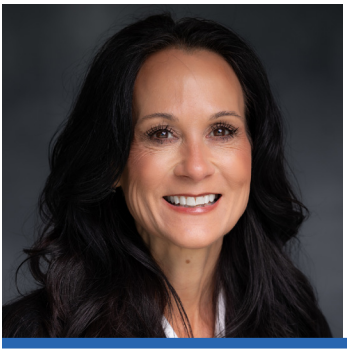

Nicole Jones

Director
Investigative Sciences Program,
RTI International

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Ms. Jones has more than 25 years of experience in forensic analysis, training and technical assistance, quality systems management, and quality assurance. She has also been responsible for evaluating Center for Forensic Science (CFS)–supported U.S. Department of Justice grant activities, including technology evaluation, technology assistance, and technology transfer. In this role, she has served as a liaison between state, local, and federal law enforcement; NIJ; and the research community.

Ms. Jones is a recognized subject matter expert and project manager for criminal justice initiatives, including forensic science, critical incident, risk management, quality assurance standards and best practices, and death investigation programs. She has developed validation protocols for implementing new instrumentation and new technologies for use in forensic laboratories.

In support of ISO accreditation and standards adoption, Ms. Jones develops innovative solutions to enhance the understanding, visibility, transparency, and effectiveness of current laboratory processes to facilitate better clarity, assistance, decision-making, and process improvement in forensic science. Her specialties include federal consulting, program/project management, stakeholder engagement, strategic planning and policy analysis and development, forensic sciences, missing persons and unidentified remains investigations, stakeholder outreach, and domestic and international partnership development.

PRESENTER INFORMATION

Daniel Katz

Director
Forensic Sciences Division, Maryland State Police

Daniel Katz has been with the Maryland State Police – Forensic Sciences Division for 18 years, including 11 years in his current role as Director, five years as Deputy Director, and two years as the Forensic Biology Section Manager. Prior to joining the Maryland State Police, he worked at the Delaware Office of the Chief Medical Examiner as the DNA Unit Manager and DNA Technical Leader during his entire seven-year tenure. Mr. Katz started his forensic career at the Armed Forces DNA Identification Laboratory where he worked for three years, first as a Technician and then as an Analyst, in both the Mitochondrial DNA and Nuclear DNA sections.

Mr. Katz grew up in Wilmington, Delaware and received a B.S. in Biotechnology from the University of Delaware. He then went to graduate school at the George Washington University where he received an M.F.S. in Forensic Science and earned a Certificate in Forensic Laboratory Management from the University of California at Davis. He is certified by the American Board of Criminalistics as a Diplomate in Comprehensive Criminalistics.

Mr. Katz has been a member of American Society of Crime Laboratory Directors (ASCLD) since 2010 and is currently on the ASCLD Board of Directors. He is a founding member of the National Association of Forensic Science Boards (NAFSB) and is currently on the NAFSB Executive Board. He is a member of the Maryland Forensic Laboratory Advisory Committee since 2014 and a member of the Maryland Sexual Assault Evidence Kit Policy and Funding Committee since 2017. He is a former president of the Mid-Atlantic Association of Forensic Scientists (MAAFS), a fellow of the American Academy of Forensic Sciences (AAFS), and a past Commissioner on the Forensic Science Education Program Accreditation Commission.

PRESENTER INFORMATION

Michael Majurski

Research Computer Scientist
National Institute of Standards and Technology

Michael Majurski is a Research Computer Scientist at the National Institute of Standards and Technology (NIST), where his work bridges artificial intelligence (AI) and measurement science. His research centers on two complementary domains: 1) AI for Metrology - developing AI systems to extract scientifically valid measurements from complex, often non-numeric, datasets and (2) Metrology for AI - designing rigorous evaluation methods to measure AI system behavior, accuracy, robustness, and failure modes. Mr. Majurski led the Trojan Detection in AI (TrojAI) test and evaluation program at NIST. He currently co-chairs the U.S. AI Safety Institute Consortium working group on security. His recent research focuses on automated benchmark generation for language models using generative methods grounded in document corpora.

