HOW EFFECTIVELY ARE STATE AND FEDERAL AGENCIES WORKING TOGETHER TO IMPLEMENT THE USE OF NEW DNA TECHNOLOGIES?

HEARING

BEFORE THE

SUBCOMMITTEE ON GOVERNMENT EFFICIENCY, FINANCIAL MANAGEMENT AND INTERGOVERNMENTAL RELATIONS

OF THE

COMMITTEE ON GOVERNMENT REFORM

HOUSE OF REPRESENTATIVES

ONE HUNDRED SEVENTH CONGRESS

FIRST SESSION

JUNE 12, 2001

Serial No. 107–57

Printed for the use of the Committee on Government Reform

Available via the World Wide Web: http://www.gpo.gov/congress/house
http://www.house.gov/reform

U.S. GOVERNMENT PRINTING OFFICE

78–050 PDF WASHINGTON : 2002

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HOW EFFECTIVELY ARE STATE AND FEDERAL AGENCIES WORKING TOGETHER TO IMPLEMENT THE USE OF NEW DNA TECHNOLOGIES?

TUESDAY, JUNE 12, 2001

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON GOVERNMENT EFFICIENCY, FINANCIAL MANAGEMENT AND INTERGOVERNMENTAL RELATIONS,
COMMITTEE ON GOVERNMENT REFORM,
Washington, DC.

The subcommittee met, pursuant to notice, at 10 a.m., in room 2154, Rayburn House Office Building, Hon. Stephen Horn (chairman of the subcommittee) presiding.

Present: Representatives Horn, Putnam, Schakowsky, and Maloney.

Staff present: J. Russell George, staff director and chief counsel; Bonnie Heald, director of communications; Earl Pierce, professional staff member; Scott Fagan, committee assistant; Chris Barkley, staff assistant; Alex Hurowitz, Ryan Sullivan, and Fariha Khaliq, interns; Michelle Ash, minority counsel; David McMillen, minority professional staff member; and Jean Gosa, minority assistant clerk.

Mr. HORN. A quorum being present, the Subcommittee on Government Efficiency, Financial Management and Intergovernmental Relations will come to order.

The subject of today's hearing, DNA technology, demonstrates the challenges that societies have confronted throughout history. Scientific advancements have, for the most part, improved the human condition. Yet, the same advances have at times forced society to confront new challenges and perhaps new controls.

Scientific advances, such as splitting the atom, for example, have led to the creation of the atomic bomb and nuclear power. Controls have been used. Some might even include the automobile on that list, and more controls have been used. The use of DNA technology is one of those issues.

DNA technology is a powerful forensic tool for law enforcement. The technology was introduced into Great Britain by scientist A.J. Jeffreys in 1985. Since the FBI introduced this technology to the United States in 1988 it has been used in thousands of cases to help convict the guilty and exonerate the innocent. This is possible because each person's DNA is unique and can be profiled through a laboratory test.

When a crime has been committed the criminal often leaves some form of DNA evidence at the crime scene. It may be a drop of blood,

skin cells, saliva, or other body tissues. If a DNA profile obtained from such evidence is the same as a profile obtained from the suspect, it can be a strong indication that the suspect committed the crime. If the profiles are not the same, the suspect almost certainly did not commit the crime. In fact, according to the FBI, in about one of every four cases involving DNA, the initial suspect is exonerated.

Recent DNA technology is more powerful and more sensitive than the original technology, and it is cheaper and quicker to test. Within a few days, a DNA profile can now be obtained from a blood stain the size of a pin head. In one case, a burglar leaving the scene, stopped in the kitchen for a snack on the way out. Forensic scientists obtained enough DNA from saliva left on the piece of cake that he had munched on to make a positive match. Another type of DNA can be extracted from the bones and strands of hair.

The use of DNA evidence has become increasingly prevalent, in part because Federal, State, and local governments have worked together to develop and implement DNA analysis. The Federal Government has provided funding and guidelines through the DNA Identification Act of 1994 and subsequent legislation. The FBI has developed a coordinated set of local, State, and Federal data bases called the Combined DNA Index System [CODIS]. This system contains DNA profiles from convicted criminals, unresolved crimes, and missing persons. Every State now uses DNA evidence and requires that certain categories of criminals be profiled. Local police and prosecutors throughout the Nation are increasingly well-trained in how to use and how to obtain DNA evidence.

Of course, DNA is much more than a forensic tool. It is also the basic chemical of inheritance. For that reason, as with other advances in technology, DNA evidence requires special cautions and safeguards. Although there are specific safeguards laid out in Federal and State laws, issues of privacy are of concern to many. In addition, there are concerns about timeliness.

The greater use of DNA technology has overwhelmed many, if not most, of the Nation's forensic laboratories that analyze this evidence. The National Commission on the Future of DNA Evidence will testify before us that there are 750,000 collected but unanalyzed aspects of DNA. And the Federal and State governments have allocated funding specifically to reduce these backlogs. Still, the backlogs remain, allowing criminals to continue preying upon innocent victims and allowing those who have been wrongly convicted of a crime to languish in prison. When these samples are not processed in a timely manner, justice is delayed and, in some cases, denied due to varying statutes of limitations.

Today, we want to learn how effectively the Federal Government is helping alleviate this backlog and how the Federal assistance might be improved.

Our first panel of witnesses will attest to the importance of timely DNA processing from their first-hand experience. In addition, there are several key witnesses from the beginning here. Mr. Barry Scheck has been on the frontline in defending the rights of those convicted of crimes to have access to post-conviction DNA testing.

Following our first panel, we will hear from those who are involved in the analysis and collection of DNA evidence. They will discuss their successes and the challenges that lie ahead.

We welcome our witnesses. We look forward to their testimony.

[The prepared statement of Hon. Stephen Horn follows:]

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Opening Statement
Chairman Stephen Horn
Subcommittee on Government Efficiency, Financial Management and Intergovernmental Relations
June 12, 2001

A quorum being present, the Subcommittee on Government Efficiency, Financial Management and Intergovernmental Relations will come to order.

The subject of today's hearing -- DNA technology -- demonstrates the challenges societies have confronted throughout history. Scientific advancements have, for the most part, improved the human condition. Yet these same advances have, at times, forced society to confront new challenges. Scientific advances such as splitting the atom, for example, have led to the creation of the atomic bomb and nuclear power. Some might even include the automobile on that list. The use of DNA technology is one of those issues.

DNA technology is a powerful forensic tool for law enforcement. The technology was introduced in Great Britain by scientist A. J. Jeffries in 1985. Since the FBI introduced this technology to the United States in 1988, it has been used in thousands of cases to help convict the guilty and exonerate the innocent. This is possible because each person's DNA is unique and can be profiled through a laboratory test.

When a crime has been committed, the criminal often leaves some form of DNA evidence at the crime scene. It may a drop of blood, skin cells, saliva, or other body tissues. If a DNA profile obtained from such evidence is the same as a profile obtained from the suspect, it can be a strong indication that the suspect committed the crime. If the profiles are not the same, the suspect almost certainly did not commit the crime. In fact, according to the FBI, in about one of every four cases involving DNA, the initial suspect is exonerated.

Recent DNA technology is more powerful and more sensitive than the original technology, and it is cheaper and quicker to test. Within a few days, a DNA profile can now be obtained from a bloodstain the size of a pinhead. In one case, a burglar stopped in the kitchen for a snack. Forensic scientists obtained enough DNA from saliva left on the piece of cake he had munched on to make a positive match. Another type of DNA can be extracted from bones and strands of hair.

The use of DNA evidence has become increasingly prevalent, in part, because of how Federal, State and local governments have worked together to develop and implement it. The Federal Government has provided funding and guidelines through the DNA Identification Act of 1994 and subsequent legislation. The FBI has developed a coordinated set of local, State and Federal databases called the Combined DNA Index System, or CODIS. This system contains DNA profiles from convicted criminals, unsolved crimes and missing persons. Every State now uses DNA evidence and requires that certain categories of criminals be profiled. Local police and prosecutors throughout the Nation are increasingly well-trained in how to obtain and use DNA evidence.

Of course, DNA is much more than a forensic tool. It is also the basic chemical of inheritance. For that reason, as with other advances in technology, DNA evidence requires special cautions and safeguards. Although there are specific safeguards laid out in Federal and State laws, issues of privacy are of concern to many. In addition, there are concerns about timeliness. The greater use of DNA technology has overwhelmed many, if not most, of the Nation's forensic laboratories that analyze this evidence.

Federal and State governments have allocated funding specifically to reduce these backlogs. Still, the backlogs remain, allowing criminals to continue preying upon innocent victims and allowing those who have been wrongly convicted of a crime to languish in prison. When these samples are not processed in a timely manner, justice is delayed and, in some cases, denied due to varying statutes of limitations.

Today, we want to learn how effectively the Federal Government is helping alleviate this backlog, and how that Federal assistance might be improved.

Our first panel of witnesses will attest to the importance of timely DNA processing from their first-hand experience. Ms. Debrah Smith was abducted from her home in the middle of an afternoon and raped. She could not identify her rapist, but ultimately through a DNA match, her predator was found. Mr. Barry Scheck has been on the frontline in defending the rights of those convicted of crimes to have access to post-conviction DNA testing.

Following our first panel, we will hear from those who are involved in the analyses and collection of DNA evidence. They will discuss their successes and the challenges that lie ahead.

We welcome our witnesses, and look forward to their testimony.

Mr. HORN. I am now going to yield to the gentlewoman from New York. It was her idea to have us take a look at this, and we are indebted to her and her staff, who worked with our staff. I am delighted to have Mrs. Maloney give her opening statement.

Mrs. MALONEY. Thank you, Chairman Horn, for agreeing to have this hearing. Our ranking member, Jan Schakowsky, is on her way and will be here shortly.

I think that DNA evidence is one of the most important crime-fighting technologies ever developed and I am delighted that we will have the opportunity to examine this issue today.

I would also like to thank all of our witnesses for taking time from their busy schedules to come here today. We are blessed to have such a wealth of the knowledge available, and I look forward to hearing from each of you. I would especially like to mention two of my constituents who are here today. Barry Scheck is the founder of the Innocence Project. Under his leadership 88 people have been exonerated. He has worked selflessly to develop policies and standards to bring more fairness and justice to the system. Another important leader is Keith Kenneth Coonrod, Chair of the Consortium of Forensic Science Organizations. I thank you for all what you are doing, and particularly for your strong work in New York.

