Every great advance in science has issued from a new audacity of imagination.

John Dewey
The Quest for Certainty, 1929
Growing for Good in 2008

During a time of economic and business uncertainty across our country, the National Forensic Science Technology Center (NFSTC) saw growth and expansion in projects, staffing and support. This positive outcome is the result of strategic planning, conservative stewardship and strong, ethical performance in the years and projects leading up to 2008. NFSTC is proud to have managed a total of 65 projects in 2008 for the National Institute of Justice, the Environmental Protection Agency and the Department of Defense.

Our board of directors and staff are dedicated to bringing quality services and solutions to crime laboratories, law enforcement, justice, coroners/medical examiners, military and the general public.

Our vision: For the forensic science community and its users to have complete confidence in the quality of the science services provided to the justice community as it strives to ensure the public safety.

Our mission: We are dedicated to supporting the justice community in ensuring the public safety by assisting the forensic sciences in the achievement of the highest level of quality services.

NFSTC programs and projects brought training support, tools and resources, technology assistance and valuable information to stakeholders through a variety of methods and programs.

Forensic Technologies Center of Excellence (FTCOE)

In September 2007, NFSTC was honored to be named Forensic Technologies Center of Excellence by the Office of Justice Programs—National Institute of Justice (OJP-NIJ). One of four centers of excellence created by the OJP-NIJ, NFSTC is the only center focused on forensic research and development. The FTCOE hit its stride in 2008, providing coordinated services and knowledge to an industry through the partner organizations:

- National Forensic Science Technology Center
- Marshall University Forensic Science Center
- National Clearinghouse for Science, Technology and the Law
- National Center for Forensic Science
- Midwest Forensics Resource Center

Among the projects delivered for the Center:

Two Technology Transition Workshops were completed and delivered in 2008: DART Mass Spectometry for Forensic Analysis and Miniaturized Microfluidic Devices. These training events were videotaped and the full two-day workshops are available online at http://projects.nfstc.org. Students can take the course over the Internet to listen to the instructor, see all handouts and screen presentations and get up-to-speed on the latest technology at their own pace. Six additional workshops are planned in 2009.
The Field Investigation Drug Officer (FIDO) program is a comprehensive training program and quality assurance system that provides law enforcement with the resources necessary to perform preliminary identification of controlled substances utilizing field test kits. In 2008, NFSTC expanded the FIDO project to include a validation study of the tests most frequently employed by law enforcement agencies. Experts at NFSTC presented the results of additional testing on the NarcoPouch®, NIK®, and NARK® II field test kits as well as the results of the entire validation study of the QuickCheck® test kits at the 2008 American Academy of Forensic Science (AAFS) conference.

Scientists at NFSTC conducted two technical evaluations, The Benefit of Using the QIAGEN MinElute® PCR Purification Kit for PostPCR Cleanup on Low Level DNA Samples and The Evaluation of Eight Commercially Available STR Kits for presentation at AAFS 2009. These thorough evaluations provide guidance for DNA analysts in the field as they consider acquiring new technologies for their laboratories.

NamUs

The National Missing and Unidentified Persons System, www.NamUs.gov, provides law enforcement professionals, medical examiners and the public the tools to work together to help solve cases. The NamUs project continued to break new ground in its last stages of development prior to the January 2009 launch.

The online database-driven system now incorporates back-up support for case management and identification through a structure of Regional System Administrators who assist in case validation and user management.

Additionally, plans were put in place to add forensic support in 2009, providing forensic odontology and anthropology for identification when potential matches arise and to ensure accurate identification data.

Records in the repository increased through additional coroner and medical examiner support as well as a major data exchange with the FBI’s National Crime Information Center (NCIC). By the end of 2008, there were approximately 4200 unidentified decedent records and 1200 missing persons records in the system.

FIDEX

The Forensic Information Data Exchange (FIDEX) project moved ahead tremendously in 2008, overcoming structure and data obstacles as it was prepared for a pilot test to be rolled out in 2009. When complete, the FIDEX system will provide multiple improvements to case management:

**Forensic Case Submission:** Cases can be submitted electronically to the crime laboratory. Currently, law enforcement agencies submit cases on paper and case information must be re-entered into the laboratory computers, causing redundant work.

**Disposition Reporting:** In FIDEX, case disposition can be seen by the laboratory prior to testing. If a case has been pled out and will not be going to trial, laboratory work does not need to be done. Improving communication about the status of cases will be tremendously helpful to laboratory scheduling.

Even prior to launch, cases were being solved as the two sides of this nationwide problem came together. Says one father who is searching for his son,

“Thank you so much... I wish there were a book written to tell parents how to deal with a missing child. Or a pill made to mend a broken heart. You have given me hope again with all your information—maybe my prayers will be answered.”
Court Information: Officers of the Court can see the status of cases while in the laboratory, and view the of evidence being tested.

