

Monday, June 27, 2005

7:30 am - 8:30 am **Registration and Continental Breakfast** *Grand Ballroom Foyer*

Welcome and Opening Remarks

8:30 am - 9:30 am **General Session** *Salons III/IV*

Sarah V. Hart

Director
National Institute of Justice
U.S. Department of Justice
Washington, DC

John S. Morgan

Assistant Director for Science and Technology
National Institute of Justice
U.S. Department of Justice
Washington, DC

Susan D. Narveson

Chief
Investigative and Forensic Sciences Division
Office of Science and Technology
National Institute of Justice
U.S. Department of Justice
Washington, DC

R&D Deliverables for the Crime Laboratory

9:30 am - 10:50 am **Plenary Session** *Salons III/IV*

Moderator

Lois Tully

Deputy Chief
Investigative and Forensic Sciences Division
Office of Science and Technology
National Institute of Justice
U.S. Department of Justice
Washington, DC

Presenters

9:30 am - 9:50 am

Duplex qPCR Assay for Quantifying Nuclear and Mitochondrial DNA in Forensic Samples: Implementation in the California DOJ Missing Persons DNA Program

Mark D. Timken

Criminalist

Jan Bashinski DNA Laboratory

California Department of Justice

Richmond, CA

9:50 am - 10:10 am

Applying Real-Time PCR DNA Quantitation to Casework Analysis

Eric Buel

Director

Forensic Laboratory

Vermont Department of Public Safety

Waterbury, VT

10:10 am - 10:30 am

mtDNA Genome SNPs for Increased Forensic Discrimination in U.S. Caucasians, African Americans, and Hispanics

Thomas J. Parsons

Chief Scientist

Armed Forces DNA Identification Laboratory

Rockville, MD

10:30 am - 10:50 am

Forensic mtDNA Mixture Fractionation by Denaturing High-Performance Liquid Chromatography

Phillip B. Danielson

Associate Professor

Department of Biological Sciences

University of Denver

Denver, CO

10:50 am - 11:10 am	Break
----------------------------	--------------

R&D Deliverables for the Crime Laboratory, Continued

11:10 am - 12:10 pm

Plenary Session

Salons III/IV

Moderator

Stacia Jackson

Contractor, Lockheed Martin Information Technology
Investigative and Forensic Sciences Division
Office of Science and Technology
National Institute of Justice
U.S. Department of Justice
Washington, DC

Presenters

11:10 am - 11:30 am

Miniplex Primer Sets for the Analysis of Degraded DNA

Kerry L. Opel

Graduate Research Assistant
Department of Chemistry and Biochemistry
Florida International University
Miami, FL

11:30 am - 11:50 am

Genetic Database of Y Chromosome Markers for Forensic Analyses

Michael F. Hammer

Research Scientist
Division of Biotechnology
University of Arizona
Tucson, AZ

11:50 am - 12:10 pm

SpermPaints: Fluorescent Monoclonal Antibody Probes to Sperm Differentiation Antigens – Application in Sexual Assault Analysis

John C. Herr

Professor of Cell Biology and Urology
Center for Research in Contraceptive and Reproductive Health
University of Virginia School of Medicine
Charlottesville, VA

Discussion and Questions

12:10 pm - 12:30 pm

Discussion Session

Salons III/IV

Working Lunch

12:30 pm - 2:00 pm

Salons I/II

Moderator

Lois Tully
Deputy Chief
Investigative and Forensic Sciences Division
Office of Science and Technology
National Institute of Justice
U.S. Department of Justice
Washington, DC

Presenter

Objectively Proving the Value of Forensic DNA to Justify Additional Resources

Ray Wickenheiser
Director
Acadiana Criminalistics Laboratory
New Iberia, LA

Tools for Researchers and Practitioners

2:00 pm - 3:30 pm

Plenary Session

Salons III/IV

Moderator

Patricia A. Kashtan
Program Management Support Analyst, Lockheed Martin Information Technology
Investigative and Forensic Sciences Division
Office of Science and Technology
National Institute of Justice
U.S. Department of Justice
Washington, DC

Presenters

2:00 pm - 2:20 pm

The Forensic Resource Network (FRN)

John Paul Jones
Program Manager
Investigative and Forensic Sciences Division
Office of Science and Technology
National Institute of Justice
U.S. Department of Justice
Washington, DC

2:20 pm - 2:50 pm

National Institute of Justice Expert Systems Test Bed Part I: Overview and Goals

Bridget Tincher

Special Projects Manager
Forensic Science Center
Marshall University
Huntington, WV