Today we will hear plenty about how powerful DNA technologies have become. We will hear plenty about the magical powers of DNA; that DNA can be extracted from a drop of blood, that the chances of a solid DNA profile match being a coincidence can be one in a trillion.

But I want to talk this morning about what this really means. DNA technologies means that rapists and other violent offenders will not get away with their terrible crimes. Even when there is absolutely nothing else to go on, a strand of hair, the bottom of a used stamp, or even DNA taken off of a victim's bruise can be used to catch and convict criminals.

This means so much to so many victims of rape and violent crime all across this Nation. Just this last month in my district in New York City, police finally arrested a rapist who had assaulted a young NBC producer on her way home from work. Although police had been unable to locate her attacker for well over a year, DNA found on the victim following the attack turned out to match the DNA of a previously convicted burglary offender. With nothing else to go on, solid DNA evidence helped break the case. Without DNA, this criminal would still be on the streets. This is what this is all about—solving the crime, putting attackers and rapists behind bars.

With that in mind, I have a few particular things that I would like to learn today, and I hope that our witnesses will be able to address them in their testimony or during the question and answer period.

Last year, Congress passed the DNA Backlog Elimination Act, designed to help States and localities collect and process DNA samples taken from convicted offenders. I was proud that Congress passed that legislation. Expanding the DNA database means that more criminals will be caught when the DNA they leave at a crime scene is matched against the database. I would like to hear how this program is working. This was a critically important step, and

I am eager to learn from our panel how much impact that legislation is having from your experience at the State and local level.

But what I would also like to learn is how well evidence is being collected at the crime scene and from victims immediately following a crime. This is a forensic evidence collection kit. It contains all of the tools a professional needs to collect evidence from a rape victim. But many hospitals across the Nation do not have these kits. In many places where kits are not available, forensic evidence is collected with nothing more than a cotton swab and a plastic bag. In many communities professionals assigned the task of collecting evidence from rape victims have not been fully trained and opportunities to collect evidence are squandered. Also, when evidence is collected, many hospitals and communities lack the know-how or the resources to properly care for the forensic evidence they have already collected.

In the end, this means that even the most talented forensic scientist may have little to work with. No matter how big the database is, we cannot fully recognize the benefits of the database without quality evidence.

I am extremely interested in how we can ensure that evidence is collected and stored properly, and I hope that all of our witnesses will address these issues today. I would also like to hear from you any ideas of where you think we should go in Congress not only with the data collection backlog bill, but what are the next steps that we can take to help law enforcement officials and innocent persons in jail benefit from the scientific evidence in DNA.

I thank all of our panel for coming. Thank you very much for your participation. And I see our ranking chairwoman, Jan Schakowsky, is here.

[The prepared statement of Hon. Carolyn B. Maloney follows:]

14th District • New York

Congresswoman

Carolyn Maloney

Reports

2430 Rayburn Building • Washington, DC 20515 • 202-225-7944
1651 Third Avenue • Suite 311 • New York, NY 10128 • 212-860-0606

June 12, 2001
Government Reform Committee, DNA hearing

Good morning. I would first like to thank Chairman Horn for agreeing to hold this hearing today. I think DNA evidence is one of the most important crime-fighting technologies ever developed and I am delighted that we have the opportunity to examine this issue today.

I would also like to thank all of our witnesses for taking time from their schedules to be here today. We are very blessed to have such a wealth of knowledge available and I look forward to hearing from each of you.

Today we will hear plenty about how powerful DNA technologies have become, we will hear plenty about the magical powers of DNA-- that DNA can be extracted from a drop of blood the size of a pinhead, that the chances of a solid DNA profile match being a coincidence can be one in one trillion.

But I want to talk this morning about what this really means. DNA technology means that rapists and other violent offenders will not get away with their heinous and horrible crimes. Even when there is absolutely nothing else to go on, a strand of hair, the bottom of a used stamp, or even DNA taken off of a victim's bruise can be used to catch and convict criminals.

This means so much to so many victims of rape and violent crime all across this nation. Just last month in New York City, police finally arrested a rapist who had assaulted a young NBC producer on her way home from work. Although police had been unable to locate her attacker for well over a year, DNA found on the victim following the attack turned out to match the DNA of a previously convicted burglary offender.

With nothing else to go on, solid DNA evidence helped break the case. Without DNA, this criminal would still be on the streets. That is what this is all about–solving the crime, putting attackers and rapists behind bars.

With that in mind, I have a few particular things that I would like to learn today, and I hope that our witnesses will be able to address them in their testimony or during the question and answer period.

Last year, Congress passed the DNA Backlog Elimination Act, designed to help states and localities collect and process DNA samples taken from convicted offenders. I was proud that Congress passed that legislation– expanding the DNA database means that more criminals will be caught when the DNA they leave at a crime scene is matched against the database.

This was a critically important step, and I am eager to learn from our panel how much impact that legislation is having on a local level. But what I would also like to learn, is how well evidence is being collected at the crime scene and from victims immediately following a crime?

This is a forensic evidence collection kit, it contains all of the tools a professional needs to collect evidence from a rape victim. Many hospitals across the nation have these kits. But many do not. In some places where kits are not available, forensic evidence is collected with nothing more than a cotton swab and a plastic bag. In many communities, professionals assigned the task of collecting evidence from rape victims have not been fully trained and opportunities to collect evidence are squandered. Also, even when evidence ***is*** collected, many hospitals and communities lack the know-how or the resources to properly care for the forensic evidence they have collected.

In the end, this means that even the most talented forensic scientists may have little to work with. No matter how big the database is, we can't fully recognize the benefits of the database without quality evidence.

I am extremely interested in how we can ensure that evidence is collected and stored properly and I hope all of our witnesses will address this issue here today.

Thank you.

Mr. HORN. I thank the gentlewoman from New York.

We now have the ranking member of this subcommittee, Ms. Schakowsky, the gentlewoman from Illinois, with us. We look forward to your opening statement.

Ms. SCHAKOWSKY. Thank you, Mr. Chairman. I want to thank you for holding this hearing. And I want to thank Mrs. Maloney for her leadership on this issue and for requesting that our subcommittee review this important topic.

Reviewing the use of new DNA technologies is an area that we can work together in a bipartisan fashion to ensure strong oversight. Democrats, Republicans, and Independents recognize the need for increased safeguards when it comes to the use of an individual's genetic makeup. DNA can be a useful identifier in many situations, such as in solving crimes, determining paternity, and identifying human remains.

Today we will hear from a number of experts regarding how DNA technologies are being used by law enforcement agencies. In criminal cases, DNA can link or exclude a suspect to a crime scene. Similarly, it can link or exclude a weapon, such as a knife, to a crime scene. DNA can be collected from blood, semen, skin, saliva, tissue, tears, bone fragments, and other body fluids. DNA has even been collected from tears found on fragments of contact lenses. And useable DNA can now be extracted from very small samples, such as a drop of blood the size of a pin head.

In order for DNA to be helpful to law enforcement officers, it must be collected, stored, and accessible for retrieval. Whether at a crime scene, in a hospital, in prison, or in a laboratory, DNA must be collected properly. Law enforcement officers, hospital staff and laboratory technicians must know how and what to collect and how to handle and transport it. They must ensure that the DNA samples are collected, the DNA samples are not contaminated, and the DNA samples from different persons are not mixed.

Once the DNA is collected, it must be stored properly. Laboratories in only 35 States are adding DNA samples to the national database. We must push to have the other 15 States on board as soon as possible. In addition, within those 35 States that are participating hundreds of thousands of samples have yet to be analyzed. We must also push to have this backlog reduced. I was a strong supporter of the DNA Backlog Elimination Act that passed last year, and I support ongoing efforts to appropriately fund DNA testing.

Accessibility to the DNA samples, once they are properly stored, is also important. Unless every laboratory shares its samples with the national database, law enforcement officers in one State cannot review samples taken in another State. In addition, convicted felons should have an opportunity to have their DNA double-checked against the crime scene. As we will hear from some of our witnesses today, there are prisoners on death row who are fighting to get their DNA tested in order to prove their innocence. Last year, after noting that the State had freed more people than it had put to death, Illinois Governor George Ryan placed a moratorium on the death penalty. Ryan explained that a commission was needed to study 13 death penalty cases that were overturned after pris-

oners were found innocent due to factors like new DNA evidence, recanted testimony, or insufficient evidence.

Furthermore, I have cosponsored H.R. 912, the Innocence Protection Act of 2001, which authorizes a person convicted of a Federal crime to apply to the appropriate Federal court for DNA testing to prove innocence, and prohibits a State from denying an application for DNA testing made by a prisoner in State custody who is under sentence of death if specified conditions apply.

Mr. Chairman, as DNA technologies continue to advance, we will need greater and greater coordination between our State, local, and Federal law enforcement agencies. I am hoping this hearing will help us pave the way to such coordination. Thank you.

Mr. HORN. Thank you.

Let me give you the procedure of panel I, and then we will do that for panel II again. On panel I, we have two expert witnesses. Deborah Smith is the crime victim that I mentioned earlier, and Barry Scheck is an attorney and the director of the innocence project of the Cardozo School of Law in New York. Some members have statements, we have read them all, and if you have submitted a written statement, it goes into the hearing record at this point and then you can summarize it. We would like you to do so in about 10 minutes because we have a lot of witnesses here today. But if you need to go beyond that time, we will. We want to make sure, following your fine testimony we have seen throughout panels I and II, we want to make sure you can have a discussion with people that might not agree with some of the way processing is going on. We just want to get it all out and on the record.

This is an investigative committee. We will be asking each of the witnesses in a group to take the oath. So, with that, if you would raise your right hands.

[Witnesses sworn.]

Mr. HORN. The clerk will note that both witnesses have affirmed the oath.

We will now proceed. Ms. Smith, we appreciate your coming because you are a crime victim and you know about these things more than anybody else would. So, if you would like to begin with your statement, we would certainly appreciate having it.

STATEMENT OF DEBBIE SMITH, CRIME VICTIM

Ms. SMITH. 03–03–89, 9342–00 through 9342–05; Numbers of Identification 8905010; C89–1968—human identification. 180907; 89–85–00–0234; written and spoken without a particular face impressed on the mind. 228–15–3839; 214515HA4; VA654195. Cold, impersonal, but necessary numbers of human identification revealing personal information about this faceless individual. Never before had there been so many ways to identify me, and yet I had never felt so lost. I resented being referred to as a number. The numbers made it seem as if I did not exist as a person; mechanical and unreal. Little did I know that it would be numbers—matching numbers that would breathe air into my lungs and allow me to truly live again.

