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ADVANCING JUSTICE THROUGH DNA TECHNOLOGY

MARCH 2003

Advancing Justice Through DNA Technology

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Advancing Justice Through DNA Technology

EXECUTIVE SUMMARY

DNA technology is increasingly vital to ensuring accuracy and fairness in the criminal justice system. DNA can be used to identify criminals with incredible accuracy when biological evidence exists, and DNA can be used to clear suspects and exonerate persons mistakenly accused or convicted of crimes.

The current federal and state DNA collection and analysis system needs improvement. In many instances, public crime labs are overwhelmed by backlogs of unanalyzed DNA samples. In addition, these labs may be ill-equipped to handle the increasing influx of DNA samples and evidence. The problems of backlogs and the lack of up-to-date technology result in significant delays in the administration of justice. More research is needed to develop faster methods for analyzing DNA evidence. Professionals involved in the criminal justice system need additional training and assistance in order to ensure the optimal use of DNA evidence to solve crimes and assist victims. And the criminal justice system needs the means to provide DNA testing in appropriate circumstances for individuals who assert that they have been wrongly convicted.

President Bush believes we must do more to realize the full potential of DNA technology to solve crime and protect the innocent. The President has proposed $232.6 million in federal funding in FY 2004 for his initiative, *Advancing Justice Through DNA Technology*, and calls for continuing this level of funding for five years – a total commitment of over $1 billion. Under the President's initiative, the Attorney General will improve the use of DNA in the criminal justice system – especially in federal, state, and local forensic laboratories – by providing funds, training and assistance to ensure that this technology reaches its full potential. The President's initiative promotes:

- ***Using DNA to Solve Crimes***: When used to its full potential, DNA technology will permit the criminal justice system to identify criminals quickly and accurately. More crimes will be solved and persons mistakenly accused or convicted of crimes will be cleared if the criminal justice system is provided with the necessary funding, technology, and assistance it needs to reap the benefits of DNA technology. Under the President's initiative, the Attorney General will:

  - ***Eliminate Backlogs***: The initiative provides funding to eliminate, within five years, the current backlogs of unanalyzed DNA samples for the most serious violent offenses – rapes, murders, and kidnappings – and for convicted offender samples needing testing.

  - ***Strengthen Crime Laboratory Capacity***: The initiative provides funding to improve the analysis capacity of federal, state, and local crime labs so they can process DNA samples efficiently and cost-effectively and help prevent future backlogs.

  - ***Stimulate Research and Development:*** The initiative provides resources to stimulate innovative research in order to develop, among other things, more rapid and less costly methods of DNA analysis and the ability to analyze smaller and more degraded samples.

  - ***Provide Training***: The initiative provides training on the collection and use of DNA evidence to the wide variety of professionals involved in using DNA evidence in the criminal justice system – police officers, prosecutors, defense attorneys, judges, forensic scientists, medical personnel, victim service providers, corrections officers, and probation and parole officers.

- ***Using DNA to Protect the Innocent***: Under the President's initiative, the Attorney General will advance the use of DNA technology to protect the innocent from wrongful prosecution. The initiative supports providing access to post-conviction DNA testing in appropriate circumstances for state or federal inmates who may have been wrongly convicted, and establishes a grant program to assist states in providing post-conviction testing.

- ***Using DNA to Identify Missing Persons***: The events of September 11, 2001 demonstrated on a national scale the potential for anguish when the remains of a missing person go unidentified. In order to help provide closure for families of missing persons, the President's initiative provides education and outreach to medical examiners, coroners, law enforcement officers, and victims' families on the use of DNA to identify missing persons.

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USING DNA TO SOLVE CRIMES

The past decade has seen great advances in a powerful criminal justice tool: deoxyribonucleic acid, or DNA. DNA can be used to identify criminals with incredible accuracy when biological evidence exists. By the same token, DNA can be used to clear suspects and exonerate persons mistakenly accused or convicted of crimes. In all, DNA technology is increasingly vital to ensuring accuracy and fairness in the criminal justice system.

