Agenda – November 28, 2012

Forensic Biology/DNA, Firearms Analysis, and Fire Research Sessions – Green Auditorium

8:00-8:30	Visit Registration Table (Coffee provided)
8:30-8:40	Introductions – John Paul Jones II, MBA, Law Enforcement Standards Office, Office of Special Programs (OSP)
8:40-9:00	Welcoming Keynote Address– Willie E. May, PhD, Associate Director for Laboratory Programs, Office of the Director

DNA Stability, Extractions and Quantitation

Moderator: John M. Butler, PhD, Biomolecular Measurement Division, Material Measurement Laboratory (MML)

9:00-9:05	Overview of DNA Programs at NIST – John M. Butler, PhD, Biomolecular Measurement Division, MML
9:05-9:25	Stability Studies – Margaret C. Kline, MS, Biomolecular Measurement Division, MML
9:25-9:40	DNA Extraction – Erica L. R. Butts, MFS, Biomolecular Measurement Division, MML
9:40-10:00	DRAGON (NIST Forensics Grand Challenge Project) – David J. Ross, PhD, Biosystems and Biomaterials Division, MML
10:00-10:20	Digital PCR & DNA Quantitation –Ross J. Haynes, Biomolecular Measurement Division, MML
10:20-10:50	Break and Poster Viewing/Exhibitor Displays

STRs, mtDNA, Rapid DNA

10:50-11:10	STR Kits & New Loci – Carolyn R. Hill, MS, Biomolecular Measurement Division, MML
11:10-11:30	STRBase and Information Resources – John M. Butler, PhD, Biomolecular Measurement Division, MML
11:30-11:50	Mixture Interpretation & True Allele – Mike D. Coble, PhD, Biomolecular Measurement Division, MML
11:50-12:10	mtDNA Base Composition – Kevin M. Kiesler, MS, Biomolecular Measurement Division, MML
12:10-12:30	Rapid DNA – Pete M. Vallone, PhD, Biomolecular Measurement Division, MML
12:30-1:45	Lunch and Poster Viewing/Exhibitor Displays

Firearms Analysis: Measurement of Identification for Firearms and Toolmark Evidence

Moderator: Robert M. Thompson, Law Enforcement Standards Office, OSP

1:45-2:00	Overview of Firearms Projects at NIST – Robert M. Thompson, Law Enforcement Standards Office, OSP
2:00-2:20	Establishing the "National Ballistics Evidence Search Engine (NBESE)" Based on 3D Topography Measurements on Correlation Cells – (Half-year Report for the NIST 2012 Forensics Grand Challenge Project) – John Song, Semiconductor and Dimensional Metrology Division, Physical Measurement Laboratory (PML)
2:20-2:40	Initial Tests and Analysis of the NIST Proposed Congruent Matching Cells (CMC) Method using Fired Cartridge Cases from Consecutively Manufactured Pistol Slides – Wei Chu, PhD, Guest Researcher, Semiconductor and Dimensional Metrology Division, PML
2:40-3:00	2D/3D Topography Comparisons of 10 Consecutively Manufactured Chisels and Punches through the Cross Correlation Function – Alan Zheng, MS, Semiconductor and Dimensional Metrology Division, PML
3:00-3:20	NIST Bullet SRM 2460 Replication and Validation Using an Improved Vacuum Casting Method and Potential Evidentiary Use – Thomas Brian Renegar, Semiconductor and Dimensional Metrology Division, PML
3:20-3:40	Break and Poster Viewing/Exhibitor Displays

Firearms Analysis: Improving Accuracy and Quality Assurance

3:40-4:00	Standard Reference Material 2461 Standard Cartridge Case – T.V. Vorburger, PhD, Guest Researcher, Semiconductor and Dimensional Metrology Division, PML
4:00-4:20	The National Ballistic Imaging Comparison Parts 1 and 2 – Alan Zheng MS, Semiconductor and Dimensional Metrology Division, PML
4:20-4:40	Models for Firearm Impression Cross-correlation Scores – James H. Yen, PhD, Statistical Engineering Division, Information Technology Laboratory (ITL)

Fire Research at NIST

4:40-5:00	Verification and Validation of Fire Models Used for Forensic Reconstructions – Kevin B. McGrattan, PhD, Fire Research Division, Engineering Laboratory (EL)

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Agenda - November 29, 2012
Trace Analysis/Collection Session – Green Auditorium

8:00-8:30	Visit Registration Table (Coffee provided)
8:30-8:35	Welcoming & Introductions – John Paul Jones II, MBA, Office of Law Enforcement Standards, Office of Special Programs
8:35-9:00	Keynote Address: Netherlands Forensic Institute - Tjark Tjin-A-Tsoi, Chief Executive Officer
9:00-9:30	Introduction to Session and Overview of Trace Analysis at NIST – Eric B. Steel, Surface & Microanalysis Science Division, Material Measurement Laboratory (MML) & Greg J. Gillen, PhD, Surface & Microanalysis Science Division, MML

Trace Sampling

Moderator: Greg J. Gillen, PhD, Surface & Microanalysis Science Division, MML

9:30-9:50	Enabling Forensics Investigations of Biothreat Incidents through Sampling Standards – Jayne Morrow, PhD, Biochemical Science Division, MML
9:50-10:10	Surface Wipe Sampling for Trace Narcotics and Explosives Collection – Jennifer R. Verkouteren, PhD, Surface and Microanalysis Science Division, MML
10:10-10:30	Aerodynamic Sampling – Matthew E. Staymates, Surface & Microanalysis Science Division, MML
10:30-10:50	Break and Poster Viewing/Exhibitor Displays