There is no way for you to understand how what is done in the DNA laboratories can mean the difference between life and death without taking you back to March 3, 1989. It is around 1 on a Fri-

day afternoon. Outside it is cold and gray and there is a light mist falling. I am in my home in a nice neighborhood in the city of Williamsburg, VA, which happens to be one of the safest cities in our country. My husband, who is a police lieutenant, was asleep upstairs after having been up for over 30 hours. How could I have possibly been any safer? I had no way of knowing that within a matter of moments my life and the lives of those around me would be changed forever.

It was a typical day in the life of any wife and mother. I was cleaning house, doing laundry, and preparing dessert for dinner with friends. In the midst of all of this I noticed that my dryer was not working properly, so I stepped outside to check the exhaust vent. When I returned, I decided to leave the back door unlocked, a door that is always locked. But I knew that I was going to return right away with the trash. But before I could return, within moments, a stranger entered that door and nearly destroyed and definitely changed my life forever.

This masked stranger forcibly took me out of my home into a wooded area where he blindfolded, robbed, and repeatedly raped me. This crime that took less than 1 hour has deprived me of an innocent outlook on life and on my freedom. The sound of his voice rang through my ears as a deafening clamor—"Remember, I know where you live and I will come back if you tell anyone."

But I did tell someone. As soon as I was allowed to return home, I ran upstairs to where my husband was sleeping and I woke him with the words "He got me, Rob, he got me." I begged him please don't call the police. I pleaded with him not to tell anyone because I feared this man would keep his promise and he would return and kill me. But the police officer in my husband knew that we could not let this crime go unreported. He also convinced me of the importance of going to the hospital, for he knew that we may need the evidence that would be collected from the rape kit. But all I wanted to do was to take a shower. I wanted to try to wash it all away.

When we returned home from the hospital I thought I could begin to process what really happened. I had survived this terrible ordeal; I could put it behind me and go on. I did not know that the worst was yet to come.

My favorite place, my home, seemed now nothing more than cold stone and wood. Nothing seemed familiar. The one place I had always felt comfortable and safe was now taunting me with memories. I would relive this nightmare day after day, remembering more and more of the details each day as the shock began to wear off. It was far from being over.

For the first time in my life I could not find any reason to live. The love of my family and friends just was not enough because they could not erase the memories and they could not take away the pain. Even my faith in God seemed to be failing me, for there was no escaping the pain and no escaping the fear.

Fear will not be satisfied until it has taken over your entire body and mind as a cancerous tumor. It cripples as arthritis, making every movement unbearable until it is finally no longer worth the pain. You become paralyzed. You feel trapped and helpless. It was always there. It was there in my waking hours as well as in my

dreams, and on many occasions my husband would be awakened in the middle of the night to the sound of blood curdling screams from my nightmares.

It was at this point that I began to realize that I could not, and I absolutely would not, live this way. Death seemed to be the only alternative, the only answer that would end this horrible nightmare that had become my life. In death there would be peace and there would be quiet, for I would no longer have to hear his voice in my ears, or feel his arms around my neck, and I would no longer have to see his face before my eyes. I knew that my mind could finally rest.

I planned the suicide in my head over and over, but there was one problem that there seemed to be no solution for, and that was my husband and two children, because I worried who would find me and would they have to live in guilt feeling that they had somehow failed me. I wondered what this would do to them. And I thank God that it was my love for them that was stronger than my need to rid myself of my torment. I finally grabbed onto this thread and it became my reason to live.

One of the most frequent comments that I heard after I was raped was "At least you're alive." But I can still tell you today that while I was alive physically, inside I had died and I was completely dead. I cursed my attacker in fact for leaving me alive to live with the pain. This intruder never laid a physical hand on anyone in my family, but when he left he left each one of us a victim. He touched emotions in us that we had never known. Suddenly, there was rage in the eyes of my young son. My daughter was afraid to go from the porch to the driveway after dark. And each one of us, especially my husband, felt the awful pain of guilt for he felt as if he could protect the whole city of Williamsburg but was unable to protect his own wife in our own home. Our home, which had always been filled with love and laughter, had now become just a house full of bitterness, anger, fear, and guilt.

But my family and I were not the only victims that day. Every person that touched my life or my family's life was to feel the effect of this crime. They too felt invaded and vulnerable. I could see the pain in their eyes because I was a constant reminder that rape can happen to anyone anywhere. They were angry for me and yet they felt helpless for there was nothing they could do. Our minds and our bodies ached for understanding and yet there was none to be found.

I waited daily to hear the news that they had found this man that had changed our lives so drastically. I lived in constant fear of his return, hearing his words over and over in my head "I know where you live and I will come back and I will kill you." The Williamsburg Police Department followed every lead and every clue only to come up empty handed. Even in my own mind I began to doubt myself. I wondered if it really happened or was it just some terrible nightmare. Do they believe me, or are they doubting my words just as I was doubting myself? But in my heart I knew that it was not just some nightmare that was going to fade with time, but that it would be one that I would have to live with forever.

I craved peace of mind and I did everything I could to attain it. We put an alarm system in our home, including panic buttons

throughout the house as well as one that I could wear around my neck, the privacy fence was put up around our backyard, and motion detectors installed. At one point, I even decided to carry a gun. There just did not seem to be any way to attain this peace and rest that my mind and my body craved for so long. I would have to suffer daily with the memory of a man who was in my life for such a short span of time. He may never have to pay for his crime, but I was going to have to pay for it forever. For 6½ years I simply existed, trying to go on and live life as normal. I can tell you that it is only by the grace of God that I am still here today.

VA 122015Y; 01–14–91—just more numbers—9117682; 07–24–95—but these numbers bring with them a life-giving force and renewed hope—4183; 07–26–95. As George Lee sat at his computer in the Virginia Division of Forensic Science on July 24, 1995, on what probably seemed to him just a normal day at the lab, he had absolutely no way of knowing what effect his work that day would have on my life and those around me. On this day, Mr. Lee entered a prisoner's blood sample into the computer and it automatically began its cross-check against previously entered samples, some of which were obtained from the rape kits. To his joy and surprise he received a cold hit, something that was fairly rare at that time. This information was passed onto the Williamsburg Police Department, they in turned passed the information onto the shift lieutenant working that day, who just happened to be my husband.

On that day, July 26, 1995, my husband walked into our living room and handed me a composite that he had carried with him ever since the incident and told me that I could throw it away because we were not going to need it anymore. Not only had they identified my rapist, but he had been in prison for another crime and had been there since 6 months after I was attacked. For the first time in 6½ years I could feel myself breath. I felt validated. There was a real name and a real face to go with the nightmare that I had lived. And everyone would know that I was telling the truth, that it was real.

Finally, I could quit looking over my shoulder. No longer did I have to drive around in circles hoping that a neighbor would drive by so that I could get the courage to get out of my car to go into our own home after dark if no one else was home. Unfamiliar noises no longer left me panic-stricken, and I no longer had to scan the faces in the crowd to see if maybe he was following me. And suicide was no longer a consideration. And finally, my husband is grateful that I don't wake him up as often in the middle of the night with ear-piercing screams.

Within myself the healing had begun and peace had come at last.

Because of that rape kit, this man is off the streets for good. The jury gave Norman Jimerson two life sentences plus 25 years without parole.

I sit here before you today as an example of the importance of the evidence obtained from the rape kit. Because of my husband insisting that I go to the hospital, I did not miss my children's college graduation, I was present to watch my daughter walk down the aisle in November, and just this past Saturday I watched as my son exchanged vows with his new bride.

I am not a public speaker by nature, and it takes every ounce of courage that I can muster to be here, but I can tell you that I count it both a privilege and an honor to be allowed this small part in the furtherance of this cause. Any time a great tool such as this is available and not used, I think that our society commits a crime against its members. We must use the crime-solving capabilities of this powerful tool to its fullest, and I pray that all of you will consider its importance to me and thousands of other victims like me. Thank you.

[The prepared statement of Ms. Smith follows:]

Debbie Smith
June 12, 2000
DNA Hearing

Sub-Committee Hearing

03-03-89; 9342-00 through 9342-05; Numbers of identification 8905010; C89-1968; ...human identification. 180907; 89-85-00-0234; Written and spoken without a particular face impressed on the mind. 228-15-3839; 214515HA4; VA654195. Cold, impersonal ... necessary numbers of human identification revealing personal information about this faceless individual. Never before had there been so many ways to identify me and yet I had never felt so lost. I resented being referred to as a number. The numbers made it seem as if I didn't exist as a person, mechanical and unreal. Little did I know that it would be numbers .... matching numbers that would breathe air into my lungs and allow me to truly live life again.

There is no way for you understand how what is done in the DNA laboratories can mean the difference between life and death without taking you back to March 3rd, 1989. It is around one o'clock on a Friday afternoon. Outside it is cold and gray with a light mist falling. I am in my home in a nice neighborhood in the city of Williamsburg, Virginia, which happens to be one of the safest towns in this country. My husband, a police lieutenant is upstairs asleep, after having been up for over 30 hours. How could I have possibly been any safer? I had no way of knowing that within a matter of moments my life and the lives of those around me would be changed forever.

A typical day in the life of any wife and mother, I was cleaning house, doing laundry and preparing dessert for dinner with friends. In the midst of all of this I noticed that my clothes dryer did not seem to be working properly, so I went outside to check the exhaust vent. When I returned, I decided to leave the back door unlocked, a door that is always locked. But I knew that I was going to return right away with the trash. ~~After all I thought, what can happen in just~~

~~a few minutes, time for me to go in, gather the trash and come back out~~. But before I could return, within moments, a stranger entered that door and nearly destroyed and definitely changed my life forever. This masked stranger forcibly took me out of my home to a wooded area, he blindfolded, robbed and repeatedly raped me. This crime that took less than one hour has deprived me of the innocent outlook on life and my freedom. The sound of his voice rang through my ears as a deafening clamor, "Remember, I know where you live and I will come back if you tell anyone.", but I did tell someone. As soon as I was allowed to return home, I ran upstairs to my sleeping husband waking him with the words " He got me Rob, he got me." I begged him not to call the police. I pleaded with him not to tell anyone because I feared this man would keep his promise to return and kill me. But the police officer in my husband knew that we couldn't let this go unreported. He also convinced me of the importance of going to the hospital for he knew we may need the evidence collected w/ the ~~so~~ rape kit. But all I wanted to do was to take a shower. I wanted to try to wash it all away.