News stories extolling the successful use of DNA to solve crimes abound. For example, in 1999, New York authorities linked a man through DNA evidence to at least 22 sexual assaults and robberies that had terrorized the city. In 2002, authorities in Philadelphia, Pennsylvania, and Fort Collins, Colorado, used DNA evidence to link and solve a series of crimes (rapes and a murder) perpetrated by the same individual. In the 2001 "Green River" killings, DNA evidence provided a major breakthrough in a series of crimes that had remained unsolved for years despite a large law enforcement task force and a $15 million investigation.

DNA is generally used to solve crimes in one of two ways. In cases where a suspect is identified, a sample of that person's DNA can be compared to evidence from the crime scene. The results of this comparison may help establish whether the suspect committed the crime. In cases where a suspect has not yet been identified, biological evidence from the crime scene can be analyzed and compared to offender profiles in DNA databases to help identify the perpetrator. Crime scene evidence can also be linked to other crime scenes through the use of DNA databases.

For example, assume that a man was convicted of sexual assault. At the time of his conviction, he was required to provide a sample of his DNA, and the resulting DNA profile was entered into a DNA database. Several years later, another sexual assault was committed. A Sexual Assault Nurse Examiner worked with the victim and was able to obtain biological evidence from the rape. This evidence was analyzed, the resulting profile was run against a DNA database, and a match was made to the man's DNA profile. He was apprehended, tried, and sentenced for his second crime. In this hypothetical case, he was also prevented from committing other crimes during the period of his incarceration.

DNA evidence is generally linked to DNA offender profiles through DNA databases. In the late 1980s, the federal government laid the groundwork for a system of national, state, and local DNA databases for the storage and exchange of DNA profiles. This system, called the Combined DNA Index System (CODIS), maintains DNA profiles obtained under the federal, state, and local systems in a set of databases that are available to law enforcement agencies across the country for law enforcement purposes. CODIS can compare crime scene evidence to a database of DNA profiles obtained from convicted offenders. CODIS can also link DNA evidence obtained from different crime scenes, thereby identifying serial criminals.

In order to take advantage of the investigative potential of CODIS, in the late 1980s and early 1990s, states began passing laws requiring offenders convicted of certain offenses to provide DNA samples. Currently all 50 states and the federal government have laws requiring that DNA samples be collected from some categories of offenders.

When used to its full potential, DNA evidence will help solve and may even prevent some of the Nation's most serious violent crimes. However, the current federal and state DNA collection and analysis system needs improvement:

(1) In many instances, public crime labs are overwhelmed by backlogs of unanalyzed DNA samples.

(2) In addition, these labs may be ill-equipped to handle the increasing influx of DNA samples and evidence. The problems of backlogs and lack of up-to-date technology result in significant delays in the administration of justice.

(3) More research is needed to develop faster methods for analyzing DNA evidence.

(4) Professionals working in the criminal justice system need additional training and assistance in order to ensure the optimal use of DNA evidence to solve crimes and assist victims.

President Bush believes we must do more to realize the full potential of DNA technology to solve crime and protect the innocent. Under the President's initiative, the Attorney General will improve the use of DNA in the criminal justice system by providing funds and assistance to ensure that this technology reaches its full potential to solve crimes.

1. Eliminating Backlogs Top

One of the biggest problems facing the criminal justice system today is the substantial backlog of unanalyzed DNA samples and biological evidence from crime scenes, especially in sexual assault and murder cases. Too often, crime scene samples wait unanalyzed in police or crime lab storage facilities. Timely analysis of these samples and placement into DNA databases can avert tragic results. For example, in 1995, the Florida Department of Law Enforcement linked evidence found on a rape-homicide victim to a convicted rapist's DNA profile just eight days before he was scheduled for parole. Had he been released prior to being linked to the unsolved rape-homicide, he may very well have raped or murdered again.

By contrast, analysis and placement into CODIS of DNA profiles can dramatically enhance the chances that potential crime victims will be spared the violence of vicious, repeat offenders. The President's initiative calls for $92.9 million to help alleviate the current backlogs of DNA samples for the most serious violent offenses – rapes, murders, and kidnappings – and for convicted offender samples needing testing. With this additional federal backlog reduction funding, the funding provided by this initiative to improve crime laboratory capacity, and continued support from the states, the current backlogs will be eliminated in five years.

