In the fall of 2004, Bill Tilstone, the NFSTC founding Executive Director, took on the very important job of directing the NFSTC in its effort to support the President’s DNA Initiative – Analyst Training program. As Kevin moved into the position of Executive Director of the NFSTC, Bill continues to support the entire organization as Deputy Director.

Michael G. Sheppo
President

OVERVIEW

Funded through a Cooperative Agreement (2000-RC-CX-K001) with the National Institute of Justice (NIJ), the National Forensic Science Technology Center (NFSTC) provides goods and services at no cost to public state and local crime laboratories.

The programs funded through the Agreement fall into three general categories:

- Quality Systems Support
- Instructional Technology and Education
- Community Outreach

The federal budget for fiscal year 2004 included $2.0M in support of the President’s DNA Initiative. Other funding included $1.98M in congressionally directed funding to support Technology Based Training (TBT) systems and $1.0M for the extension of the current DNA Audit Program (Cooperative Agreement 2004-DN-BX-0079) to include a Grant Program Assessment (GPA).

The proposal submitted to the NIJ for programs covered by the directed funding was based upon reports from a consultative process that involved key stakeholders from the forensic science community. The process engaged focus groups formed through professionally facilitated discussions involving member organizations of the NFSTC corporation. For the past three years, the NFSTC has successfully employed the Membership meetings as an equivalent to one of the Regional Advisory Councils (RAC), which is used by the National Law Enforcement and Corrections Technology Center (NLECTC) system.
To ensure the quality of testing conducted in NIJ funded laboratories, the NIJ requires a system to confirm that DNA grantee laboratories meet the national quality assurance standards for DNA analysis. Utilizing the FBI national QA standards for DNA analysis as the NIJ – NFSTC audit criteria ensures that DNA testing laboratories provide valid data, which is entered into the Combined DNA Index System (CODIS). DNA testing laboratories are subject to much scrutiny and must confirm that they meet the national QA standards for DNA analysis.

Free of charge, the NFSTC provides biannual external DNA Laboratory Audits to public crime laboratories performing DNA analysis. The DNA Audit program began in 2002 with a total of 34 completed DNA laboratory audits. In 2003, another 58 DNA laboratories were audited and in 2004 the total annual no cost audits reached 81 laboratories. Effective January 1, 2005, the program has expanded to include a component for the review of DNA grants received by laboratories.

The NIJ provides hundreds of millions of dollars in grant funds to state and local crime laboratories for the analysis of convicted offender and forensic casework samples. As part of the NIJ Grant Administration responsibilities, there is an obligation to review the status and impact of these grants by conducting site visits to grant recipients. Together, the NIJ and the NFSTC developed the Grant Program Assessment (GPA) program to ascertain adherence to the Office of Justice Programs (OJP) grant and contract requirements. The NIJ requested that the NFSTC assist in overseeing the program. An NIJ award of $1.0M was provided to the NFSTC to cover the costs of the combined DNA Audit and GPA Program.

DNA Audit stakeholder comments:

“...was thorough and reasonable. She had many good recommendations and was able to remain objective. She’s capable of detecting the difference between isolated and systemic problems.”

“... had a very common sense approach to DNA Analysis and is very respected by the unit. We gained a great deal from his knowledge and experience.”
Quality Documents

Created by the NFSTC and a group of quality managers, the Quality Documents program is comprised of an easy-to-use Quality Manual Template and over 90 document samples. This program is designed to be used as a guideline for crime laboratories in the creation of customized quality documents that meet the laboratory’s needs for a comprehensive quality system.

The Quality Documents are available through the NFSTC website (http://www.NFSTC.org/qualDocs.htm). Detailed instructions for downloading the files or directly accessing the documents are included.

Fire Debris Validation Kit

The NFSTC partnered with the Technical Working Group for Fire and Explosions (TWGFEX) and the National Center for Forensic Science (NCFS) in Orlando to produce a set of instructions and flammable liquids for use by a laboratory in the validation of fire debris analysis. Referee testing is complete and a summary report is under development. The kit will be distributed in 2005.

Gunsights™

The Gunsights™ CD-ROM was distributed to over 350 crime laboratories between 2002 and 2004. Produced by Forensic Technology, Inc. in Largo, FL, this firearms reference software provides detailed information and high-resolution photographs on more than 2,700 current and historic firearm models. The objectives of this program have been fulfilled.
Field Investigation Drug Officer

The Field Investigation Drug Officer program is designed to provide officers from law enforcement agencies with a recommended practice guide for performing standardized testing of controlled substances in the field. The guide is comprised of a comprehensive training section, quality assurance guidelines, and established testing processes.

Use of the program reinforces confidence in field testing results at a consensus level for prosecutors and the courts. The program may expand to include pilot testing and the evaluation of new field testing technologies.