When we returned home from the hospital, I thought could begin to process what had really happened. ~~I thought that the worst was over.~~ I had survived this terrible ordeal. I could put it behind me and go on. But the worst was yet to come. My favorite place ... my home ... seemed now nothing more than cold stone and wood. ~~Everything seemed to have a strange look about it~~. Nothing seemed familiar at all. The one place I always felt comfortable and safe was now taunting me with memories . I would relive this nightmare day after day. Remembering more and more details each day as the shock began to wear off. It was far from being over.

For the first time in my life, I couldn't find any reason to live. The love of my family and friends wasn't enough. They couldn't erase the memories or take away the pain. Even my

faith in God seemed to be failing me. ~~In fact, I couldn't understand how a God of love could allow this to happen~~.

There was no escaping the pain, no escaping the fear. Fear will not be satisfied until it has taken over your mind and body as a cancerous tumor. It cripples like arthritis, making every movement unbearable, until finally it no longer seems worth the pain. You become paralyzed feeling trapped and helpless. It was always there. It was there in my waking hours as well as in my dreams. On many occasions, my husband would be awakened in the middle of the night to the sound of blood curdling screams from the nightmares. It was at this point that I began to realize that I could not and would not live this way. Death seemed to be the only alternative, the only answer that would end this horrible nightmare that had become my life. In death, there would be peace and quiet. I would no longer hear his voice in my ears, feel his arm around my neck or see his face before my eyes. My mind could rest. ~~I could not risk surviving ... my death would need to be fast and final. I decided a gun would be my answer~~. Over and over I planned this suicide in my head. But there was one problem that had no solution ... my husband and two children. Who would find me? Would they live in guilt feeling they had failed me? What would this do to them? ~~I could not bear the thought that they would have to endure the same kind of pain that I was feeling.~~ I thank God that my love for them was stronger than need to rid myself of this constant torment. I finally grabbed onto this thread and it became my reason to live. One of the most frequent comments I heard after being raped was, "At least you're alive." But I can tell you still today that while I was alive physically I had died inside. I cursed my attacker for leaving me alive to live with this pain.

This intruder never laid a physical hand on anyone else in my family, but when he left,

he left each of us a victim. He touched emotions that we had never known. Suddenly there was rage in the eyes of my son. My daughter was afraid to go from the porch to the driveway after dark. And each of us, especially my husband, felt the awful pain of guilt. He felt as if he could protect the whole city but unable to protect his own wife in our own home. Our home which had always been filled with love and laughter had now become a house full of bitterness, anger, fear and guilt.

But my family and I were not the only victims that day. Every person that touched my life or my family's life was to feel the effect of this crime. ~~They no longer felt safe in their sweet little town of Williamsburg.~~ They, too felt invaded and vulnerable. I could see the pain in their eyes because I was a constant reminder that rape truly can happen to anyone anywhere. ~~They would guard their words~~ so ~~they wouldn't say anything to upset me~~. They were angry for me and yet they felt helpless for there was nothing they could do. ~~I often found myself comforting them~~. Our minds and bodies ached for understanding and yet there was none to be found. I waited daily to hear the news that they had found this man that had changed our lives so drastically. ~~These days turned into weeks and the weeks into months and the months into years.~~ I lived in constant fear of his return, hearing his words over and over in my head, "I know where you live and I will come back and I will kill you."

The Williamsburg Police Department followed every lead and every clue, only to come up empty handed. Even my own mind began to doubt myself. Had it really happened? Was it just some terrible nightmare? Do they believe me, or are they doubting my words as I was doubting myself. But in my heart I knew that it wasn't some nightmare that was going to fade with time, but one that I would live forever. ~~I began to realize that the quality of life I once~~

~~enjoyed would never be restored.~~

I craved peace of mind and did everything I could to attain it. An alarm system was installed in our home including panic buttons throughout the house as well as one I could wear around my neck. The privacy fence was put around our backyard and motion detectors were installed. At one point, I even took to carrying a gun.

There just didn't seem to be any way to attain this peace and rest that my mind and my body craved for so long. ~~I began to wonder how I was ever going to be able to really live again.~~ I would suffer daily with the memory of a man who was in my life for such a short span of time and he may never have to pay for his crime, but I was going to have to pay for it forever. I can tell you that it is only by the grace of God that I am here today. For six and a half years, I simply existed trying to go on and live life as normal.

VA122015Y, 01-14-91, More numbers. 91-17682, 07-24-95, But these numbers bring with them a life giving force and a renewed hope. 4183, 07-26-95. As George Li sat at his computer in the Virginia Division of Forensic Science on July 24 1995, on what probably seemed to him to be just another day at the lab, he had no way of knowing what effect his work that day would have on my life and those around me. On this day Mr. Li entered a prisoner's blood sample into the computer and it automatically began its cross check against previously entered samples. some of which were ~~[illegible]~~ obtained from rape kits To his joy and surprise he received a cold hit, something fairly rare at that time. ~~Two days later~~, this information was passed on to the Williamsburg Police Department ~~where this case was being investigated.~~ They in turn passed the information on to the shift Lieutenant working that day who just happened to be my husband. On that day, July 26, 1995, my husband walked into our living room and handed me a composite that he had carried with

him ever since the incident, and told me I could throw it away because we weren't going to need it anymore. Not only had they identified my rapist but he was already in prison for another crime...and had been there ~~for~~ since 6 months after I was attacked.

For the first time in six and a half years, I could feel myself breathe. I felt validated. There was a real name and a real face to go with the nightmare. Everyone would know that I was telling the truth, that it was real. Finally, I could quit looking over my shoulder. No longer did I have to drive around in circles hoping a neighbor would drive by so I could get the courage to get out of my car to go into my own front door if no one else was home. Unfamiliar noises no longer left me panic-stricken. I no longer scanned faces in a crowd to see if he was following me. Suicide was no longer a consideration. And finally, my husband is grateful that I don't wake him up anymore in the middle of the night with the ear-piercing screams. Within myself, the healing had begun and peace had come at last. Because of ~~your efforts~~ that rape kit this man is off the streets for good. The jury gave Norman Jimmerson 2 life sentences plus 25 years with no chance of parole.

I stand here before you as an example of ~~what DNA is truly all about.~~ the importance of the evidence obtained from the rape kit. Because of ~~the efforts of the Forensic Scientists~~ my husband insisting that I go to the hospital, I did not miss my children's college graduation and I was present to watch my husband walk my daughter down the aisle in November and this past Saturday, I watched my son exchange his vows. I am not a public speaker by nature and it takes every ounce of strength and courage that I can muster just to be here, but I count it both a privilege and an honor to be allowed this small part in the furtherance of this cause. Anytime a great tool such as this is available, yet not used, I think that our society commits a crime against its members. We must use the crime solving capabilities of this powerful tool, DNA, to it's fullest and I pray that all of you will consider it's importance to me and thousands of other victims like me. Thank you

Mr. HORN. We thank you. It is riveting testimony, and we thank you for taking the time to come here and share that experience, no matter how horrible it is. But women all over America have had just your experience, and obviously you speak well for the thousands of women that have gone through this. We thank you for your coming to share that with us. Hopefully, your testimony will get people to think more about these things and make sure that we get the type of DNA and everything else that can be dealt with to get these predators and put them away in prison forever. So, thank you very much.

Would any of you have questions right now?

Mrs. MALONEY. I have a question, Mr. Chairman.

Mr. HORN. The gentlewoman from New York, Mrs. Maloney.

Mrs. MALONEY. Just on behalf of women and girls all over the country, I would say the world, I want to thank you for your incredible testimony. It is very brave and very important that you are here today. Your testimony put meaning behind the numbers. It put meaning behind the numbers to show the human aspect, and that is tremendously important. I know that many of us will be even more inspired to develop every single tool we can to further protect people.

One of your statements was very important. You said that every time a rape kit is available and not used, society commits a crime. And yet, I believe that these rape kits are not in every hospital, nor are they uniform. And I would like to ask you, do you think every hospital and medical center should have one of these rape kits? And do you think there should be uniform rape kits that would help our police officers solve the crimes?

Ms. SMITH. Absolutely. Because without the rape kit we would have never been able to have the evidence that we needed to convict Norman Jimerson, because that was basically all we had was the evidence from that rape kit. I would think that if we do it uniformly, then it would become common knowledge of how to use it and when the different labs get that then they would know exactly what they were looking at as opposed to a different kit from place to place.

Mrs. MALONEY. Thank you for your testimony.

Mr. HORN. On the rape kit usage, in your experience, was that done in a hospital with nurses or doctors?

Ms. SMITH. Unfortunately, mine was done in the hospital with a doctor. But our hospital has now changed that in that we have SANE nurses in place for which I am very grateful. That is a very important program to have in place in every single hospital.

Mr. HORN. I am thinking of paramedics also and evidence. Do you think these rape kits should be used by paramedics?

Ms. SMITH. Only if they are trained properly to use it, because for a rape victim that is one of the first things that she has to go through and the first contact that a rape victim has certainly has a great impact on how she is going to process what has just happened to her. It can be a totally humiliating process to go through, and if it is done wrong—and I believe that is why a lot of victims do not come forward now is because we do not have the proper programs in place for that. So, I would say that only a very trained paramedic should be given that.

Mr. HORN. And certainly the doctors in the hospital usually would be those on emergency duty. I think that the staffs on both sides should take a look at some of these hospitals and are they educated on how to best utilize this, because it is such a trauma that you are going through when you get rolled into that emergency ward. I would just like to know if ever in medical school they teach people about these things, because they are frightening.

The predator that went after you, what has happened?

Ms. SMITH. He is in the Red Onion Prison and he has been given two life sentences plus 25 years with absolutely no chance of parole. He does have an appeal right now but it does not look like there is any chance that anything will come of that.

Mr. HORN. Well, it is good to know that he is behind bars, that is for sure.

The gentlewoman from Illinois?

Ms. SCHAKOWSKY. Thank you so much for your testimony. I know it took a lot to do that, but, hopefully, it will result in having contributed a lot to changing things. I wanted to ask you, you said that all you wanted to do was take a shower and not really forget about it——

Ms. SMITH. Wash.

Ms. SCHAKOWSKY. Yes, wash it away. And your husband convinced you that it was important. I am sure that is the impulse of most rape victims. I am wondering if, as painful as it might be, we need to do a better job of convincing whoever might be in this horrible situation just how very important it is, and if you have any suggestions of how we might be able to communicate that at that terrible moment that the right choice is to go to the hospital and make sure that evidence is collected?