2:50 pm - 3:10 pm

Grant Progress Assessment (GPA) Program

Mark S. Nelson

GPA/DNA Audit Program Manager
National Forensic Science Technology Center
Largo, FL

3:10 pm - 3:30 pm

TBA

Kevin Lothridge

Executive Director
National Forensic Science Technology Center
Largo, FL

3:30 pm - 3:50 pm

Break

Tools for Researchers and Practitioners, Continued

3:50 pm - 4:30 pm

Plenary Session

Salons III/IV

Moderator

Kesha Lowe

Program Assistant, Lockheed Martin Information Technology
Investigative and Forensic Sciences Division
Office of Science and Technology
National Institute of Justice
U.S. Department of Justice
Washington, DC

Presenters

3:50 pm - 4:10 pm

Development of a Speedy Rape Kit Screening Method

Jack Ballantyne

Associate Professor

Department of Chemistry

University of Central Florida

Orlando, FL

4:10 pm - 4:30 pm

DNA.gov: The Face of the President's Initiative

Lee Mockensturm

Web Content Manager

National Institute of Justice

U.S. Department of Justice

Washington, DC

Discussion and Closing Remarks

4:30 pm - 5:00 pm

General Session

Salons III/IV

Tuesday, June 28, 2005

7:30 am - 8:15 am

Registration and Continental Breakfast

Grand Ballroom Foyer

Opening Remarks

8:15 am - 8:30 am

General Session

Salons III/IV

Susan D. Narveson

Chief

Investigative and Forensic Sciences Division

Office of Science and Technology

National Institute of Justice

U.S. Department of Justice

Washington, DC

Lois Tully

Deputy Chief

Investigative and Forensic Sciences Division

Office of Science and Technology

National Institute of Justice

U.S. Department of Justice

Washington, DC

R&D New Projects

8:30 am - 10:10 am

Plenary Session

Salons III/IV

Moderator

Nick Viggiani

Forensic Policy Analyst, Lockheed Martin Information Technology

Investigative and Forensic Sciences Division

Office of Science and Technology

National Institute of Justice

U.S. Department of Justice

Washington, DC

Presenters

8:30 am - 8:50 am

Development of Laser Microdissection to Separate Spermatozoa From Epithelial Cells for STR Analysis

Christine T. Sanders

Research Associate

Department of Neuroscience

Rosalind Franklin University of Medicine and Science

North Chicago, IL

8:50 am - 9:10 am

Development of an Automated System to Detect Spermatozoa on Laboratory Slides to Increase Productivity in the Analysis of Sexual Assault Cases

Eric Buel

Director

Forensic Laboratory

Vermont Department of Public Safety

Waterbury, VT

9:10 am - 9:30 am

Developing an SNP Panel for Forensic Identification

Kenneth K. Kidd

Professor

Department of Genetics, Psychiatry, and Biology

Yale University School of Medicine

New Haven, CT

9:30 am - 9:50 am

Pairwise Relatedness Estimation: Accounting for Evolutionary Effects

Amanda Hepler

Ph.D. Candidate

Department of Statistics

North Carolina State University

Raleigh, NC

9:50 am - 10:10 am

Miniaturized Forensic DNA Analysis System for SNP-based Detection

Carl A. Batt

Liberty Hyde Bailey Professor
Department of Food Science
College of Agriculture and Life Sciences
Cornell University
Ithaca, NY

10:10 am - 10:30 am

Break

R&D New Projects, Continued

10:30 am - 12:10 pm

Plenary Session

Salons III/IV

Moderator

Thurston L. Bryant

Analyst, Lockheed Martin Information Technology
Investigative and Forensic Sciences Division
Office of Science and Technology
National Institute of Justice
U.S. Department of Justice
Washington, DC

Presenters

10:30 am - 10:50 am

Microfabricated Capillary Array Electrophoresis Genetic Analyzers for Forensic Short Tandem Repeat DNA Profiling

Richard A. Mathies

Professor
Department of Chemistry
University of California, Berkeley
Berkeley, CA

10:50 am - 11:10 am

Generating More Precise Postmortem Interval Estimates With Entomological Evidence: Reliable Patterns of Gene Expression Throughout Calliphoroid Larval and Pupal Development

David Foran

Professor
Forensic Biology Program
Michigan State University
East Lansing, MI

11:10 am - 11:30 am

mtDNA Reference Database for the Domestic Dog

Marc W. Allard

Louis Weintraub Associate Professor
Department of Biological Sciences
The George Washington University
Washington, DC

11:30 am - 11:50 am

Development and Validation of a Standardized Canine STR Panel for Use in Forensic Casework