In 2009, FIDEX will begin pilot testing to prepare for nationwide system availability.

Training

Pattern Evidence is a critical discipline for any crime laboratory and solid training in this area is vital. NFSTC continued to promote these important areas by developing and delivering comprehensive programs as part of the NIJ training initiatives. In 2008, 5 of 12 Latent Print courses were delivered to 20 students and two of four Footwear/Tire Track courses were delivered to an additional 20 students. Development continues for remaining courses in Latent Print and Footwear/Tire Track, and Tenprint Examiner courses have been scheduled to begin in 2009.

Students for these courses were required to meet certain criteria, including a visual acuity test to ensure proper performance on the job. Students were carefully chosen to represent laboratories from across the United States and its territories to ensure that this high-quality, entry-level training is provided to the best candidates.

NFSTC Online Learning System (NOLS) development and usage continued in 2008 as we prepare to offer fully functional online learning capabilities for our deliverables. This system (sample screens pictured, left) began as the assessment tool for the President’s DNA Initiative-DNA Analyst training in 2007, and was incorporated into the Pattern Evidence program in 2008. NOLS will be expanded to its full capabilities, including trainee enrollment, content delivery and assessments for future training initiatives.

Two groups totalling 45 medical examiners received the Forensic Science for Pathologists training, developed and delivered by NFSTC, covering some of the foundational concepts of forensic pathology. Industry subject matter experts were leveraged to present forensic disciplines including anthropology, controlled substance analysis, court testimony, crime scene processing, DNA and serology (body fluid analysis), entomology, explosives and explosive device identification, fire debris analysis, firearm and toolmark identification, latent fingerprint processing, odontology, toxicology and trace evidence analysis.

The sessions were delivered in a traditional classroom setting and one was captured for future online delivery in a variety of multimedia formats. This program was funded through a competitively awarded cooperative agreement provided by the Bureau of Justice Assistance (BJA).
Deployable Forensic Laboratory

NFSTC’s deployable forensic laboratory provides moveable, flexible laboratory space that can supplement existing crime analysis capabilities, or replace them when necessary, in an innovative and efficient way. Developed in partnership with the Department of Defense and the Defense Threat Reduction Agency (DTRA), NFSTC deployable laboratories can make a critical difference to local or national forces when needed.

In 2008, NFSTC deployable forensic laboratories were put to the test to support the public crime laboratory run by the Cedar Rapids, Iowa, Police Department (CRPD). June 2008 brought the worst flooding in the city’s history, submerging 1,300 city blocks, requiring the evacuation of 24,000 people and putting the city’s crime laboratory under eight feet of water. Much of the forensic equipment was destroyed and the buildings were uninhabitable.

In October, the CRPD laboratory director learned of the deployable forensic laboratories and reached out to NFSTC for assistance. Thanks to funding provided through NIJ, a deployable forensic laboratory was available for their use at no charge and was shipped to Cedar Rapids. Within a few weeks, Cedar Rapids had a 400-square-foot, state-of-the-art mobile forensics laboratory up and running in the parking lot, allowing the city to provide forensic capabilities once again. While the town of Cedar Rapids is still rebuilding after the historic flood, the Police Department’s crime scene investigation unit is now fully operational thanks to the support of NFSTC’s deployable forensic laboratory. This deployment is scheduled to be featured in the fall 2009 edition of the NIJ Journal.

DNA / GPA PROGRAM – Updates and Outcomes

The Audit/Assessment program is the longest-running and most widely known program at NFSTC and reports for audits and assessments doubled in 2008 from 2007. The DNA Audit program visits and reviews publicly funded DNA laboratories against the Federal Bureau of Investigation (FBI) Quality Assurance Standards as approved by the National DNA Index System (NDIS). These audits are provided by NFSTC at no cost to the laboratories and must be completed every two years.

In 2008, NFSTC performed 97 External DNA Audits and 773 Grant Progress Assessment reports through this program. The NFSTC visited 227 individual agencies and/or laboratories in 2008.

To assist in the management of this growing program, the Assessment Program online database was rolled out in December 2008, allowing assessors to update profiles anywhere at any time. Grantees can now update their logistic profile, including sub-grantees and laboratory data, and the management team is able to administer the program using real-time data.
Laboratories that receive NIJ funding must have their grants assessed every two years, as per NIJ grant rules. Grant Progress Assessments (GPAs) can be conducted at the same time for those laboratories and agencies choosing to participate in the free DNA Audit program. NFSTC assesses project progress for grantees receiving funds from the Paul Coverdell National Forensic Science Improvement Act Grant program, Solving Cold Cases with DNA and other DNA grant programs.