Ms. SMITH. I think, of course, education would be the primary factor in that. And, yes, I think that is very important. I think that is one thing that the SANE program does, which is Sexual Assault Nurse Examiners, because in letting people know that the program is available, it lets people know that if you are sexually assaulted that it is a one-on-one program where a nurse collects the evidence, but that if the rape victim herself does not hear that, then maybe her friend or whoever it is that she goes to will know that and they can take her or convince her to go and have this done.

It is only education, and that is one reason why we decided to go public with this is because rape is not something that the victims should feel guilt about, but yet it is the one crime where the blame is placed on the victim. That is one reason that we decided to be public with this. I believe that it is only as people will speak out and stand up and say, "yes, I have been raped" that it will make other victims able to go forth, go to the hospital and say this did happen to me and I do want something done about this, and take some of the fear and some of the guilt away from what has happened to her.

Ms. SCHAKOWSKY. I wanted to ask you a little bit about the sense of guilt and the fact that you said that you felt like now you were vindicated and you were really believed. Was there reason, objective reason, I understand there were a lot of emotions going on, but were you made to feel that maybe it wasn't true, you were interro-

gated in such a way that you felt that someone believed that it had not happened?

Ms. SMITH. Not really. It was just basically something that we all as victims tend to second-guess ourselves. But one of the things that did make me feel that way was the questions that were asked to me. I was asked the same questions over and over again, they were just phrased a little differently. I felt as if they really were not believing what I was saying, they were trying to kind of trip me up to catch me in a lie is what I felt. Mind you, if I felt this way, other victims probably felt it even more so, because this did happen in my own community where my husband worked as a police officer, so I was family. So they were handling me with kid gloves, so to speak. So I felt that if I felt this way, how much more must it be that way for other victims who do not have that contact. That was also a very deep concern of mine because I know that I was handled very gently and so it really did bother me what other victims might be going through.

Ms. SCHAKOWSKY. So even though the subject of this hearing is DNA, I appreciate very much your sharing this and it can spill over into other issues that we can consider as a body. Thank you very much.

Ms. SMITH. Thank you.

Mr. HORN. Thank you. You mentioned the SANE program. What does that stand for?

Ms. SMITH. Sexual Assault Nurse Examiners. They are trained by a school out of our lab in Virginia to know how to do the physical collection of the evidence as well as handling those first emotional problems that a victim may have.

Mr. HORN. We thank you very much. You have given sufficient testimony here, and if you want to stay, we would be delighted to have you because the next panel will be on how the States and the Federal Government try to get the DNA data so that people who should be in jail are sent to jail. So feel free to stay the morning.

Mr. Scheck, attorney, director of the innocence project of the Cardozo School of Law in New York.

STATEMENT OF BARRY SCHECK, ATTORNEY, DIRECTOR, THE INNOCENCE PROJECT, CARDOZO SCHOOL OF LAW

Mr. SCHECK. Thank you very much. It is a privilege to be here. Let me start by saying this is the second time I believe that I have had the privilege to be with Mrs. Debbie Smith and hear what she has to say. I want to emphasize two points right away. I am here to tell you about priorities on how we can most efficiently do DNA typing, deal with these backlogs, and there are two initial points to be made that directly stem from what Debbie Smith told you today. No. 1, every crime lab in this country, at the State and local levels, have to have the capacity to do DNA typing on a rape kit within 7 to 10 days after a crime like this is committed so they can take the DNA profile of the assailant and put it in the databank and see if it matches any other unsolved sexual assault that is going on in the community. All laboratories do not have that capacity. I pick 7 to 10 days because that is the turnaround time in the United Kingdom where they are getting far more hits than we are linking unsolved cases to each other. That is No. 1.

No. 2, and it is the second priority I mentioned in my testimony that has been submitted, there are hundreds of thousands of rape kits that are literally being thrown away in police labs and medical examiners' offices all across the United States. Our national DNA Commission had a survey done, frankly, a quick and dirty survey, and I mean no disrespect to the people that did it, that estimated 180,000 untyped sexual assault kits, rape kits throughout the country, but that is no doubt an underestimate. Literally, what is happening is that these cases are not being typed. They should be immediately typed and put in the system so, again, you will be able to identify serial rapists, serial rapists/murders right away. And yet, that has not happened.

Now how do I come to be so concerned about that, aside from having heard Debbie Smith before or sitting as a commissioner on the national DNA Commission. What you may not know is that I and the co-Director of the Innocence Project, Peter Neufeld, actually serve as Commissioners of forensic science in the State of New York. New York has a unique body called the Forensic Science Review Board. It is an independent group of professionals and crime lab people, judges, and police officers that regulate our crime lab. We passed this bill 6 years ago. And so we officially regulate our crime labs and regulate the DNA databanks. And what I discovered wearing the hat of a commissioner of forensic science is that in the New York City Medical Examiner's Office alone, which only governs New York City, we had 25,000 untyped sexual assault kits, cases just like Debbie Smith's. And literally what would happen is when the 5-year statute of limitations would run, they would throw away the rape kits. I went to the then police commissioner, Howard Safer, somebody that Peter Neufeld and I sue on a regular basis, police brutality cases——

Mr. HORN. With good cause.

Mr. SCHECK. We assume it. We represent Abner Nueva, who is a crime victim. So we said to the commissioner you must stop this. And to his great credit he said yes. That was 3 years ago and he immediately put out for bid, trying to outsource it to private labs because our State and local labs did not have the capacity, and effort to type these 25,000 rape kits. And even in the most aggressive effort in the country to deal with this problem, we have only been able to type 8,000 to this point in time.

But one of those is a very interesting case that I think has been noted by others. We had this terrible sexual assault, I think Congresswoman Maloney mentioned it, of a producer that in the middle of the day was dragged into a vestibule area at Rockefeller Center near the NBC studios and sexually assaulted. The assailant in that case, we were able to get his DNA, even though he was out on parole or probation, type it, put it into the databank, and he was apprehended, and I will explain why that matters.

What I would like to try to quickly go through with you are priorities. This is a subcommittee, part of a larger committee, that is talking about efficiency in government. We can throw a lot of money at this problem, and we should, we are woefully underfunded on the State, local, and national levels in terms of capacity to do DNA testing, but it is critically important that we do this funding now, because we are never going to make up all the de-

mand for this, we do it intelligently so that we can prevent crimes from being committed by apprehending the guilty assailants quicker, we can prevent innocent people from being arrested, tried, convicted, or, God forbid, executed, and there is more than enough evidence of that, in a very efficient way. And we need your help because some of the people that are about to testify before you, whom I have known well and worked with for years, are in bureaucracies and they have their own problems dealing with all kinds of officials and all kinds of pressures put upon them, and I come before you, a law professor, right, a criminal defense lawyer, somebody that serves as a commissioner, a public official, and I must tell you that I do not owe anybody anything. So I think I can speak pretty directly to some of these priorities. I ask you to query my friends carefully about them and see why they cannot better produce on these things.

So, No. 1 priority. You must have the capacity to type samples in rape cases, in murder cases, and, frankly, burglaries and other cases where you can do it right away, within 7 to 10 days after the crime is committed. And what you must worry about, millions of dollars are being put into reducing backlogs, is that you do not impair the capacities of the lab, indeed you have to get these labs to type the new cases right away. I have seen this before—clean up this backlog of somebody that is sitting in jail for the next 20 years, a convicted offender, it is important to type that sample, that is true, but the person is in prison, but it is more important to make sure that the sample is typed in the case of the victim so that can be put in the database and we can see if it is somebody else.

Let's speak about a case in New York. We had a serial rapist; 17 cases were connected to each other, and it was not immediately apparent to investigators that all 17 cases were related. It turned out that this particular serial rapist usually wore a mask, and so in most of these cases the victim could not make an identification or even give a description for a sketch. In 1 of the 17 cases, and we only knew they were related because we had DNA on unsolved cases right after it was committed, 17 of them, in the 17 case the victim was able to pull the mask off the assailant and give a sketch that could then be distributed to police officers. This was instrumental in leading to this man's capture. So you can see it is a powerful investigative tool.

So, No. 1, you must not under any circumstances impair the ability of these labs, indeed, you need to empower them, they do not have the capacity right now, to do the new cases. That is No. 1.

No. 2, we have to deal with these old unsolved cases, these rape kits before they are thrown away. Incidently, there is legislation being proposed in State after State. There is a simple way to do this to prevent the statute of limitations from running. First of all, you should pass a statute in each State that says, and they are doing it, you can get a John Doe warrant against a DNA profile of an unsolved case where somebody has committed the crime, and that tolls the statute of limitations. So if the statute of limitations is 5 years or 7 years, as long as that John Doe warrant is on file, you can pick that person up and prosecute them later. The model bill which I submitted to you is one that I believe Speaker Sheldon

Silver has proposed in New York because it helps with the backlog issue.

What Speaker Silver proposed is you can get this John Doe warrant and we will extend the statute of limitations a year or two, but we will also give additional money to our laboratories to type these unsolved rape kits before the statute runs. It is a much better idea than just abolishing the statute of limitations, which, frankly, serve good purposes to prevent people from being prosecuted on stale evidence. It should not be infinite. But that is the way to do it. So you have these unsolved rape kits, unsolved homicides before the advent of DNA. We can go back now and get blood stains, hairs, all kinds of evidence, type it and solve unsolved homicides. So that is a key priority.

A third priority ought to be post-conviction DNA testing. Now, as Congresswoman Schakowsky noted, there is this Innocence Protection Act, sponsored by Delahunt and LaHood here in the House, and I think a number of you are sponsors of that, and also in the Senate by Senator Leahy and Gordon Smith. I urge you to get this legislation passed this session. What it is going to do, just one of its provisions, is mandate any State that wants to be part of the DNA data banking system, and every State gets money and every State wants to be, would have to pass a statute that said that an inmate has a right to get post-conviction DNA testing if it would raise a reasonable probability that they did not commit the crime.

Two States had this bill 5 or 6 years ago, New York and Illinois. It is not a coincidence that New York and Illinois have the most post-conviction DNA exonerations. Now we have bills passed, good bills, in California, in Arizona, in Oklahoma. Frankly, there have been some bad bills passed. Florida just passed a bill that was just signed the other week. The bill says, OK, you can get a post-conviction DNA test but you have 2 years to do it. Now I can tell you, because we have been doing these cases, that it takes far longer. If you are an inmate in prison and you do not have any money, you do not have a right to a lawyer, you do not have a lawyer, you have to get transcripts, you have to find the evidence, 75 percent of the time the evidence is lost or destroyed, you have to make a proper presentation in court to get the DNA test under this statute. There have been 10 people exonerated from death row with post-conviction DNA testing. All 10 of them would have been dead under the Florida bill because they could not get the resources to make the application within 2 years.