Sree Kanthaswamy

Director
Veterinary Genetics Laboratory
School of Veterinary Medicine
University of California, Davis
Davis, CA

11:50 am - 12:10 pm

Forensic Stain Identification by RT-PCR Analysis

Janice A. Nicklas

Forensic Chemist IV
Forensic Laboratory
Vermont Department of Public Safety
Waterbury, VT

Discussion and Questions

12:10 pm - 12:30 pm

Discussion Session

Salons III/IV

Working Lunch: R&D Demonstrations and Practitioner Posters

12:30 pm - 2:30 pm

Salons I/II

Presenters

Multiplex_QA and MixSTR: Excel-Based Tools for STR Multiplex Measurement Quality Assessment and for Mixture Evaluation

John M. Butler

Research Chemist
Human Identity Project Team
DNA Technologies Group and Biotechnology Division
National Institute of Standards and Technology
Gaithersburg, MD

Forensic Botany Applications in Casework and Use as Tracers in Drug Distribution Networks

Heather Miller Coyle
Laboratory Coordinator
Forensic Science Program
University of New Haven
West Haven, CT

SpermPaint: Fluorescent Monoclonal Antibody Probes for Sperm Identification

John C. Herr
Professor of Cell Biology and Urology
Center for Research in Contraceptive and Reproductive Health
University of Virginia School of Medicine
Charlottesville, VA

Evaluation of Track-Etch Filters for Isolating Sperm DNA in Rape Kits

Carll Ladd
Supervising Criminalist
DNA Unit
Connecticut Forensic Science Laboratory
Meriden, CT

Prototype Polymeric Microfluidic DNA Analysis System for Forensic Analysis

Laurie E. Locascio
Team Leader
Microfluids Program
Analytical Chemistry Division
Chemical Science and Technology Laboratory
National Institute of Standards and Technology
Gaithersburg, MD

Quantitation of Human DNA in Forensic Samples

Janice A. Nicklas
Forensic Chemist IV
Forensic Laboratory
Vermont Department of Public Safety
Waterbury, VT

Multiplex qPCR Assays for the Quantification of DNA in Forensic Samples

Mark D. Timken
Criminalist
Jan Bashinski DNA Laboratory
California Department of Justice
Richmond, CA

DNA Chip Instrument for Automated Human Identification

Ronald Sosnowski
Grant Director
Advanced Technology Division
Nanogen, Inc.
San Diego, CA

Update on the FBI's CODIS Program

2:30 pm - 2:50 pm

General Session

Salon III/IV

Moderator

John Paul Jones
Program Manager
Investigative and Forensic Sciences Division
Office of Science and Technology
National Institute of Justice
U.S. Department of Justice
Washington, DC

Presenter

Thomas F. Callaghan
Chief
CODIS Unit
Laboratory Division
Federal Bureau of Investigation
Quantico, VA

National Institute of Justice Expert System Test Bed Part II: Discussion of Individual Expert Systems

2:50 pm - 4:50 pm

Plenary Session

Salon III/IV

Moderator

John Paul Jones
Program Manager
Investigative and Forensic Sciences Division
Office of Science and Technology
National Institute of Justice
U.S. Department of Justice
Washington, DC

Presenters

2:50 pm - 3:20 pm

Applied Biosystems Expert System: GeneMapper® ID

Lisa Calandro

Senior Forensic Scientist
Applied Markets
Applied Biosystems
Foster City, CA

3:20 pm - 3:50 pm

Cybergenetics© Expert System: TrueAllele®

Mark W. Perlin

Chief Executive Officer and Founder
Cybergenetics, Inc.
Pittsburgh, PA

3:50 pm - 4:20 pm

The Forensic Science Service® Expert System: FSS-i 3

Christopher Maguire

Software Business Unit Manager
Forensic Science Service
Wetherby, West Yorkshire
United Kingdom

Expert System Test Bed Part II Discussion Session

4:20 pm - 4:50 pm

Discussion Session

Salons III/IV

Closing Remarks

4:50 pm - 5:00 pm

General Session

Salons III/IV

Wednesday, June 29, 2005

7:30 am - 8:15 am

Registration and Continental Breakfast

Grand Ballroom Foyer

Opening Remarks

8:15 am - 8:30 am

General Session

Salons III/IV

Susan D. Narveson

Chief

Investigative and Forensic Sciences Division

Office of Science and Technology

National Institute of Justice

U.S. Department of Justice

Washington, DC

Lois Tully

Deputy Chief

Investigative and Forensic Sciences Division

Office of Science and Technology

National Institute of Justice

U.S. Department of Justice

Washington, DC

R&D Ongoing Projects

8:30 am - 9:50 am

Plenary Session

Salons III/IV

Moderator

Natalie T. Lu

Program Manager

Investigative and Forensic Sciences Division

Office of Science and Technology

National Institute of Justice

U.S. Department of Justice

Washington, DC

Presenters

8:30 am - 8:50 am

Increasing the Predictability and Success Rate of Skeletal Evidence Typing: Using Physical Characteristics of Bone as a Metric for DNA Quality and Quantity