He previously led NIST's TrojAI program, a multi-year effort aimed at detecting hidden malicious functionality (trojans) embedded in machine learning models. TrojAI involved extending adversarial machine learning methods into model trojaning across many different AI model modalities. The NIST component of TrojAI involved sequestered evaluation of performer detection algorithms and the creation of evaluation datasets comprising over 8 TB of clean and trojaned models across 27 challenge rounds.

Mr. Majurski began his research career in classical computer vision, building tools to extract measurements from biomedical image data, such as tracking stem cell growth dynamics over time. This early work produced widely used algorithms including Empirical Gradient Thresholding for robust binary segmentation, Microscopy Image Stitching Tool (MIST) for scalable image stitching, and Linear Mapper for object tracking in time-series data.

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PRESENTER INFORMATION

Michael Majurski

Research Computer Scientist
National Institute of Standards and Technology

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With the rise of convolutional neural networks, the AI for Metrology work started in earnest with segmentation, object detection, classification/regression tooling constructed to extract measurement information from images and other non-numeric data sources. While building AI measurement tooling, Mr. Majurski explored the limits related to AI robustness and how to improve performance under limited training data regimes. He has investigated methods such as advanced data augmentation, generative adversarial networks (GANs) for domain synthesis, transfer learning from related tasks, and semi-supervised contrastive learning. Building AI models from small domain-specific datasets is a particular specialty. He extended existing small data methods into semi-supervised training approaches based on contrastive learning. Specifically, introducing a Method of Moments constraint on semi-supervised model embedding space representations to improve out of distribution performance.

Mr. Majurski's current work continues to explore the frontier of AI evaluation, especially in the context of generative Language Models, where he is building measurement tooling to assess system capabilities based upon synthetic data evaluations grounded in document corpora.

PRESENTER INFORMATION

Dr. Niki Osborne

Consultant
The Forensic AI

Dr. Niki Osborne is a cognitive scientist and forensic research specialist with a Ph.D. in Psychology and over 15 years of experience examining how people make decisions under uncertainty. Her work sits at the intersection of human factors, cognitive bias, forensic science, and artificial intelligence (AI), with a focus on designing systems that support more accurate, transparent, and reliable decision-making.

Her early research investigated how contextual information, expectations, and ambiguity influence forensic evidence interpretation. She has published widely across forensic disciplines, including bloodstain pattern analysis, fingerprint comparison, bitemark analysis, and handwriting comparison, and is sometimes engaged to review complex forensic evidence in both active and post-conviction cases. In this role, she helps legal teams assess whether bias, error, or flawed reasoning may have influenced expert opinions. Her training and consultancy efforts have supported forensic scientists, legal professionals, and standards bodies across multiple jurisdictions.

Dr. Osborne led an international expert working group for the U.S. National Institute of Standards and Technology (NIST), which applied a human factors and systems-thinking approach to improve the reliability of forensic DNA interpretation. The resulting report provides recommendations for reducing the likelihood and consequences of bias and error in DNA interpretation.

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PRESENTER INFORMATION

Dr. Niki Osborne

Consultant
The Forensic AI

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More recently, Dr. Osborne's interests have shifted toward the transformative potential of AI in forensic science. As a steering committee member of NIST's AI in Forensic Science Program, she developed a structured template for AI use case documentation and built a use case library to help AI developers align their tools with real-world forensic needs. She is also interested in how AI tools are adopted in high-stakes operational contexts, how their outputs are interpreted and trusted by human users, and what cognitive and organizational factors affect their implementation and impact.

Dr. Osborne is an advocate for human-AI collaboration, emphasizing the importance of systems that respect human strengths and limitations, foster calibrated trust, and maintain critical oversight. She is currently collaborating with the developers of the NIST AI Risk Management Framework to make AI risk concepts more accessible and actionable for forensic practitioners adopting new technologies.