Understanding the Backlog

The state and local backlog problem has two components: (1) "***casework sample backlogs***," which consist of DNA samples obtained from crime scenes, victims, and suspects in criminal cases, and (2) "***convicted offender backlogs,***" which consist of DNA samples obtained from convicted offenders who are incarcerated or under supervision. The nature of the DNA backlog is complex and changing, and measuring the precise number of unanalyzed DNA samples is difficult.

- Casework Sample Backlogs: In a 2001 survey of public DNA laboratories, the Bureau of Justice Statistics (BJS) found that between 1997 and 2000, DNA laboratories experienced a 73% increase in casework and a 135% increase in their casework backlogs. Many casework samples go unanalyzed for lack of a suspect to which to compare the biological evidence from the crime scene. These are often referred to as "no-suspect" cases. Based on an ongoing assessment of

crime laboratories and law enforcement agencies, the National Institute of Justice (NIJ) estimates that the current backlog of rape and homicide cases is approximately 350,000. The initiative calls for $76 million in FY 2004 to help eliminate these backlogs over five years.

- Convicted Offender Backlogs: States are increasing the number of convicted offenders required to provide DNA samples. Currently, 23 states require all convicted felons to provide DNA samples. Preliminary estimates by NIJ place the number of collected, untested convicted offender samples at between 200,000 and 300,000. NIJ also estimates that there are between 500,000 and 1,000,000 convicted offender samples that are owed, but not yet collected. The initiative calls for $15 million in FY 2004 to help eliminate convicted offender backlogs over five years.

The federal government also faces a high demand for analysis of casework and convicted offender DNA samples. The FBI has two DNA casework analysis units (see page 5). The first unit, which focuses on analyzing nuclear DNA, has a backlog of approximately 900 cases. The second unit, which focuses on analyzing mitochondrial DNA (mtDNA), has a backlog of roughly 120 cases.

The federal government also collects DNA samples from persons convicted of offenses in certain categories, including crimes of violence or terrorism. The FBI currently has a backlog of approximately 18,000 convicted offender samples. The initiative calls for $1.9 million in FY 2004 to fund the federal convicted offender program; some of these funds will be devoted to eliminating the federal convicted offender backlog.

Effect of Clearing the Backlog

The results of addressing backlogs are dramatic, as the two examples below illustrate:

- In September 1993, a married couple was attacked on a jogging trail in Dallas by a man with a gun who sexually assaulted the woman after shooting the man. No suspect was ever positively identified, although police investigated over 200 leads and 40 potential suspects. In August 2000, evidence from the case was analyzed using current DNA technology. Then, in February 2001, the DNA sample was matched to an individual who was already serving a five-year sentence for an unrelated 1997 sexual assault of a child. The man has since been convicted of capital murder and aggravated sexual assault.

- In March 1992, an Alexandria, Virginia shop owner was stabbed more than 150 times in her home. There were no witnesses to the crime. For years, detectives had no leads, but they did have traces of someone's blood, apparently from the fierce struggle between the victim and the killer. Meanwhile, in 1996, a man pleaded guilty to robbing a gas station, and his DNA was collected for analysis and inclusion in the Virginia DNA database. Because of the backlog, the man's sample was not immediately analyzed. In the summer of 2000, the sample was analyzed and matched through the database to the evidence from the Alexandria woman's murder. In April 2001, almost nine years after the commission of this brutal crime, the man was sentenced to life in prison.

Several law enforcement agencies, prosecutors' offices, and crime labs across the country have established innovative programs to review old cases. Often called "cold case units," these programs have enabled criminal justice officials to solve cases that have languished for years without suspects. Most frequently, DNA evidence has been the linchpin in solving these cases. For instance, this past July, a California man was found guilty of the 1974 rape-homicide of a 19 year-old pregnant woman – a case that was solved through DNA evidence nearly thirty years after the crime was committed.