It is great to pass the Innocence Protection Act, but it is an unfunded mandate. What we have to have is an allocation of resources so that we can get some of these people into court so they can get the DNA testing to prove their innocence. And I want to emphasize that in so many of these cases, once we find the convicted offender, we also find the real perpetrator; hopefully before that perpetrator commits more crimes.

I call to your attention, Mr. Putnam and others, to Florida. We have only had one post-conviction DNA exoneration in Florida. Frank Lee Smith, an inmate on death row, died trying to get the DNA test because under Florida law he could not go into court to get the DNA test. The prosecutor denied the DNA test, refused to give it to him. He died in prison of cancer. The defense lawyers,

we had maintained that there was a serial murder-rapist named Eddie Lee Mosely who committed the crime that Smith had been convicted and put on death row for committing. The day Al Gore conceded, they leaked the fact that our friends at the FBI had done a DNA test, after we had preserved the samples and prevented them from being destroyed, showing that Frank Lee Smith was innocent and Eddie Lee Mosely had, in fact, committed that crime.

Some very wonderful detectives in the Ft. Lauderdale area began developing evidence in another case of a man named Jerry Frank Townsend. He had plead guilty ultimately to rape-murders, five of them, two actually in Florida, to avoid the death penalty. He had been convicted of three, two others in Miami he plead guilty to. All five were committed by Eddie Lee Mosely, the serial offender. Jerry Frank Townsend is a mentally retarded man who confessed to these crimes that he did not commit.

There are others like that. And these are cases where if earlier we had been able to look at these post-conviction cases we could prevent other crimes from being committed, because frequently it is serial offenders. It is a wider set of victims. It is the victims of the crimes themselves and their families, and it is the inmates that are innocent and their families that are victims of all of this.

We cannot have these unfunded mandates. I would suggest, we have a network of law schools now that are voluntarily coming forward, way underfunded—come to our offices sometime, you will see letters piled up to the ceilings that we have not even been able to read—and very small amount of money from the Federal Government to fund projects run by law professors, some of whom were former prosecutors or crime lab people. To try to get into this backlog would be very efficient and cost-effective.

Mr. HORN. Mr. Scheck, am I understanding this correctly that New York has a 30-day waiting period in rape cases?

Mr. SCHECK. A 30-day waiting period?

Mr. HORN. A 30-day waiting period. I am just curious what that means. Is there a 30-day waiting period in rape cases?

Mr. SCHECK. You mean before the testing can be done? I would imagine the turnaround, I am not altogether sure, my colleagues here might be able to be more specific about what it is. We have different labs in the city of New York, we have the State lab, we have them in Suffolk County. I cannot speak, and I would not want to speak too quickly.

Mr. HORN. Well, we will ask them.

Mr. SCHECK. But I know that the turnaround—30 days would be good compared to what is going on in many jurisdictions.

Now there is another thing that I really would ask you to question my colleagues about in law enforcement. I have never understood this, dealing with the issue of the backlog. There are 1 million people it is estimated that are on parole or probation whose samples should be in the databank because they have committed a violent felony, probably a rape or a homicide, but they are out on supervised release, they are on parole or probation. They are part of the backlog. We should be going out and getting their samples first.

I will tell you what happened in the State of New York. Because we have this kind of unique forensic science commission and we

regulate the DNA databank, we said to the State officials, look, we know that you have a few hundred thousand samples that you have got to type of convicted offenders who are in prison, but we want you first to type the people that are on the street because they are the ones that could go out and commit the crimes. So we want the people on probation, the people on parole tested first. Initially, our officials came in and said that is too hard. It is much too hard because we have to go out and find them, we have not trained our people, it is much easier to go into the prisons where they are already there and collect it from them. It is too hard, so we will do those later. We said no, no, no, you have got to do those first.

Now, this NBC case is a good example. Some people were complaining that this man was not captured soon enough. He had been released from jail but he was forced to come in and give a sample because he was on parole. And that is how he was located. It is 1 million people. Those should be the first people tested. Yet, when my colleagues from NIJ and on our national DNA commission sought to go and—I wanted them to say, listen, if you are going to give money to the States, there ought to be conditional grants. They ought to get more money if they say they are going to cleanup the backlog by typing the old samples, the people on the street, first rather than people in prison. Well, they say they would rather not have the money than do that. Look, I am just a law professor. I do not understand it. It makes no sense. It is completely backward. Maybe you can figure it out for me. But that is something that should be done.

Obviously, we have to do the convicted offender backlog. There are about 400,000 of them now it is estimated. What we did in New York is that when they first come in we type them, right after they are convicted, but everybody that is about to leave is typed before they get on the street. And that makes sense. If you are to do it, you should do it intelligently. The last people to be typed, frankly, are the ones that are doing 20 to 40 years. First get the people on the street.

Another thing, and this would be my final point to you, one of the things that I know some of my friends at the FBI want to testify about, and I know you noted it in opening remarks, there is a new kind of DNA test called mitochondrial DNA testing. This is an assay that allows DNA to be taken directly from the shaft of the hair. With the other kinds of DNA testing that we use for the databank, the short tan repeat [STR], you would need a fleshy root of the hair.

What we are finding is that microscopic hair comparisons is, in my judgment, junk forensic science. Repeatedly, it can be shown that this kind of comparison between an unknown hair and known hairs is flawed and wrong. Maybe my friends from the FBI will not like that much. But it has been flawed, frankly, on both inclusions and on exclusions that we can show using this mitochondrial DNA testing. But what they will tell you I am sure is that even when they have a good hair person from the FBI, Agent Dietrick, when he looks at an old case where somebody was convicted on microscopic hair comparison testimony and Agent Dietrick says, "OK, I agree with the examiner, this is a match." when they finally go to

do mitochondrial testing, 5 to 10 percent of the time the mito shows that the inclusion is inaccurate. We now have the capacity to look at the these hair cases and what we have found is that when we calculated it for 74 of the post-conviction exonerations—since our book "Actual Innocence" came out in February there is an exoneration every 18 days, so, you know, how to keep up with it—I have not calculated all the hairs, but out of the 74, 33 had microscopic hair comparisons.

Now this is going to be a big problem and you have to find more money for mito testing, whether it is increasing the capacity of the FBI, or outsourcing to other private laboratories. Right now in Oklahoma there is a scandal. There is a chemist named Joyce Gilchrest who was known for being a forensic scientist of questionable repute, even by her peers. The FBI has gone in and looked at eight of her cases and in five instances were very troubled by the results. Now 1,400 of her cases in Oklahoma have been isolated and there will be certainly hundreds that will have to be reviewed. The State of Oklahoma alone, just for Gilchrest cases, has allocated $700,000 to do DNA testing on these old cases to see if we can correct injustices.

I am telling you right now that even though more attention should have been paid to Joyce Gilchrest as a forensic scientist, this same kind of situation, the problems, the limits of microscopic hair comparison in old cases, it is in every State. It is in every State. And it is a comparatively more expensive test because it can cost presently $1,000, $2,000 per hair. There may be ways that our friends will suggest of funding some research to do some assays that are quicker screening procedures that will bring down the cost. But this is another priority that you are going to have to look at.

So in closing, what I really urge this committee to do is look for ways to prioritize. We are not going to have as much money as is necessary, frankly, to do everything. But if you can do the new cases; you certainly can do the cases of these unsolved rape kits, do those right away, that is basic justice; if you can do the basic justice of allowing these people who are rotting away in jail or on death row to get their chance to prove their innocence, which will also find the real perpetrator in many instances before they commit more crimes; if you go and get the old samples, the people that are on the street first; if you do all those things or find ways to stimulate our friends here to do it, it would be a tremendous service and really in the name of efficiency, which, after all, I guess this subcommittee is all about. Thank you.

[The prepared statement of Mr. Scheck follows:]

COMMITTEE ON GOVERNMENT REFORMS
SUBCOMMITTEE ON GOVERNMENT EFFICIENCY, FINANCIAL MANAGEMENT, AND INTERGOVERNMENTAL RELATIONS

HOW EFFECTIVELY ARE STATE AND FEDERAL AGENCIES WORKING TOGETHER TO IMPLEMENT THE USE OF NEWLY DEVELOPED DNA TECHNOLOGIES?

STATEMENT OF BARRY C. SCHECK

RELEVANT BIOGRAPHY

Barry Scheck has been a Professor of Law at the Benjamin N. Cardozo School of Law in New York City for twenty-three years where he serves as Co-Director of the Innocence Project, a clinical program that uses post-conviction DNA testing to exonerate wrongly convicted inmates. He recently co-authored *Actual Innocence* Peter Neufeld and Jim Dwyer, a book that studies the causes and remedies for wrongful convictions (mistaken identification, false confessions, bad lawyering, junk or fraudulent forensic science, police or prosecutorial misconduct) using the now eighty-eight post-conviction DNA exonerations in the United States as a database for the analysis. There are now twenty-five law schools, as well as some graduate schools in the journalism and the social sciences, that have innocence projects and are participating in a National Innocence Network. The purpose of this Network is not just to take on cases to exonerate the wrongly conviction, with or without the help of DNA evidence, but to spur a vigorous effort to understand and attack the causes of wrongful convictions in collaboration with scholars from many disciplines as well as actors from all parts of the criminal justice system.

Professor Scheck has served for six years as a Commissioner on New York's Forensic Science Review Board, a unique regulatory body that governs all crime laboratories in the state including New York's DNA databank system. As a Commissioner on the National Institute for

Justice's Commission on the Future of DNA Evidence, Professor Scheck not only focused on the Post-Conviction and Legal Issues reports, but concentrated his efforts on the problem of getting old, unsolved crimes (particularly rapes and homicides) tested expeditiously. He has also spent considerable time litigating DNA cases (criminal and civil, usually for the defense but sometimes consulting with prosecutors and detectives) as well as training detectives, crime scene analysts, and laboratory technicians on methods for expeditiously and accurately collecting and processing evidence from crime scenes. He has written extensively on these issues and related privacy and constitutional concerns that have arisen around the growth of DNA databanks.