PRESENTER INFORMATION

Michael Rosenblum

Professor of Biostatistics
Johns Hopkins University

Dr. Michael Rosenblum is Professor of Biostatistics at Johns Hopkins University and Co-Director of the Johns Hopkins Causal Inference Working Group. He has a Ph.D. in Applied Mathematics from the Massachusetts Institute of Technology. His research focuses on design and statistical analysis of randomized and observational studies, and appropriate handling of missing data. He was elected Fellow of the American Statistical Association (ASA) for "outstanding contributions to statistical methodology and applications, especially with respect to the adaptive design and optimal analysis of randomized trials." He serves on the ASA Advisory Committee for Forensic Science. He is Principal Investigator of a grant from Johns Hopkins University titled "Evaluating Accuracy and Reproducibility of Forensic Science Methods Used in Criminal Courts", which has produced peer-reviewed research papers and presentations, including at the American Academy of Forensic Sciences. He is an affiliate of the Forensic Science Standards Board's Statistics Task Group for the Organization of Scientific Area Committees for Forensic Science at the National Institute of Standards and Technology. He is a member of the National Academies of Sciences, Engineering, and Medicine Committee on Advancing the Field of Forensic Pathology: Lesson Learned from Death in Custody Investigations. He has also published peer-reviewed research evaluating the scientific validity of firearms examination.

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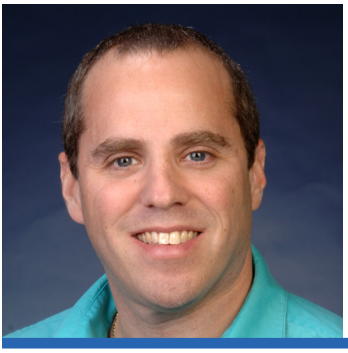

Craig Schlenoff

Senior Advisor for Artificial Intelligence
Information Technology Laboratory,
National Institute of Standards and
Technology

Dr. Craig Schlenoff currently serves as the Senior Advisor for Artificial Intelligence (AI) in the Information Technology Laboratory (ITL) in the National Institute of Standards and Technology (NIST). In this role, he advises the ITL Director and other NIST senior management on trends in AI and how NIST can best position itself to enable U.S. industry to lead in AI innovation. Prior to this, Dr. Schlenoff served as the NIST Acting Deputy Associate Director of Laboratory Programs (ADLP), where he advised the ADLP, provided operational guidance for NIST's scientific and technical laboratory programs across six laboratories, led program and budget development, and coordinated interagency and outreach activities, accelerating U.S. innovation.

Dr. Schlenoff previously served as the Director of the Office of Science and Technology Policy's Networking and Information Technology Research and Development (NITRD) National Coordination Office. In this role, he coordinated $11B of Federal Government information technology (IT) research and development (R&D) to identify, develop, and transition into use the secure IT, high-performance computing, networking, and software capabilities needed by the nation, and fostered public-private partnerships that provide world-leading IT capabilities. He also served as the co-chair of the NITRD AI R&D Interagency Working Group, where he led the development of the 2023 AI R&D Strategic Plan Update.

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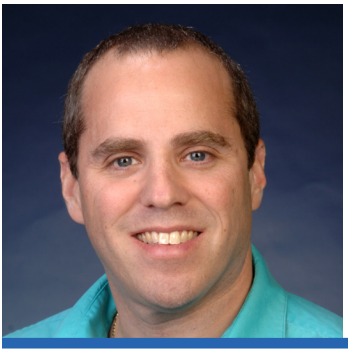

Craig Schlenoff

Senior Advisor for Artificial Intelligence
Information Technology Laboratory,
National Institute of Standards and Technology

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Previously, Dr. Schlenoff was the Group Leader of the Cognition and Collaboration Systems Group, the Program Manager of the Measurement Science for Manufacturing Robotics Program, and the Project Leader of the Agility Performance of Robotic Systems project and the Embodied AI and Data Generation for Manufacturing project in the Intelligent Systems Division at NIST. His research interests include AI, knowledge representation/ontologies, intention recognition, and performance evaluation of autonomous systems and industrial robotics. He has led multiple million-dollar projects and programs addressing performance evaluation of advanced military technologies and agility performance of manufacturing robotic systems. He has published over 150 journal and conference papers, guest edited three journals and three books, and written four book chapters. He is currently the Associate Vice President for Standardization in the Institute of Electrical and Electronics Engineers Robotics and Automation Society. He has served as the Program Manager for the Process Engineering Program at NIST and as the Director of Ontologies at VerticalNet Inc. He also teaches two courses at the University of Maryland, College Park: "Calculus" and "Building a Manufacturing Robot Software System" and "Mathematics for Engineers" at Johns Hopkins University.