Prior Federal Support of State DNA Backlog Reduction

In recent years, the federal government has strongly supported states in their efforts to eliminate backlogs of convicted offender and casework DNA samples. Since the creation in 2000 of the Department of Justice's (DOJ's) Convicted Offender DNA Backlog Reduction Program, more than 493,600 offender samples from 24 states have been analyzed. Since the creation in 2001 of the No Suspect Casework DNA Backlog Reduction Program, federal funds have been provided to support the analysis of approximately 24,800 cases. States have analyzed evidence in an additional 18,000 "no-suspect" cases as a result of a match requirement of Convicted Offender DNA Backlog Reduction funding.

In 2002 and 2003 combined, the President requested and Congress appropriated $70.8 million to fund these DNA backlog reduction programs. Additionally, Attorney General John Ashcroft also made available $25 million in Asset Forfeiture funds to address the backlog of convicted offender and "no suspect" casework samples. Thus, the Bush Administration already has devoted more than $95 million to reducing DNA backlogs.

2. *Strengthening Crime Laboratory Capacity* Top

At present, many of our Nation's crime laboratories do not have the capacity necessary to analyze DNA samples in a timely fashion. Many have limited equipment resources, outdated information systems, and overwhelming case management demands. As a result, the criminal justice system as a whole is unable to reap the full benefits of DNA technology. The President's initiative will provide federal funding to further automate and improve the infrastructure of federal, state, and local crime labs so they can process DNA samples efficiently and cost-effectively. These infrastructure improvements are critical to preventing future DNA backlogs, and to helping the criminal justice system realize the full potential of DNA technology.

Increasing the Analysis Capacity of Public Crime Labs

The President's initiative will provide significant support to public crime labs so that these labs can update their infrastructure, automate their DNA analysis procedures, and improve their retention and storage of forensic evidence. The initiative calls for $60 million in FY 2004 funding, which will be dedicated to:

- Providing Basic Infrastructure Support: Some public crime laboratories still need assistance to help them obtain equipment and material to conduct the basic processes of DNA analysis – extraction, quantitation, amplification and analysis – and to help them meet various accreditation requirements.

- Building Infrastructure through Laboratory Information Management Systems: Laboratory Information Management Systems, or "LIMS," are designed to automate evidence handling and casework management, to improve the integrity and speed of evidence handling procedures, and to ensure proper chain of custody. DOJ estimates that only 10 percent of the public DNA laboratories have LIMS systems.

- Providing Automation Tools to Public DNA Laboratories: To streamline aspects of the DNA analysis procedure that are labor and time-intensive, crime laboratories should have automated systems, such as robotic DNA extraction units. Automated DNA analysis systems increase analyst productivity, limit human error and reduce contamination.

- Providing Support for the Retention and Storage of Forensic Evidence: Forensic evidence must be stored in a manner that ensures its integrity and maintains its availability throughout criminal investigations and judicial proceedings. Appropriate evidence storage conditions require costly equipment such as security systems, environmental control systems, ambient temperature monitors, and de-humidifiers. The initiative will support the improvement of evidence storage capabilities.

Funding the FBI Forensic Analysis Programs

The FBI Laboratory runs several different programs for the analysis of DNA information. The Nuclear DNA Program supports federal, state, local, and international law enforcement agencies by providing advanced technical assistance within the forensic biology discipline and sub-disciplines through interrelated capabilities and expertise. The Mitochondrial DNA (mtDNA) Analysis Program is responsible for performing mtDNA analysis of forensic evidence containing small or degraded quantities of DNA on items of evidence submitted from federal, state, and local law enforcement agencies. Mitochondrial DNA is a powerful tool available for investigating cases of kidnapping, missing persons, and skeletal remains where nuclear DNA is not present. The initiative will provide funds to these two existing programs to permit them to continue their important work. In addition, the initiative will provide funds to the FBI to further expand regional mtDNA labs that will provide an alternative source for mtDNA analysis to state and local law enforcement, and allow the FBI laboratory to concentrate more of its efforts on federal cases. The initiative calls for $20.5 million in FY 2004 to fund these programs.

Funding the Combined DNA Index System

The Combined DNA Index System (CODIS), administered by the FBI, maintains DNA profiles obtained through federal, state, and local DNA sample collection programs, and makes this information available to law enforcement agencies across the country for law enforcement identification purposes. Currently, the National DNA Index System (NDIS) of CODIS contains about 1.7 million DNA profiles. The President's initiative includes funding to complete a general redesign and upgrade of CODIS, which will increase the system's capacity to 50 million DNA profiles, reduce the search time from hours to microseconds for matching DNA profiles, and enable instant, real-time (as opposed to weekly) searches of the database by participating forensic laboratories. The initiative calls for $9.9 million in FY 2004 to fund this program.