DNA Validation Program

The DNA Validation program is a mechanism designed to assist laboratories to comply with various standards for the validation of their particular DNA analytical system. The program will assist the laboratory in identifying the critical steps within procedures that need to be controlled and documented. It also will ensure that laboratory analytical systems perform in a manner consistent with specifications and limitations.
Forensic Academies

DNA Academy II

Funded through the NIJ Cooperative Agreement, DNA Academy II was conducted during the first half of 2004. DNA training was presented to eight students through distance learning, on-site lectures, and hands-on laboratory practicum. DNA Academy II was an abbreviated version of the first DNA Academy, which was held in the fall of 2003. Serology was not included in the curriculum and the timeframe was reduced to twelve instead of sixteen weeks. A draft of the final report for the NIJ is complete and under review by an external consultant. The report is comprised of the curriculum, lesson plans, and lessons learned and can be made available to interested public laboratories.

DNA Academy III

The NFSTC developed an infrastructure partnership with the Illinois State Police (ISP) funding the direct cost of delivery. The NFSTC trained 13 recently hired DNA analysts. The academy took place from June 2004 through October 2004 and followed the same format as the first DNA Academy. The first four weeks’ curriculum was delivered via distance learning and the remaining twelve weeks were provided onsite at the NFSTC facility. During that time, the students completed a comprehensive curriculum comprised of theory and practical exercises.

DNA CD-ROM

The DNA CD-ROM was produced as a training tool for DNA Academy I and utilized in subsequent Academies for the presentation of theoretical DNA and other related subject matter in a distance learning format. It proved to be an effective technology-based training tool that complements course content material for students attending NFSTC sponsored DNA Academies.

Firearms Academy

The forensic community has identified a pending shortage of qualified firearms examiners. Historically, the ranks of these analysts have been filled by sworn law enforcement officers or others who have undergone extensive training and apprenticeships within crime laboratories. The constraints of Daubert and admissibility have pressured the field toward examiners with science degrees and
standardized training in their backgrounds. The relatively low number of firearms examiners compared to other disciplines has resulted in a deficit of individual laboratory trainers and mentors.

Working with the California Forensic Science Institute (CFSI), Association of Firearms and Toolmark Examiners (AFTE), subject matter experts, and firearms examiners, the NFSTC is developing a training program for newly hired Firearms Examiners. Formatted in technology-based training, with an accompanying practical training guide, the curriculum is designed for use in an academy or laboratory setting.

**Principles of Forensic DNA for Officers of the Court**

This technology-based deliverable on forensic DNA evidence is intended to serve as an educational resource tool for officers of the court (attorneys and the judiciary). A technical working group of subject matter experts has developed content for fifteen modules. Modules 1-5 have been programmed and released in beta version CD-ROM format. The initial beta version was distributed at the annual American Society of Crime Laboratory Directors (ASCLD) meeting and presented as a resource tool at the American Prosecutors Research Institute’s Witness to the Truth training programs.

An evaluation component has been instituted to track user feedback regarding content scope, accuracy, and relevance. Pertinent user feedback will be incorporated into the final deliverable. As part of the President’s DNA Initiative, the completed project is intended to empower officers of the court with the knowledge to effectively use forensic DNA evidence as a crime fighting tool benefiting the entire criminal justice system.
The proposal submitted to the NIJ in support of programs covered by the President’s DNA Initiative (PDI) was based upon the training needs identified by the PDI. The programs address quality and competency needs and will have an effective life of at least five years. Funded through the President’s DNA Initiative, the programs are also designed to complement the existing Principles of DNA for Officers of the Court CD-ROM initiative.

The NFSTC deliverable (President’s DNA Initiative – Analyst Training), which utilizes experience from the NFSTC DNA Academies and a Technology Based Training (TBT) format to create a resource for training new DNA analysts, will be made available to public laboratories at no or minimal cost.

This program consists of a theoretical knowledge base presented in self-paced multi-media modules, a practical skills manual for use in the student’s laboratory, web-based mentoring guides and a train-the-trainer module for on-site laboratory training. Key subject areas include basic biochemistry, genetics and molecular biology, population genetics, and electrophoretic capillary instrument troubleshooting. Globally packaged for delivery as continuing education classes to existing DNA analysts, the modules are structured so that the material can be easily transformed for independent use in other environments, such as crime scene training.

The Digital Evidence in the Courtroom program is designed to assist law enforcement and the judiciary in the use of digital evidence in the trial process. Utilizing a mock trial format, the interactive training DVD captures critical issues encountered during a trial involving digital evidence by incorporating live events and other material identified by expert participants from the technical working group.
COMMUNITY OUTREACH

The NFSTC provides support to the forensic science community through a variety of means. The goal of this program is to improve communication and to gain feedback and input from the community.