Dr. Schlenoff received his bachelor's degree in Mechanical Engineering at the University of Maryland College Park, his master's degree in Mechanical Engineering from Rensselaer Polytechnic Institute, and his Ph.D. in Computer Science from the University of Burgundy in Dijon, France.

PRESENTER INFORMATION

Reva Schwartz

Co-Founder and Research Scientist
Civitaas Insights, LLC

Reva Schwartz is a Research Scientist and Co-Founder of Civitaas Insights. She builds evaluation methods to understand artificial intelligence's (AI's) value and utility in the real world, and how it transforms our culture and society.

Her 20+ year career in federal service spanned technology use, oversight and evaluation in high-risk/high-consequence settings. Ms. Schwartz started her career as a forensic scientist at the United States Secret Service where she served as an expert in speech and signal processing, forensic speaker recognition, and the enhancement of audio recordings, and other forensic evidence. She has been an advisor to the U.S. intelligence community, federal, state, local, and international law enforcement agencies concerning best practices in forensic science, expert-driven and human-in-the-loop approaches, and decision making in high-risk/high-consequence settings.

Most recently she served as a research scientist at the National Institute of Standards and Technology (NIST) AI Innovation Lab where she led the work on Bias in Artificial Intelligence and created and led NIST's Assessing Risks and Impacts of AI (ARIA) Program to advance measurement science for the risks posed by AI to people and society. An innovative program, ARIA moves beyond performance measurement to understand how people interact with generative AI in context. Reva was a member of NIST's AI Risk Management Framework (RMF) core writing team and chief architect of NIST's AI RMF Playbook.

Ms. Schwartz's research interests include the role of expertise and interdisciplinarity in the design, use, and evaluation of complex systems. She has advised federal agencies about how domain experts interact with automation to make sense of information in high-stakes settings.

PRESENTER INFORMATION

Hon. (ret) Donald E. Shelton

Faculty
Michigan State University
and University of Arizona

Judge Donald E. Shelton was a Circuit Judge in Ann Arbor, Michigan for almost 25 years. The Michigan Constitution requires that judges leave the bench at age 70. In 2014, he became the Director of the Criminology and Criminal Justice Program at the University of Michigan-Dearborn. He retired from the University in 2024 but continues to remotely teach forensic science and criminal justice courses at Michigan State University and the University of Arizona. Judge Shelton earned his undergraduate degree from Western Michigan University, his Juris Doctor degree from the University of Michigan Law School, his master's degree in Criminology and Criminal Justice from Eastern Michigan University, and his Ph.D. in Judicial Studies from the University of Nevada, Reno. Dr. Shelton is a prolific author and researcher, particularly in the field of forensic science evidence. His doctoral dissertation was "Criminal Adjudication: The Challenges of Forensic Science Evidence in the Early 21st Century" and his most recent books include *Forensic Science in Court: Challenges in the 21st Century* and *Forensic Science Evidence: Can the Law Keep up with Science*. He has published many articles and research papers and was one of the earliest published researchers into the so-called "CSI Effect", the expectation of jurors for scientific evidence. He has focused on the impact of modern technology on judges, jurors, and the justice system as an institution. Judge Shelton is a fellow in the American Academy of Forensic Sciences (AAFS) and past Chair of the AAFS Jurisprudence Section.