3. Stimulating Research And Development Top

In order to improve the use of DNA technology to advance the cause of justice, the Attorney General will stimulate research and development of new methods of analyzing DNA samples under the President's initiative. Also, the President has asked the Attorney General to establish demonstration projects under the initiative to further study the public safety and law enforcement benefits of fully integrating the use of DNA technology to solve crimes. Finally, the President has directed the Attorney General to create a National Forensic Science Commission to study rapidly evolving advances in all areas of the forensic sciences and to make recommendations to maximize the use of the forensic sciences in the criminal justice system. In all, the President's initiative will devote $24.8 million in FY 2004 to fund advances in the use of DNA technology.

Improving DNA Technology

Forensic DNA analysis is rapidly evolving. Research and development of tools that will permit crime laboratories to conduct DNA analysis quickly is vital to the goal of improving the timely analysis of DNA samples. Smaller, faster, and less costly analysis tools will reduce capital investments for crime laboratories while increasing their capacity to process more cases. Over the course of the next several years, DNA research efforts will focus on the following areas:

- The development of "DNA chip technology" that uses nanotechnology to improve both speed and resolution of DNA evidence analysis. This technology will reduce analysis time from several hours to several minutes and provide cost-effective miniaturized components.
- The development of more robust methods to enable more crime labs to have greater success in the analysis of degraded, old, or compromised items of biological evidence.
- Advanced applications of various DNA analysis methods, such as automated Short Tandem Repeats (STRs), Single Nucleotide Polymorphisms (SNPs), mitochondrial DNA analysis (mtDNA), and Y-chromosome DNA analysis.
- The use of animal, plant, and microbial DNA to provide leads that may link DNA found on or near human perpetrators or victims to the actual perpetrator of the crime.
- Technologies that will enable DNA identification of vast numbers of samples occasioned by a mass disaster or mass fatality incident.
- Technologies that permit better separation of minute traces of male sexual assailant DNA from female victims.

The initiative devotes $10 million in FY 2004 funding to benefit the state and local criminal justice community through DNA research and development. It also requests $9.8 million in FY 2004 funding to further expand the FBI's DNA research and development program.

Establishing DNA Demonstration Projects

To further research the impact of increased DNA evidence collection on public safety and law enforcement operations, the Attorney General will conduct rigorous scientific research through demonstration projects on the use of DNA evidence under the initiative. This research will help determine the scope of public safety benefits that result when police are trained to more effectively collect DNA evidence and prosecutors are provided with training to enhance their ability to present this evidence in court.

Several jurisdictions will be selected to incorporate core training and evidence collection requirements in their daily operations. At each site, one or more law enforcement agencies will be chosen to implement extensive training on the collection of DNA evidence and to increase the resources devoted to the investigation and prosecution of these cases. Prosecutors will also receive training on how to more effectively present DNA evidence and how forensic DNA technology may be used to solve current and "cold" cases. Jurisdictions that received increased training and resources will be compared with jurisdictions that did not receive these benefits.

The resulting comparison will measure the impact of increased DNA evidence collection on public safety and law enforcement operations. For example, projects will examine whether there are increased crime clearance rates, whether DNA aided investigations, the number of cases successfully prosecuted, the number of cases where guilty pleas were obtained due to the presence of DNA evidence, any

financial savings resulting from the use of forensic evidence, and increased responsiveness to victims. The information obtained will allow state and local governments to make more informed decisions regarding investment in forensic DNA as a crime-fighting tool. The initiative calls for $4.5 million in FY 2004 to fund these projects.

Creating a National Forensic Science Commission

To facilitate the ability of policymakers to assess the needs of the forensic science community, and to stimulate public awareness of the uses of forensic technology to solve crimes, the President has directed the Attorney General to create a National Forensic Science Commission. The Commission will be charged with two primary responsibilities: (1) developing recommendations for long-term strategies to maximize the use of current forensic technologies to solve crimes and protect the public, and (2) identifying potential scientific breakthroughs that may be used to assist law enforcement.