A STRUGGLE TO CORRECT PRIORITIES:

HOW TO EXONERATE THE INNOCENT, IDENTIFY THE GUILTY EXPEDITIOUSLY, SOLVE OLD "NO SUSPECT" CASES, PROMOTE USEFUL RESEARCH, AND AT THE SAME TIME AVOID SWEEPING POLICIES THAT WILL UNNECESSARILY OFFEND CITIZENS OR INFRINGE ON THEIR CIVIL LIBERTIES.

With few exceptions, at either the state or federal level, funding for DNA typing and databanking has been woefully insufficient and misdirected because it ignores priorities that are not only cost-effective but also serve as strategies that maximize our chances of exonerating the innocent and apprehending the guilty.

I. ***Capacity to Solve New Crimes***

Every time an innocent person is arrested, indicted, incarcerated before trial, tried, convicted, sentenced to a long prison term or, heaven forbid, subjected to the death penalty, the real perpetrator who remains at large is free to commit more crimes. DNA technology has the potential in a limited

number of cases (maybe 20% of serious felonies) to provide definitive evidence about who really committed the crime.[1] The sooner DNA tested is conducted, the better for all concerned.

The efficient administration of DNA testing as an investigative tool hinges, in the first instance, on typing evidence from new crimes before they are solved and databanking the DNA profiles. Linking unsolved crimes to each other from different jurisdictions, or within a jurisdiction provides clues that are solid and often counterintuitive. In the United Kingdom, which is far ahead of us in this process, the aggressive training of police officers to identify DNA evidence at the crime scene and type unsolved crimes (certainly all rapes, murders, and burglaries) within seven to ten days after the commission of the crime has been the key to their success in getting databank "hits." Virtually no crime laboratory in the United States has that capacity. Getting laboratories to reach this capacity in dealing with fieldwork -- new cases -- should not be impaired by efforts to get at the backlog of convicted offenders. Unless you have the unsolved crimes in the databank, what is the point of spending a lot of money on a convicted offender backlog, especially typing inmates who are serving lengthy prison terms? This simple, common sense point is not reflected in our funding priorities. In the 2000-2001 fiscal year, NIJ allocated funding for "backlog" reduction to 21 states (approximately $14.4 million) but mandated that only 1% of the cases typed by unsolved cases as opposed to convicted offenders.[2] The capacity to type new crime evidence cannot be impaired while efforts are made to address the DNA backlog problem.

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[1]Indeed, in seventeen out of the eighty-eight post-convicted exonerations through DNA testing, the real perpetrator was brought to justice through use of the DNA profile obtained in post-conviction testing.

[2] This is not intended as a criticism of NIJ staff; the priorities more reflected, I think, the demands of the public laboratories.

Ultimately, the processing of new evidence for its DNA profile at the local level effects the way in which is crime is addressed at all levels. The capacity to solve new crimes is not specific to police precincts and prosecutors. Rather, such information augments the national capacity to identify perpetrators of current, past and future crimes. The capacity to solve new crimes confers a simultaneous capacity to address unsolved crimes, offering victims and their families a higher potential for closure and a heightened faith in criminal justice and law enforcement throughout the United States.

II. ***The Capacity To Test Old Unsolved Crimes***

The failure to type old, unsolved cases is a national scandal, especially unsolved rape kits which are literally being thrown away by the thousands. Frankly, if crime victims generally were aware of this situation they would be banging on the doors of crime laboratories, district attorney's offices, and courthouses.

A survey conducted by the Police Executive Research Forum (PERF) and researchers at Eastern Kentucky University concluded that at least 150,000 rape kits have not been DNA typed in cases where the police have no suspect. This survey was discussed at length in the September 26, 1999 proceedings of the National Commission on the Future of DNA Evidence created by the U.S. Department of Justice (attached as Appendix I). The conclusion of the discussion, acknowledged by the study's authors, was that the 150,000 figure is extremely underestimated.

I have first hand experience with the situation in New York City. Three years ago, as a Commissioner of Forensic Science, I learned that 25,000 untyped rape kits existed in the New York City Medical Examiner's office and were about to be thrown away as the five year statute of limitations ran. When I brought this to the attention of then Police Commissioner Howard Safir, he immediately took steps to deal with it. He was able to outsource to private laboratories,

through a bidding process, only 8,000 of these kits. The problem was not just lack of capacity in the New York State and city laboratories, but lack of capacity at the private laboratories. It goes without saying that typing of these rape kits has led to the apprehension of serial rapists before they commit more crimes.[3] To my knowledge no other jurisdiction has attempted to attack the backlog of old, unsolved rape cases in such great numbers and even this effort has not, to say the least, proceeded as quickly as desired. More limited but strategic typing of old rape and/or homicide cases in Milwaukee, San Diego, Oakland and other jurisdictions, initiated by prosecutors and police officers who know the investigatory power of DNA technology, have led to spectacular results. But, unfortunately, these law enforcement officials are fighting an uphill battle to get resources. Even more disturbing, the PERF-Eastern Kentucky University survey showed that many departments do not even consider sending their evidence from nonsuspect cases to be typed.

To put it quite bluntly, it is more important to do typing in unsolved rapes and homicides than to type convicted offenders who will be spending the next twenty years in prison. It is good law enforcement, it is cost effective, and most importantly, it is a matter of basic fairness and compassion for the victims of these crimes and their families.

Many states have begun extending or, in some instances, abolishing statutes of limitations to allow for the possibility of typing old cases. Unless one is careful, these efforts can be counterproductive because statutes of limitations do serve an important purpose in preventing unfair prosecutions based on stale evidence (imagine cases where DNA is not dispositive because

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[3]For example, typing of 17 unsolved rape kits revealed the existence of a serial rapist who would invariably wear a mask and commit offenses in different boroughs. In one of his attacks, however, the victim was able to pull the mask off his face and provide a sketch to detectives that was helpful in the offender's ultimate apprehension.

the defense is consent but the case is being tried a decade or more after the incident) as well as relieving police and prosecutors from demands to pursue very old cases at the expense of new ones they can more efficiently solve. There is, however, a very good, sensible way to accommodate all these concerns – passing statutes that permit the filing of John Doe warrants against DNA profiles which will toll statutes of limitations. This approach was pioneered by Milwaukee prosecutor Norman Gahn and has been followed in many jurisdictions.[4] The best bill that codifies this practice and, most importantly, provides for extra funding so that DNA laboratories can do the typing for the John Doe warrants before the statute of limitations has run, was proposed last year by New York's Assembly Speaker Sheldon Silver (See Appendix II for the full text of the bill).

III. The Capacity To Do Post-Conviction Testing

Perhaps the most dramatic use of DNA typing has been in the exoneration of individuals who are actually innocent of a crime for which they have been incarcerated and in some cases sentenced to death. Appendix III provides a list of the eighty-eight wrongfully convicted men in

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[4]In December 2001, Gahn obtained a John Doe warrant in order to keep a 1994 unsolved rape case alive beyond the statute of limitations date. Subsequently, the John Doe DNA profile was linked to an incarcerated offender, Bobby Richard Dabney Jr. In March of this year, Dabney was charged with the 1994 rape. The Dabney case was the twelfth John Doe warrant issued in Milwaukee. Similarly, Milwaukee Police Detective Lori Gaglione, through DNA typing of a 1992 unsolved homicide was able to issue a warrant for Leonardo Pimentel Sanchez, a convicted rapist whose sample was in an offender databank based on a 1989 rape. Sanchez had been released and deported from the United States to Mexico eight separate times. If the unsolved case had been typed earlier or generally available, he could have been apprehended. See, Doege, David. "DNA Brings Charge in 1994 Rape; Genetic Profile Warrant Issued Before Match was Found." Milwaukee Journal Sentinel, March 15, 2001. In Austin, Texas, four days before the statute of limitations was set to expire, a grand jury indicted "John Doe" for a 1995 rape solely based on the unknown suspect's DNA profile so as to continue and hopefully conclude the investigation in about 100 unsolved rape cases between 1995 and 1998. Villa, Judi. "DNA Puts Heat on Sex-Crime Cases Gone Cold." The Arizona Republic, December 18. 2000.

the United States exonerated to date through post-conviction DNA testing alphabetically and chronologically. There are an additional seven post-conviction exonerations in Canada.

Post-conviction testing serves a multitude of important law enforcement purposes beyond simply the most fundamental and obvious reason to do it -- correct injustices. Indeed, the most important lessons DNA testing can offer the criminal justice system lie in a careful analysis of these post-conviction cases to find the causes and remedies for wrongful convictions which can be applied in the vast majority of criminal cases where there is no DNA evidence to test. Peter Neufeld, Jim Dwyer and I have made an effort to review these issues in *Actual Innocence*. The problems associated with mistaken eyewitness identification, false confessions, junk forensic science, inadequate defense counsel, police and prosecutorial misconduct, and informer testimony are serious but solvable. These solutions are mainstream proposals that Republicans and Democrats, conservatives and liberals, prosecutors and defense lawyers can all embrace. As George Will noted in his generously supportive review of *Actual Innocence*, conservatives in particular should keep in mind that the criminal justice system is "just another government program, so skepticism is in order."

For many years only New York and Illinois had post-conviction DNA statutes that permitted inmates to get testing at state expense if the results would raise a reasonable probability they were wrongfully convicted. So it is no surprise that for years New York and Illinois had the greatest number of post-conviction exonerations. Many states have limited relief to inmates on death row only, denying the possibility of relief to innocent people who could be imprisoned for decades on non-capital charges. Other states has created very limited windows of opportunity for the post-conviction DNA testing. For example, Florida just passed a post-conviction statute that gives inmates only two years to make their applications (Appendix IV contains the full text of the

statute). Quite simply, had a two year statute of limitations existed in the ten cases of innocent men freed from death row by post-conviction DNA testing, all ten would have been executed.[5] I can assure you, after a decade of involvement in these cases, such a statute is worse than having a statute at all. In order to meet the standards necessary to get a post-conviction DNA test, inmates must be able to find the transcripts of their trials, police reports, lab reports, and other critical case materials. For indigents who are not entitled to counsel this is virtually an impossible task in old cases. The vast majority of our Innocent Project cases take more than two years to perfect. Indeed, 75% of the time critical biological evidence is reported lost or destroyed, although it takes years to determine if that's really the case. In short, post-conviction DNA applications are very labor intensive enterprises. It is cruel and self-defeating to pass post-conviction DNA statutes that set up impossible windows of opportunity or, even if there are no time limits, exist as unfunded mandates, giving the indigent no realistic hope of being able to find evidence or prove innocence. (Appendix V contains a personal account of the difficulty encountered by the innocent in obtaining post-conviction DNA testing: the testimony of Dennis Fritz before the Senate Judiciary Committee).