David Foran

Professor
Forensic Science Program
Michigan State University
East Lansing, MI

8:50 am - 9:10 am

Assessment and In Vitro Repair of Damaged DNA Templates

Jack Ballantyne

Associate Professor
Department of Chemistry
University of Central Florida
Orlando, FL

9:10 am - 9:30 am

Gene Polymorphism and Human Pigmentation

Murray H. Brilliant

Lindholm Professor of Genetics
Department of Pediatrics
University of Arizona College of Medicine
Tucson, AZ

9:30 am - 9:50 am

Developing Methods for Bone Sample Preparation and DNA Isolation Using Proteinases

Richard C. Li

Assistant Professor
Forensic Science Program
College of Criminal Justice
Sam Houston State University
Huntsville, TX

9:50 am - 10:10 am	Break
---------------------------	--------------

Programs of the DNA Initiative

10:10 am - 11:30 am

Plenary Session

Salons III/IV

Moderator

John Hihn

Program Manager
Investigative and Forensic Sciences Division
Office of Science and Technology
National Institute of Justice
U.S. Department of Justice
Washington, DC

Presenters

10:10 am - 10:30 am

NIJ's DNA Training Initiative

G.A. Redding

Analyst
Science and Technology Division
Institute for Defense Analyses
Alexandria, VA

10:30 am - 10:50 am

Solving Cold Cases Through the Identification of Missing Persons and Unidentified Human Remains

Arthur J. Eisenberg

Director
DNA Identity Laboratory
Professor
Department of Pathology and Anatomy
University of North Texas Health Science Center
Ft. Worth, TX

10:50 am - 11:10 am

Demonstration Projects of the DNA Initiative: Overview

Edwin W. Zedlewski

Acting Deputy Assistant Director for Research and Evaluation
National Institute of Justice
U.S. Department of Justice
Washington, DC

11:10 am - 11:30 am

Prioritizing Minor Crime DNA Analysis to Yield Major Results: Two Year No-Suspect Grant Summary

Dawn M. Hicks

Senior Forensic Scientist
Serology and DNA Section
Palm Beach County Sheriff's Office
West Palm Beach, FL

Discussion and Questions

11:30 am - 11:45 am

Discussion Session

Salons III/IV

Working Lunch

11:45 am - 1:15 pm

Salons I/II

Moderator

Lois Tully

Deputy Chief
Investigative and Forensic Sciences Division
Office of Science and Technology
National Institute of Justice
U.S. Department of Justice
Washington, DC

Presenter

Evidence Collection From a Living Crime Scene: SANE Practice and DNA

Patricia M. Speck

Ph.D. Candidate
College of Nursing
University of Tennessee Center for Health Sciences
Immediate Past President
International Association of Forensic Nurses
Memphis, TN

Overview of Federal DNA Programs

1:15 pm - 2:20 pm

Plenary Session

Salons III/IV

Moderator

Dale Heideman
Program Manager
Investigative and Forensic Sciences Division
Office of Science and Technology
National Institute of Justice
U.S. Department of Justice
Washington, DC

Presenters

1:15 pm - 1:40 pm

R&D Programs of the FBI

Laura Kienker
Research Biologist
Counterterrorism and Forensic Science Research Unit
Laboratory Division
Federal Bureau of Investigation
Quantico, VA

1:40 pm - 2:00 pm

NIST On-Going Projects to Aid the Human Identity Testing Community

John M. Butler
Research Chemist
Human Identity Project Team
DNA Technologies Group and Biotechnology Division
National Institute of Standards and Technology
Gaithersburg, MD

2:00 pm - 2:20 pm

What's New - NIJ Program Updates

Investigative and Forensic Sciences Program Managers
Investigative and Forensic Sciences Division
Office of Science and Technology
National Institute of Justice
U.S. Department of Justice
Washington, DC

Closing Remarks

2:20 pm - 2:40 pm

General Session

Salons III/IV

Susan D. Narveson

Chief

Investigative and Forensic Sciences Division

Office of Science and Technology

National Institute of Justice

U.S. Department of Justice

Washington, DC