The Attorney General will appoint Commission members from professional forensic science organizations and accreditation bodies and from the criminal justice community. These individuals will have broad knowledge and in-depth expertise in the criminal justice system and in various areas of the forensic sciences such as analytical toxicology, trace evidence, forensic biology, firearms and toolmark examinations, latent fingerprints, crime scene analysis, digital evidence, and forensic pathology, in addition to DNA. Judges, prosecutors, attorneys, victim advocates, and other members of the criminal justice system will also be represented on the Commission.

The Commission will study advances in all areas of the forensic sciences and make recommendations on how new and existing technologies can be used to improve public safety. The Commission will also serve as an ongoing forum for discussing initiatives and policy, and may issue recommendations that will assist state and local law enforcement agencies in the cost-effective use of these technologies to solve crimes. The initiative devotes $500,000 in FY 2004 to the establishment of the Commission.

4. Training the Criminal Justice Community Top

In order to maximize the use of DNA technology, under the President's initiative, the Attorney General will develop training and provide assistance regarding the collection and use of DNA evidence to the wide variety of professionals involved in the criminal justice system, including police officers, prosecutors, defense attorneys, judges, forensic scientists, medical personnel, victim service providers, corrections officers, and probation and parole officers.

Key players in the criminal justice system should receive additional training in the proper collection, preservation, and use of DNA evidence. Fundamental knowledge of the capabilities of DNA technology is essential for police officers to collect evidence properly, prosecutors and defense attorneys to introduce and use it successfully in court, and judges to rule correctly on its admissibility. Victim service providers and medical personnel likewise need to understand DNA technology in order to encourage more successful evidence collection and to be fully responsive to the needs of victims.

Law Enforcement Training

As the first responders to crime scenes, law enforcement officers should be able to identify, collect and preserve probative biological evidence for submission to crime laboratories. Improper collection can mean that valuable evidence is missed or rendered unsuitable for testing. The initiative devotes $3.5 million in FY 2004 to assist law enforcement in meeting the following training needs:

- Basic "awareness training" on DNA evidence for patrol officers and other first-responders;
- Intensive training on identifying, collecting, and preserving potential DNA evidence for evidence technicians, investigators, and others processing crime scenes;
- Training and education for investigators and responding officers on DNA databases and their potential to provide leads in current and "cold" cases; and
- Training and information for law enforcement leadership and policymakers to facilitate more informed decisions about effective DNA evidence collection and testing.

Training Prosecutors, Defense Attorneys, and Judges

In order to achieve just results in cases involving DNA evidence, prosecutors, defense attorneys, and judges should receive proper training on the use and presentation of DNA evidence. The initiative devotes $2.5 million in FY 2004 to support:

- Training and technical assistance for prosecutors to learn about solving "cold cases" with DNA evidence, responding to post-conviction DNA testing requests, and developing innovative legal strategies to optimize the power of forensic DNA technology. Grant funds will be available for state and local prosecutors' organizations for the development and delivery of training materials to assist prosecutors in presenting this evidence before courts and juries, and in understanding more about the value of DNA evidence in particular cases.
- Training for defense counsel handling cases involving biological evidence on the applications and limitations of DNA evidence. Grant funds will be made available to continuing legal education programs or bar associations to provide training and resources on forensic DNA technology.
- Training for judges, who must be equipped with sufficient technical and scientific knowledge to make appropriate rulings in cases involving DNA evidence. Grant funds will be available to national judicial conferences and organizations.

Training For Probation and Parole Officers and Corrections Personnel

Probation and parole officers play a critical role in ensuring that offenders are complying with their statutory obligations to provide DNA samples. Corrections personnel often are responsible for obtaining DNA samples from inmates required by law to submit such samples. Through training and education programs, these professionals will be better equipped to ensure that samples are taken from all individuals who are required by law to provide them. The initiative calls for $1 million in FY 2004 to support this training.