Reaching Out

Programs developed and delivered as part of NIJ cooperative agreements are offered at little or no cost to the justice community. To effectively publicize these opportunities, NFSTC uses the Internet, newsletters and other printed pieces and participates in conferences across the country. By reaching out face-to-face, presenting cutting-edge technologies and information and participating in scientific presentations, NFSTC delivers the best knowledge to the professionals and laboratories nationwide. NFSTC continues to be a trusted partner in bringing people together for industry growth, knowledge sharing and idea generation. A brief list of 2008 events hosted, sponsored or attended by NFSTC includes:

- Applied Technologies Conference  
  *March 2008 in Point Clear, AL*

- General Forensics Technology Working Group meetings  
  *April 2008/November 2008, Clearwater, FL*

- International Association of Forensic Sciences (IAFS)  
  *July 2008, New Orleans, LA*

- DNA Grantee Summit  
  *August 2008, Clearwater, FL*

- Green Mountain DNA Conference  
  *July 2008, Vermont*

- Cold Case Training  
  *April 2008, Pittsburgh, PA*

- American Academy of Forensic Sciences (AAFS) Meeting  
  *February 2008, Washington, D.C.*

- NIJ Conference  
  *July 2008, Washington, D.C.*

- International Association for Identification (IAI) Meeting  
  *August 2008, Louisville, KY*

- American Society for Crime Laboratory Directors (ASCLD)  
  *September 2008, Salt Lake City, UT*

- Critical Incident Preparedness Conference  
  *October 2008, Chicago, IL*

- International Association for Chiefs of Police (IACP)  
  *November 2008, San Diego, CA*

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2008 DNA/GPA Feedback

“We’re very impressed with the team...they were professional and very knowledgeable about the process.”  
*Fresno Police Department, CA*

“The team was very professional. They offered assistance and insight - they truly took an interest in what we are doing and hope to do in the future.”  
*Henderson Police Department, NV*

“We were impressed with the assessment team's years of experience and knowledge. They were very approachable and willing to answer the questions posed by our Division personnel.”  
*Guam Police Department-Forensic Science Division, GU*
Facilities Expansion

In 2008, NFSTC added critical storage and training space by leasing a warehouse space adjacent to the NFSTC headquarters. This 12,000 square foot building allows for safe storage and configuration of deployable laboratories and the mobile firing range between deployments. In addition, it provides completely secure, weather independent, blank space for setting up mock crime scenes or other large-scale scenarios for training. The facility includes a conference room, additional storage or training rooms and restrooms with showers. This addition vastly increases the flexible space available for training and brings NFSTC’s total space to approximately 35,000 square feet.

2008 Audited Financial Statement

NFSTC is committed to prudent and appropriate fiscal management, providing the best in forensic support, training and services for our communities across the country.

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<thead>
<tr>
<th>Income:</th>
<th>Total</th>
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<tbody>
<tr>
<td>Grant income—direct federal funding</td>
<td>9,920,872</td>
<td>92%</td>
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<tr>
<td>Contract income—other governmental and private agencies</td>
<td>774,916</td>
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<td>IPA Agreements</td>
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<tr>
<td>Other</td>
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<td><strong>Total</strong></td>
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Expenses:

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<th>Program Services:</th>
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<tbody>
<tr>
<td>NJI Cooperative Agr.</td>
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<td>BJA Cooperative Agr.</td>
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<td>EPA Cooperative Agr.</td>
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<td>Other Programs</td>
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<td>Supporting Services</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>$10,888,871</strong></td>
<td><strong>100%</strong></td>
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</tbody>
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A full financial statement and copy of the IRS Form 990 can be obtained by contacting NFSTC at info@nfstc.org or calling 727-549-6067.
2008-2009 NFSTC Board of Directors

Back Row, L-R: Joe Polski, Carl Selavka, Benny Del Re, Jamie Downs
Front Row, L-R: Karolyn Tontarski, Marie Samples, Susan Uremovich, Kelly Gibbs

Joseph Polski, President
Chief Operations Officer
International Association for Identification (IAI)

Benny Del Re, Treasurer
Director
Santa Clara County Crime Laboratory, San Jose, CA

Karolyn Tontarski, Secretary
Forensic DNA Technical Leader
Consultative Forensic Specialist

Susan Uremovich
Director, Eastern Laboratory
Virginia Department of Forensic Science

Marie Samples
Assistant Director
New York City Office of Chief Medical Examiner

Jamie C. Downs, M.D.
Regional Medical Examiner
Georgia Bureau of Investigation
Coastal Region

Kelly Gibbs
Inspections and Enforcement Branch
Infrastructure Security Compliance Div.
Department of Homeland Security

Carl M. Selavka, Ph.D.
Forensic Analytical Chemist
Consultative Forensic Specialist

NFSTC Executive Management:

Kevin Lothridge, CEO
David Epstein, COO
Dave Sylvester, Director, Project Administration
A Word from the President

It gives me great pleasure to present to the forensic science community and other stakeholders this annual report of work done by the National Forensic Science Technology Center (NFSTC) in 2008. The NFSTC provides quality services, training, technical transition, technical evaluation and a myriad of other support activities to the forensic community. In addition, the NFSTC continues to develop relationships and provide various forensic services to the Department of Defense (DoD).