PRESENTER INFORMATION

Martin Stanley

Artificial Intelligence and Cybersecurity Researcher
National Institute of Standards and Technology

Martin Stanley, Artificial Intelligence (AI) and Cybersecurity Researcher, leads the AI Risk Management Framework (AI RMF) efforts at the U.S. National Institute of Standards and Technology (NIST) Information Technology Laboratory. Mr. Stanley previously led the Emerging Technology and Research and Development Program at the Cybersecurity and Infrastructure Security Agency and the Enterprise Cybersecurity Program at the U.S. Food and Drug Administration. Prior to his federal service, Mr. Stanley held executive leadership positions at Vonage and UUNET Technologies. Mr. Stanley co-authored "Digital Health", an Oxford University Press Publication, and led the 2024 development of NIST AI 600-1 "NIST AI RMF: Generative Artificial Intelligence Profile" and NIST SP 800-218A "Secure Software Development Practices for Generative AI and Dual-Use Foundation Models: An SSDF Community Profile."

PRESENTER INFORMATION

Stephanie Stoiloff

Director
Forensic and Technology Division,
Miami-Dade Sheriff's Office

Stephanie Stoiloff is currently the Director of the Forensic and Technology Division at the Miami-Dade Sheriff's Office, overseeing the Information Technology Office, the Crime Scene and Evidence Bureau, and a full-service, accredited crime laboratory that provides forensic services for the Miami-Dade Sheriff's Office, all municipal agencies in Miami-Dade County, and state and federal agencies, as needed.

Ms. Stoiloff has almost thirty years of experience in forensic science. She currently serves on the National Technology Validation and Implementation Collaborative (NTVIC) Steering, Forensic Investigative Genetic Genealogy, Single Cell DNA, and Rapid DNA Committees, and the NTVIC Evidence-Based Task Group. Further, she also serves on the American Society of Crime Laboratory Directors Disaster Victim Identification, Advocacy, and Member Resource Committees. She is a graduate of the Southern Police Institute 95th Command Officers Development Course as well as a member of the Miami-Dade County Association of Chiefs of Police, Major Cities Chiefs Association Forensic Science Committee, and the International Association of Chiefs of Police Police Investigative Operations Committee.

Ms. Stoiloff served on various national and international committees and working groups including the Forensic Laboratory Needs Technology Working Group established by the National Institute of Justice, the Federal Bureau of Investigation's Rapid DNA Crime Scene Technology Advancement Task Group, the Technical Working Group for the Preservation of Biological Evidence, and the Sexual Assault Forensic Examination Response Working Group. These working groups produced collaborative, comprehensive documents that are nationally and internationally recognized.

Ms. Stoiloff has also presented on topics including technology transition in a crime laboratory, forensic intelligence, gun crime intelligence, managing forensic operations, and Rapid DNA analysis. Further, she has also co-authored articles on forensic intelligence and other topics and collaborated on several widely recognized forensic research studies.

PRESENTER INFORMATION

Dr. Peter Stout

President and CEO
Houston Forensic Science Center

Dr. Peter Stout initially joined the Houston Forensic Science Center (HFSC) in 2015 as its Chief Operating Officer and Vice President. He has more than 25 years of experience in forensic science and forensic toxicology. Prior to joining HFSC, Dr. Stout worked as a Senior Research Forensic Scientist and Director of Operations in the Center for Forensic Sciences at RTI International. Additionally, he served as President of the Society of Forensic Toxicologists, and he is currently the President of the Texas Association of Crime Lab Directors. Dr. Stout has a doctorate in Toxicology from the University of Colorado Health Sciences Center in Denver. Dr. Stout also served as an officer in the U.S. Navy Medical Service Corps.