Training for Forensic Scientists

The forensic science community has a critical need for trained forensic scientists in public crime laboratories. The initiative will assist the development of comprehensive training programs for a new generation of forensic scientists, enabling new forensic scientists to receive in-depth training to prepare them for analyzing actual casework in a crime laboratory. The initiative calls for $3 million in FY 2004 to support this training.

Training for Medical Personnel

The initiative will also provide $5 million in FY 2004 to support the development of training and educational materials for doctors and nurses involved in treating victims of sexual assault. Trained medical personnel are needed to effectively collect usable DNA evidence, while safeguarding the privacy rights and addressing the needs of rape victims requiring sexual assault exams. These programs will specifically target underserved areas of the country. Funding may also be used to support the development of SANE (Sexual Assault Nurse Examiner), SAFE (Sexual Assault Forensic Examiner), and SART (Sexual Assault Response Team) programs.

Training for Victim Service Providers

Victims and those who advocate on their behalf must have access to information about the investigative and courtroom uses of forensic DNA evidence. Victims should be properly informed about how DNA evidence may impact their cases. In situations involving post-conviction DNA testing, victim service providers must be able to assist victims through the often-painful process of newly-ordered DNA tests and re-opened court proceedings. To address the concerns of victims, the initiative would develop additional DNA education and training programs for victim advocates and victim service providers so that they may better assist victims in all cases involving DNA evidence. The initiative calls for $5 million in FY 2004 to support this training.

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USING DNA TO PROTECT THE INNOCENT

DNA technology is increasingly vital to ensuring fairness in the criminal justice system. Every effort that is made to reduce backlogs of untested evidence, to better equip forensic laboratories, to develop faster methods of analyzing samples, and to better train professionals in the use of DNA technology, will improve the accuracy of the criminal justice system. Accordingly, the measures described in the previous sections will not only help solve crimes and keep dangerous offenders off the streets, but will also help minimize the risk that innocent individuals are wrongly accused or convicted.

Post-conviction DNA testing has received considerable attention in recent years. Since the advent of forensic DNA analysis, a number of individuals convicted of crimes have been subsequently exonerated through DNA analysis of crime scene evidence that was not tested at the time of trial. The following are two recent reported examples:

- In February 2003, a Hampton Roads, Virginia man was released from prison after post-conviction DNA tests proved that he did not rape a nursing student in 1981. The man had spent two decades in prison after being convicted of breaking into the woman's apartment and raping her. Two juries failed to reach a verdict, but a third jury found him guilty. From the time of his arrest, however, the man maintained his innocence. Last year, a Virginia crime lab located evidence in the man's case in a file maintained by a forensic scientist who had since died. DNA tests conducted on this evidence proved that he was not the perpetrator, and have preliminarily linked the crime scene evidence to a felon whose DNA sample was maintained in the Virginia DNA database. The Norfolk Commonwealth Attorney supported the man's immediate release from prison after learning of the DNA test result. Law enforcement authorities are following up on the "cold hit."

- A Maryland man served 20 years of a 30-year sentence after being convicted of a 1982 home invasion rape of a schoolteacher. Through post-conviction DNA testing, the man was exonerated in 2002. When the crime scene profile was uploaded to CODIS, it was preliminarily linked to a felon whose DNA profile was maintained in a DNA database. This man has subsequently been arrested and charged for the 1982 crime, and is awaiting trial later this year. The original defendant was pardoned in January 2003.

Many states have already enacted provisions that allow convicted offenders in certain cases to seek post-conviction DNA testing of evidence collected in those cases. Currently, 31 states have enacted special statutory provisions providing post-conviction DNA testing, and additional states make post-conviction testing available through other procedures. Federal law also should provide for post-conviction DNA testing in appropriate cases.

To demonstrate support for appropriate post-conviction testing of DNA evidence, the Attorney General will create a $5 million grant program under the President's initiative to help states defray the costs of post-conviction DNA testing. In order to receive this funding, state programs will be required to meet criteria established by the Department of Justice. These criteria will require that DNA testing be performed by an accredited forensic laboratory, and will encourage states to develop plans that ensure prompt DNA testing of persons who may be wrongly convicted and discourage frivolous testing that may cause unnecessary expense and needless harm to crime victims.