Standard Test Materials/Operational Protocols

10:50-11:10	Production of Seized Drug Analysis Standards by Inkjet Printing (NIST Forensics Grand Challenge Project) – Jeanita S. Pritchett, PhD, Analytical Chemistry Division, MML
11:10-11:30	Nuclear Forensics Reference Materials (NIST Forensics Grand Challenge Project) – Kenneth G. W. Inn, PhD, Radiation & Biomolecular Physics Division, PML
11:30-11:50	Following the Scent – Development of Canine Training Aids – William A. MacCrehan, PhD, Analytical Chemistry Division, MML
11:50-12:10	Performance Validation for Trace – R. Mike Verkouteren, PhD, Microanalysis Science Division, MML
12:10-12:30	NIST Trace Explosives Test Bed – Marcela Najarro, Materials Measurement Science Division, MML
12:30-12:50	Mass Spec Reference Libraries for Forensics: Past, Present and Future - Steve E. Stein, PhD, Biomolecular Measurements Division, MML
12:50-2:20	Lunch and Poster Viewing/Exhibitor Displays/Deployable Laboratory/Mobile Decontamination Vehicle (Hands-on Biothreat Response and Sample Collection Demo)

Technique Development for Trace Evidence

Moderator: Eric B. Steel, Surface & Microanalysis Science Division, MML

2:20-2:40	Automated Particle Analysis – Nicholas W. M. Ritchie, Materials Measurement Science Division, MML
2:40-3:00	Combined IMS and Biometrics – Jessica L. Staymates, MFS, Surface and Microanalysis Science Division, MML
3:00-3:20	Atmospheric Pressure MS - Tim M. Brewer, PhD, Surface and Microanalysis Science Division, MML
3:20-3:40	Improvements in Trace Involatile Vapor Analysis – Tom J. Bruno, PhD, Applied Chemicals and Materials Division, MML
3:40-4:00	Unified Organic, Inorganic, and Morphological Analysis of Forensic Samples via SEM- based, High-Resolution X-ray Spectroscopy – W. B. Doriese, PhD, Quantum Electronics and Photonics Division, PML
4:00-5:00	Optional Open House and Trace Analysis Lab Tours of NIST Facilities
4:00-5:00	Poster Viewing/Exhibitor Displays

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Agenda - November 30, 2012

Computer & Multimedia Forensics and Fingerprints & Biometrics Sessions – Green Auditorium

8:00-8:30	Visit Registration Table (Coffee provided)
8:30-8:40	Welcoming & Introductions – John Paul Jones II, MBA, Office of Law Enforcement Standards, Office of Special Programs
8:40-9:00	Introduction to Sessions and Overview of Forensics and Information Technology at NIST – Martin Herman, PhD, Information Technology Laboratory Office, Information Technology Laboratory (ITL)

Computer and Multimedia Forensics

9:00-9:20	Overview of Computer Forensics at NIST – Barbara Guttman, Software and Systems Division, ITL
9:20-9:40	National Software Reference Library and Diskprint Research – Mary T. Laamanen & John M. Tebbutt, Software and Systems Division, ITL
9:40-10:00	File Identification in iOS – Michael Ogata, Software and Systems Division, ITL
10:00-10:20	Computer Forensic Tool Testing (CFTT) at NIST – James R. Lyle, PhD, Software and Systems Division, ITL
10:20-10:50	Break and Poster Viewing/Exhibitor Displays
10:50-11:10	Mobile Device Tool Testing – Richard Ayers, MS, Software and Systems Division, ITL
11:10-11:30	Developing a Forensic Image Examination Rating Scale – Charles Fenimore, PhD, Information Access Division, ITL
11:30-11:50	Instance search, copy detection, and semantic indexing at TRECVID - Paul D. Over, Information Access Division, ITL
11:50-1:10	Lunch and Poster Viewing/Exhibitor Displays (Deployable Lab Closes at 1:30PM)

Fingerprints & Biometrics

1:10-1:20	Overview of Fingerprint and Biometric Activities at NIST – Michael D. Garris, Information Access Division, ITL
1:20-1:40	Overview of the NIST Evaluation of Latent Fingerprint Technologies (ELFT) Project – Michael D. Indovina, Information Access Division, ITL
1:40-2:00	Fingerprint Quality – Elham Tabassi, Information Access Division, ITL
2:00-2:20	Biometrics & Forensics: The role of standards in data exchange – Brad Wing, Information Access Division, ITL
2:20-2:40	Metrics for Enhancement of Latent Fingerprint Images (NIST Forensics Grand Challenge Project) – Andrew M. Dienstfrey Applied and Computational Mathematics Division, ITL & Mary F. Theofanos, MS, Standards Coordination Office, Laboratory Programs
2:40-3:00	Break and Poster Viewing/Exhibitor Displays
3:00-3:20	Transcending PSNR: SIVV as a Comprehensive Image Fidelity Metric – John M. Libert, Information Access Division, ITL
3:20-3:40	Challenges in Forensic Face Recognition – P. Jonathon Philips, PhD, Information Access Division, ITL
3:40-4:00	Human Assisted Speaker Recognition – Craig S. Greenberg, MS, Information Access Division, ITL
4:00	Conference Concludes

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