To effectively disseminate information to stakeholders regarding the NIJ-NFSTC programs, the NFSTC utilizes a number of Community Outreach approaches:

- Participation in conferences
- Meeting and activity sponsorship
- Newsletter articles for publication
- On-site hosting of training seminars

During 2004 the NFSTC provided direct support to:

- AAFS Forensic Specialties Accreditation Board  $45K
- AFQAM Annual Meeting Sponsor  $60K
- ASCLD Mentoring Committee  $18K
- IACP Forensic Science Committee  $10K
- NIJ Stakeholder Group on Forensic Science Improvement  $30K
- Intergovernmental Personnel Assignment to NIJ  $210K

Planned support for 2005:

- AFQAM 2005 Annual Meeting Sponsor and Host  $80K
- Support the IACP Forensic Science Committee with WVU  $54K
- Support to the AAFS Forensic Specialties Accreditation Board  $15K
- Facilitation and hosting workshops for other entities including the IAI

FINANCIAL STATEMENTS

The audited financial statements have been issued to the NFSTC member organizations as well as the NFSTC Board of Directors and are available upon request.
As we move into 2005, it is difficult to believe that it has been almost ten years since the ASCLD Board of Directors took the visionary step to establish the NFSTC. The following members of that historic board are commended and duly recognized in this 2004 Annual Report:

W. Mark Dale, President  
Carrie Whitcomb, President Elect  
C. Michael Johnston, Secretary  
Lowell C. Van Berkom, Treasurer  
Marc D. Cunningham  
Kenneth W. Goddard  
Howard A. Harris  
James J. Kearney  
Michelle E. Kestler  
Margaret Kuo  
Kevin L. Lothridge  
Larry A. Pederson  
Steven C. Sigel  
Robert B. Stacey  
Ann Talbot  
William J. Hartner, Past President  
Paul B. Ferrara, Ex-Officio  
Milton E. Ahlerich, Ex-Officio

“Forensic Science” was on the verge of becoming a household word in 1995. During the past several years, advances in technology and the need to increase our vigilance over the public safety has bolstered the NFSTC mission. We continue to dedicate all of our efforts to supporting the greater forensic science community by consistently focusing on the areas of community support, quality assurance, and practitioner competency.

As many changes in the forensic sciences occurred over the years, the NFSTC has periodically undergone transformation. This year, the NFSTC Board of Directors will transition as several board members have decided not to seek re-nomination, opening the door for considerable change in the composition of our Board. As these board members leave, I want to recognize their dedicated leadership and welcome our new board members.

While partnering with the forensic community to ensure the public safety, the NFSTC has expanded services by making our facility available as a host site for use by forensic science laboratories and organizations. This is witnessed by our relationship with the International Association for Identification (IAI) to which we will provide a location for regional training. We will continue to work with the University of South Florida as we
hold an introductory Forensic Science class at our facility. Our partnerships will grow as we host the AFQAM meeting in October 2005.

We look forward to another productive year as a member of the National Institute of Justice’s Forensic Resource Network. The NIJ has organized the Forensic Resource Network (FRN) into a proactive team of support providers for the forensic community. Thank all of you for your continued support and input into NFSTC projects.

Largo, FL
May 1, 2005
<table>
<thead>
<tr>
<th>Laboratory</th>
<th>Program Management</th>
<th>Community Outreach</th>
<th>Academies</th>
</tr>
</thead>
<tbody>
<tr>
<td><a href="http://www.nfstc.org">www.nfstc.org</a></td>
<td>DNA Audits</td>
<td>Community Outreach</td>
<td>Validation Kits</td>
</tr>
<tr>
<td>DNA Academy</td>
<td></td>
<td></td>
<td>Quality Documents</td>
</tr>
<tr>
<td>DNA Auditors</td>
<td>Grant Progress Assessments</td>
<td></td>
<td>Field Investigation Drug Officer</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Intranet</td>
</tr>
<tr>
<td>Technology Based Training</td>
<td>Multimedia Design</td>
<td>Instructional Design</td>
<td>Distance Learning</td>
</tr>
<tr>
<td>--------------------------</td>
<td>-------------------</td>
<td>----------------------</td>
<td>------------------</td>
</tr>
<tr>
<td>President's DNA Initiative - Analyst Training</td>
<td>Graphic Design</td>
<td>Firearms Academy</td>
<td></td>
</tr>
<tr>
<td>DNA for Officers of the Court</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Animations</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Digital Evidence in the Courtroom</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Finance</td>
<td>Compliance</td>
<td>Human Resources</td>
<td>Information Systems</td>
</tr>
<tr>
<td>-------------------------</td>
<td>---------------------------------</td>
<td>-----------------</td>
<td>---------------------</td>
</tr>
<tr>
<td>Cooperative Agreement</td>
<td>Stakeholders</td>
<td>Administration</td>
<td>Accounting</td>
</tr>
<tr>
<td>Organizational Development</td>
<td>Regulatory Oversight</td>
<td>National Institute of Justice</td>
<td>Fiduciary Responsibility</td>
</tr>
<tr>
<td>Benefits</td>
<td>Department of Justice</td>
<td></td>
<td>Servers</td>
</tr>
</tbody>
</table>