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USING DNA TO IDENTIFY MISSING PERSONS

Families of missing persons who are presumed dead face tremendous emotional turmoil when they are unable to learn about the fates of their loved ones. The events of September 11, 2001 demonstrated on a national scale the potential for anguish when the remains of a missing person go unidentified. In the wake of this tragedy, the Department of Justice brought together DNA experts from across the country to develop improved DNA analysis methods identifying the World Trade Center victims.

Despite tremendous scientific advancements, DNA technology is not routinely used in missing persons cases. According to statistics maintained by the FBI's National Crime Information Center (NCIC), there are nearly 5,000 reported unidentified persons in the United States. This element of the President's initiative will help identify the missing, and in doing so, will provide an increased sense of closure to their families.

The FBI's Missing Persons DNA Database Program currently provides the essential infrastructure for identifying human remains. This database maintains two indices of DNA samples. The first index contains DNA profiles of relatives of missing persons and the second contains DNA profiles of unidentified human remains. Successful identifications require that both profiles be entered. Currently, this database is not used to its full potential. States have only recently begun to conduct DNA analysis on human remains and to submit the results to the FBI for inclusion in its database. Many unidentified human remains continue to be disposed of without the collection of DNA samples. Further, even when the samples are collected, many crime labs lack the capacity to conduct timely analysis, especially where the biological sample is old or degraded. In addition, many family members and law enforcement officials lack sufficient information about the existence of the program and how to participate.

The President's initiative will help ensure that DNA forensic technology is used to its full potential to identify missing persons. The initiative will:

- Provide outreach and education to medical examiners, coroners, and law enforcement officers about the use of DNA to identify human remains and to aid in missing persons cases;
- Make DNA reference collection kits available to these state and local officials;
- Support the development of educational materials and outreach programs for families of missing children and adults;
- Encourage states to collect DNA samples before any unidentified remains are disposed;
- Strengthen crime lab capacity (see page 4) to enable more state and local labs to conduct timely DNA analysis of biological samples from unidentified human remains;
- Provide for the analysis of degraded and old biological samples through the FBI's Mitochondrial DNA Analysis Program (see page 5);
- Provide technical assistance to state and local crime labs and medical examiners on the collection and analysis of degraded remains through the FBI and the National Institute of Justice; and
- Support research and development of more robust methods for analyzing degraded, old, or

compromised biological samples (see page 6).

The President's initiative will devote $2 million in FY 2004 for outreach programs and the development of educational materials and reference collection kits.

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FUNDING

The President's DNA Initiative, *Advancing Justice Through DNA Technology*, calls for $232.6 million in federal funding for FY 2004. This includes $100.7 million in new funding. In addition, as part of the $232.6 million, the Justice Department is targeting $13.5 million in FY 2004 funding from existing programs within the Office of Justice Programs to support the DNA Initiative.*

Element of the Initiative	2004 Budget Request (millions of dollars)
USING DNA TO SOLVE CRIMES	
Eliminating Backlogs	**$92.9**
State Casework Backlogs	$76.0
State Convicted Offender Backlogs	$15.0
Funding the Federal Convicted Offender Program	$1.9
Strengthening Crime Lab Capacity	**$90.4**
Increasing the Analysis Capacity of Public Crime Labs	$60.0
Funding FBI Forensic Analysis Programs	$20.5
Funding the Combined DNA Index System	$9.9
Stimulating Research and Development	**$24.8**
Improving DNA Technology	$10.0
FBI Research and Development	$9.8
DNA Demonstration Projects	$4.5
The National Forensic Science Commission	$0.5
Training the Criminal Justice Community	**$17.5**
Law Enforcement	$3.5
Prosecutors, Defense Attorneys, and Judges	$2.5
Probation & Parole Officers, Corrections Personnel	$1.0
Forensic Scientists	$3.0
Medical Personnel	$5.0
Victim Service Providers	$2.5
USING DNA TO PROTECT THE INNOCENT	**$5.0**

USING DNA TO IDENTIFY MISSING PERSONS	**$2.0**
TOTAL FUNDING	**$232.6**

* These funds must be used in accordance with the applicable programs' authorizing statutes.

TOC | Using DNA to Identify Missing Persons