PRESENTER INFORMATION

Henry Swofford

Lead Scientist
Forensic Science Research Program,
National Institute of Standards
and Technology

Dr. Henry Swofford is the Lead Scientist with the Forensic Science Research Program in the Special Programs Office at the National Institute of Standards and Technology. Dr. Swofford holds a Ph.D. in Forensic Science from the University Lausanne, a Master of Science in Forensic Science from the University of Florida, and a Bachelor of Science in Biology with a minor in Chemistry from Georgia State University. His previous position was in the private sector where he oversaw the execution of strategic investments in technology development programs on behalf of the United States Intelligence Community. Prior to that, he served as the chief of the Latent Print Branch for the United States Army Criminal Investigation Laboratory (USACIL) responsible for overseeing forensic latent print operations in support of the criminal investigative mission of the U.S. Department of Defense. Other roles include serving as a Quality Assurance Manager, Research Coordinator, and Physical Scientist/Latent Print Examiner for the USACIL as well as a Laboratory Technician for the Georgia Bureau of Investigation since 2003. Over his career, Swofford has authored several articles and given approximately 150 professional presentations throughout the United States and International community related to forensic science methods and practices. He has testified in federal, state, and military courts as an expert and served on numerous committees and boards related to forensic science.

PRESENTER INFORMATION

Melissa Taylor

Senior Forensic Science Research Manager, Special Programs Office; *Program Manager*, National Artificial Intelligence Advisory Committee, Information Technology Laboratory, National Institute of Standards and Technology

Melissa Taylor is a Senior Forensic Science Research Manager at the National Institute of Standards and Technology (NIST), where she works at the intersection of forensic science, human behavior, and technology. Her current work focuses on improving how forensic experts make decisions, mapping out how forensic processes work in real-world settings, and helping to build trustworthy and responsible artificial intelligence (AI) systems for use in the field.

With more than 20 years of experience in the forensic sciences, Ms. Taylor's career has spanned government, private industry, and research. Before joining NIST, she worked with Booz Allen Hamilton and Lockheed Martin and served as a consultant to the National Institute of Justice. She brings a deep understanding of both the technical and human sides of forensic work.

At NIST, she leads the Expert Working Group Series on Human Factors in Forensic Sciences—bringing together professionals from across disciplines to look at how things like bias, communication, and decision-making affect forensic results. She's also contributed to key NIST publications, including *Forensic DNA Interpretation and Human Factors, Beginner's Guide to Biometric and Forensic Science Human Subjects Research Protection*, and *Best Practices in the Collection and Use of Biometric and Forensic Datasets,* among others. Ms. Taylor also serves as the Program Manager for the United States National Artificial Intelligence Advisory Committee, which advises the President and the National AI Initiative Office on all things AI, from scientific progress to ethics to workforce impacts.

In 2025, she was honored with the Department of Commerce's 2024 Gold Medal Award—the highest recognition the department gives—for her leadership in forensic science.

PRESENTER INFORMATION

Amy Watroba

Executive Director
Illinois Forensic Science Commission

Amy Watroba joined the Illinois Forensic Science Commission as its first Executive Director in January of 2024. Ms. Watroba advises and assists the Commission with its statutory duties and purpose, drafts Commission policies and protocols, serves as project manager for Commission initiatives, and liaisons with forensic science stakeholders and organizations on behalf of the Commission to understand and define the issues impacting the delivery and application of forensic science in Illinois.

Previously, Ms. Watroba was a trial and appellate prosecutor in Illinois for over twenty years. She concentrated on cases involving complex forensic evidence, providing legal support and training for attorneys, law enforcement officers, and scientists, and developing policies and procedures related to forensic evidence. She prosecuted high-profile and serious felony jury and bench trials involving DNA, serology, trace chemistry, firearms identification, blood stain pattern analysis, drug chemistry, forensic pathology, historic cell tower analysis, and fingerprint evidence. She also litigated appeals related to forensic evidence in the Supreme Court of the United States, Illinois Supreme Court, and Illinois Appellate Court.

Ms. Watroba has served on the National District Attorneys Association's (NDAA's) Forensic Science Working Group, four of the American Academy of Forensic Sciences' Consensus Bodies, and the FBI's Rapid DNA Task Force, and she was appointed by Illinois Governor JB Pritzker to the Governor's Task Force on Forensic Science in 2020. She has presented training programs across the country for attorneys, law enforcement professionals, and forensic scientists and was honored to receive the NDAA's 2021 Distinguished Faculty Award. She authored "The Expert Witness" chapter of the *NDAA's Trial Advocacy Manual* (2019) and co-authored *Report Writing for Crime Scene Investigators,* which was published by *CRC Press* in June of 2022.