Over the past several years, forensic science/identification has taken on an important role for the warfighter, both in terms of identification of individuals and the development of forensic intelligence capabilities. NFSTC is uniquely positioned to provide services in both of these areas.

The NFSTC Board of Directors meets quarterly to guide and manage the overall mission and provide financial oversight of the NFSTC. The Finance/Audit Committee (FAC) of the Board also meets quarterly and acts as the eyes and ears of the board with respect to financial matters, reporting results quarterly.

As the world continues to change, we look forward to NFSTC’s continued service to the larger forensics community well into the future.

Joe Polski
NFSTC Board President

NFSTC Member Organizations

The members of NFSTC meet annually to receive an update on organization activities and elect the directors.

American Academy of Forensic Sciences
American Board of Criminalistics
Association of Forensic Quality Assurance Managers
American Society of Crime Laboratory Directors
Bureau of Alcohol, Tobacco, Firearms and Explosives
Florida International University
International Association for Identification
Southeastern Public Safety Institute of St. Petersburg College
University of Central Florida
University of South Florida
Teamwork at Every Turn

The NFSTC staff team is comprised of professionals in forensic sciences, training development and delivery, law enforcement, financial and human resource management, compliance, technology production and communications. In 2008, staffing levels grew to 36 permanent staff, an increase of nearly 30 percent over 2007. This expansion of talent will continue in 2009 to meet the demands of the project schedule. In addition, NFSTC services like the GPA/Assessment program and NamUs created contractor opportunities across the country, with a total of 175 by the end of 2008.

Back Row: L-R: Chris Vivian, Billy Young, Ed Stroebel, Kirk Grates, Carrie Sutherland, Alice Ricketts, Mark Zimmerman, Dennis Thureson, Bill Cote, Rob O’Brien, Danny Nichols
Third row: L-R: Phokam Torres, Lori Sullivan, Leonard Williams, Priscilla Miller, Cathy Boatman, Jennifer Shankle, Liz Yourkievitz, Rose Sacchetti, Becky Carter
Second Row: L-R: Eileen Fynan, Joanna Cristalli, Laura Brandon, David Sylvester, Jo Uber, Mike O’Berry
Front Row: L-R: Jane Smith, David Epstein, Kevin Lothridge, Joan Ring, Lea Jerin, Linda Margaritondo,

Not pictured: Scott Hutchins, Asher Gurko, Dale Heideman, Debbie Figarelli, John Wegel, Bridget Tincher

Photo by Scott Hutchins
What’s Next for NFSTC?

Training

NFSTC competed for and will deliver four (4) new NIJ Training Awards in 2009, including Pattern Evidence – Latent Print, Biological Screening, Crime Scene Techniques and Emerging Technologies in DNA Analysis.

NamUs

In 2009, NFSTC will integrate the two databases that make up this publicly available resource, providing automatic cross-comparisons of records in the system. More resources will be devoted to the validation of scientific data uploaded to NamUs.gov and to assist state and local agencies in confirming NamUs-generated matches. Forensic anthropology and odontology services will be provided to aid in identification. NFSTC will host a national seminar to train law enforcement, medical examiners and missing persons clearinghouse directors to use the NamUs system in their day-to-day work.

Technology Transition

The Forensic Technologies Center of Excellence will continue to provide technology evaluations, demonstrations and workshops to aid forensic service units in selecting and using the best techniques. NFSTC will demonstrate new applications and technologies, including the deployable laboratories, at regional and national events.

Private Contracts

As a GSA Advantage training provider, NFSTC is sought after to develop and deliver tailored training in a wide variety of areas. By making these services available on GSA contract GA-02F-0081U, NFSTC can streamline processes that often hinder agencies from training new personnel rapidly.

Support to the Warfighter

A trusted service provider, in 2009 NFSTC will maintain support of our nation’s military through forensic technology courses, allowing the warfighter to better exploit information acquired on battlefields around the world. We will train future military leaders on the important of forensic intelligence and continue to be leaders in asymmetric forensic science.

Enhancing Partnerships

The NFSTC continues “Partnering to Ensure Public Safety” as we build strategic partnerships to improve the finished projects that stakeholders demand.
The National Forensic Science Technology Center (NFSTC) is a 501(c)(3) corporation headquartered in Largo, Florida. Founded in 1995, NFSTC provides quality forensic services including training, assessment, technology assistance and evaluation to the justice and forensic communities. NFSTC receives funding from the National Institute of Justice and other federal agencies.