Ms. Watroba received her law degree from Loyola University-Chicago School of Law in 2001 and graduated with Honors from the University of Michigan-Ann Arbor in 1998 with a B.A. in Creative Writing.

PRESENTER INFORMATION

Agnes Winokur

Director
Special Testing and Research Laboratory, Drug Enforcement Administration

Dr. Agnes Winokur currently serves as the Laboratory Director for the Drug Enforcement Administration (DEA) Special Testing and Research Laboratory. She holds a B.S. in Chemistry and a B.A. in Criminology from the University of Florida, as well as an M.S. in Forensic Science and a Ph.D. in Chemistry from Florida International University.

With over 26 years of experience at the DEA, Dr. Winokur has served in various capacities including forensic chemist, supervisor, program manager, and associate laboratory director. As the current laboratory director of the DEA Special Testing and Research Laboratory, she oversees DEA's Forensic Science Intelligence Profiling Programs, the organic synthesis group, the laboratory system's method validation group, and the reference material authentication group, while providing oversight for analytical research efforts. Previously, she served as Laboratory Director of the DEA Southeast Regional Laboratory. Dr. Winokur has delivered numerous presentations to law enforcement agencies and forensic science organizations, authored publications, and developed innovative processes to enhance drug analysis and streamline laboratory operations to reduce backlogs. She actively leverages her connections within the forensic community and law enforcement agencies to foster collaboration and partnerships across agencies and forensic disciplines.

Beyond her DEA responsibilities, Dr. Winokur holds several prominent leadership positions in the forensic science community. She currently serves as Chair of the National Institute of Standards and Technology Organization of Scientific Area Committees for Forensic Science Seized Drugs Subcommittee, which develops standards and guidelines for the forensic analysis of seized drugs in the United States. She also chairs the Standards Developing Organization ASTM International E30 Forensic Sciences Committee and the newly created ASTM E30 AI and Machine Learning for Forensic Science Subcommittee. Dr. Winokur served as a member of the International Scientific Working Group for the Analysis of Seized Drugs for five years, contributing to efforts to improve the quality of forensic examination of seized drugs for the international forensic community. As an active fellow of the American Academy of Forensic Sciences (AAFS), she currently serves as Criminalistics Section Chair and Chair of the AAFS's Opioids and Emerging Drugs Ad-Hoc Committee.

PRESENTER INFORMATION

Andrew Wong

Director
Business Intelligence and Data Insights Division, Miami-Dade County Information Technology Department

Andrew Wong is the Director of the Business Intelligence and Data Insights Division at the Miami-Dade County Information Technology (IT) Department. He leads county-wide strategic initiatives focused on artificial intelligence (AI), Low-Code platforms, and a Trusted Data Lakehouse—advancing data governance, analytics, and innovation across systems and departments.

With over 40 years of IT experience in databases, IT infrastructure, and application development, Mr. Wong oversees the county's Trusted Data Lakehouse Platform—built on a modern data warehousing architecture in the Microsoft Azure cloud. The platform currently houses over 87 billion rows of data and is expanding by approximately 13 million rows daily. The platform will experience significant growth as other systems data are included. It serves as the foundation for enterprise analytics, operational intelligence, and scalable AI initiatives.

Mr. Wong is spearheading the development of a Data Lakehouse to support Criminal Justice Information Services reporting, including integrations with the Miami-Dade Sheriff's Office (MDSO), Clerk of the Courts, and Miami-Dade Corrections and Rehabilitation Department. These data environments enhance interagency collaboration, transparency, and forensic readiness.

As part of the county's AI portfolio, Mr. Wong is currently leading a Generative AI initiative with MDSO to support the modernization and standardization of forensic standard operating procedures. This initiative leverages Generative AI to assist in document generation, procedural consistency, and knowledge retention, illustrating the transformative role of AI in public safety operations.