There is a cost-effective way to address this problem. There is now an Innocence Network of "innocence projects" at twenty-five law schools in the United States. These projects work with public defender offices, volunteer lawyer organizations, volunteer investigators, district attorney's offices and journalism graduate schools in an effort to exonerate the wrongfully convicted through post-conviction DNA testing. These Innocence Projects are run by professors

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[5]Their names and the states in which they were wrongfully convicted are as follows: Kirk Bloodsworth, MD; Rolando Cruz, IL; Alejandro Hernandez, IL; Verneal Jimmerson, IL; Ronald Jones, IL; Robert Miller, OK; Dennis Williams, IL; Ron Williamson, OK; Earl Washington, VA; and Frank Lee Smith, FL.

that were prosecutors, public defenders, judges, and police officers. They are not only interested in correcting injustices but learning lessons, doing scholarship, and making practical changes to improve the criminal justice system. Providing funds for these institutions to perfect post-conviction DNA applications is cost effective (idealistic law students cost nothing and are very enthusiastic about this work) and greatly benefits the system as a whole. The need for funding the Innocence Network will dramatically increase if the Innocence Protection Act passes in this session since that legislation would require all states who want to receive federal funding to participate in the national DNA databanking system (and all states do) would have to pass post-

conviction DNA testing statutes. (A list of participants in Innocence Projects may be found as Appendix VI).

IV. Capacity to Type "Owed" Samples from Released Offenders

According to the FBI the current statistic for released offenders who have not submitted a sample to be processed for its DNA profile, so called "owed" samples, is estimated at 1 million. This is another overlooked, scandalous situation. Think about it: these "owed" samples predominantly involve individuals convicted of murders, rapes, and other serious felonies who are on the street. The "owed" samples are the first convicted offender samples that should typed because these individuals are at large and could commit crimes against citizens who are not in prison, as opposed to untyped offender samples from individuals who are still incarcerated. This is common sense, yet no state other than New York, to the best of my knowledge, has endeavored to type these "owed" samples first. The principal reason this happened in New York is that our Forensic Science Review Board ordered it. Admittedly, for law enforcement officials this is a difficult course. It is easier to collect samples from incarcerated inmates. But just because it is easy, and law enforcement officials are under pressure to reduce their "backlog," that doesn't make a policy that types the incarcerated inmate first, and ignores the offender on street, sensible. While I sympathize with the resistance Justice Department officials encountered from state and local authorities to typing the "owed" samples first, I think it was a serious error not to require it, or at least offer very substantial incentives to do so. This Committee should urge action on this issue now.

V. Capacity to Type the Backlog of Convicted Offender Samples

There are now about 400,000 untyped convicted offender samples of inmates who are incarcerated. Of course this backlog should be cleared, but not before the "owed" samples. An efficient way to approach the problem is to set up a system where a state types all newly convicted

offender in a systematic way and all offenders about to be released. Get to the long term prisoners later.

VI. Capacity to Do Mitochondrial DNA Testing

Finally, the Committee should be aware of a comparatively new forensic DNA typing technique, mitochondrial testing, which can extract DNA directly from the shaft of a hair. This important technique is quickly demonstrating that results from microscopic hair comparisons are unreliable. The FBI itself estimates that 5 to 10% of its own microscopic "inclusions" are proven wrong by mitochondrial testing. The error rate for past cases at the state and local level is undoubtably much higher. In the state of Oklahoma alone, out of the 1,400 cases handled by Oklahoma City Analyst Joyce Gilchrist, there will undoubtably hundreds of cases requiring mitochondrial testing of hair samples. All across the country there will be hundreds of post-conviction cases, as well as hundreds unsolved cases, which require this form of comparatively expensive testing (as much as $2,000 a hair at some laboratories). The FBI and private laboratories do not have anything near the proper capacity to deal with these cases. It is an important funding priority.

Mr. HORN. We thank you.

Do any of my colleagues have questions at this time? Does the gentleman from Florida have any questions?

Mr. PUTNAM. Thank you, Mr. Chairman. Mr. Scheck, you summarized it there at the end and if you would please restate your prioritization, your hierarchy of testing, begin with death row, next hit those people who are on the streets with parole/probation. Are those your top two?

Mr. SCHECK. I would hesitate. No. 1, and I really want to emphasize this, crimes that are now being committed. A victim of a sexual assault, there is no excuse for not typing that case right away to see whether or not it matches other unsolved cases that lead to the investigation and apprehension of that individual. We must make sure that the labs have the capacity to do that. It would be a terrible mistake, and this is my fear, that in the name of cleaning up backlog the labs do not have that capacity. So we have to make sure that they have that capacity, and I assure you they do not have it now in various different States. Some States do. Florida is pretty good, Virginia has more capacity. But even in Virginia, Profoare complains all the time that he has these problems with the new cases. So I would say you have to make sure that is done first.

I would say the old unsolved cases, and I include within that the post-conviction cases, because, in a sense, if somebody is saying I am innocent, please test my case, that is one that is in question if a test could make a difference in the case and no DNA was ever done. So there is that class of cases. And these rape kits. The old unsolved cases, there is no excuse for not doing those right away.

Then, if you are going into the backlog issue, the first backlogs that I would do are the people that are on parole or probation. It is more important to get them, they are on the street. These individuals might commit new crimes. The statutes say their samples should be in the databank. The States are going to say to you, "Administratively, it is just too hard to find my parolee, to find my probationer and bring them back and have them just take a swab, a buckle swab, roll it in the mouth, if that is the method of collection, and give it to the lab to do DNA typing." I find that ridiculous. That is what my very well-intentioned colleagues are being told every time that they approach this State authority. Some people are even saying to them, "We will not take your money if that is the condition. It is too hard."

Mr. PUTNAM. Let me change gears with you. What would you say to those who are concerned about the privacy issues? How would you deal with that aspect of this?

Mr. SCHECK. Well, privacy issues is a coming concern. Right now, as far as the Federal system, the CODIS system is concerned and the DNA Identification Act of 1992—I know because I testified about it—that we had privacy protections built-in. That is to say, you can only use the DNA profiles for identifying missing persons, identifying unknown crime samples, and matching convicted offenders.

Where the privacy issue is coming to bear now is that as State and local authorities develop their own capacity to do DNA testing, they are creating parallel databanks; that is to say, you might call

it a "Usual Suspects Data bank." I think everyone in our DNA commission was quite concerned that when Cecelia Krause, a wonderful examiner from Florida, put up an anonymous note on a list server asking crime lab examiners, "When you are creating your own computerized databank that is outside of the CODIS system, what kind of samples do you put in there?" Some of them actually e-mailed back "We put in the samples from rape victims, or elimination samples, or suspect samples." So, think about it. Somebody is the victim of a crime, this sample is taken and put into a computerized databank because the police think, well, maybe this victim is a drug offender, or maybe it is suspicious, or let's just keep it around.

I think most sensible crime-lab people are not engaged in this practice, but some were. That whole development of State and local databanks is unregulated for the most part. There are no privacy restrictions built into it. I think that we are heading for some real trouble there and that States better get their act together and regulate that and put very, very strict privacy restrictions on it. I am a very big proponent of DNA testing and DNA databank conducted correctly. But I think there is a healthy skepticism out there that if the Government has got your DNA, God knows what they are going to do with it. And I do not think that sometimes my friends in law enforcement are acting in their own enlightened self-interest. They should put more privacy protections on themselves so that we do not have some kind of civil liberties disaster where you get a lot of opposition to this because people are fearful that insufficient privacy protections are in place.

Mr. PUTNAM. Unlike a finger print, DNA is the key to the kingdom. It is an infinitesimally more informative piece of information about any human being. So, to the extent that as capacity grows and technology catches up with the backlog and we begin to expand these to other crimes, where down the hierarchy from rapists and murders do you take these DNA samples? Do you take them from forcible entry suspects and convicted felons, DUI offenders, juvenile offenders. Where in the hierarchy do you stop taking DNA samples?

Mr. SCHECK. Well, I think that burglaries, I have to say, are a very important area to be doing DNA typing. In truth, and I know some of the subsequent witnesses are going to talk about it, we really have to train law enforcement on how to collect the evidence correctly and make sure they do not contaminate it and get confounding results. But burglaries are a very important area.

In the United Kingdom, they really specialize in typing in burglaries. So what you will find is that a perpetrator might leave blood at the point of forced entry, might drink from this cup in the course of the burglary and leave the cup or the beer bottle there and you can swab that, get the DNA pattern, and you can find such offenders. They do link up very often with even more serious offenses. So burglary is something to look at.

The more you expand the number of categories that are included the bigger the backlogs get. Everybody is going to tell you that. States are moving, at first they were pretty much just limiting it to sexual assaults and murder, now, quite rationally, they are expanding it to even as far as all felonies. But, interestingly enough,

our national DNA commission recommended to the Attorney General that States not go to the point where they collect DNA from people at arrest. I have concerns about it for civil liberties reasons, some of my colleagues share them, some of them were less concerned about the civil liberties reason. But for practical purposes, everyone on our commission agreed that it would be a nightmare.

The States absolutely cannot cope with being forced to type everybody at arrest, because right now they have a million old samples of people who have committed murders and rapes who are on the streets that they are not typing, they say we cannot do it, they are not able to type a murder or rape within 7 to 10 days after the crime is committed, they have other backlogs, they cannot do post-conviction DNA testing in great numbers. If you do all of that, you spend a few billion solving that problem, then come back and talk to me about arrests and we can discuss that issue.

A lot of this is really common sense. And if you can get the priorities right, you are not only going to protect the innocent, but you are really going to protect victims in a profound way. It is common sense. It is good law enforcement. It is cost-effective. The challenge to the committee is to get the bureaucracies to respond to the priorities more sensitively.

Mr. PUTNAM. Thank you. My time has expired.

Mr. HORN. Mrs. Maloney.

Mrs. MALONEY. Mr. Chairman, I do have a couple of questions for Mr. Scheck. I particularly wanted to welcome him from the great State of New York. And I wanted to ask, from your experience and your work, Mr. Scheck, do you think that there is a need for a standardized victim physical evidence recovery kit? Apparently some hospitals do not have them and there is not a standard. Do you believe we need a Federal standard?

Mr. SCHECK. There is no question I think that we do need a standard. I know that Dr. Henry Lee and Robert Ganzlen have issued a very interesting report to NIJ about these rape kits, because the rape kit is the beginning of everything. If you have a sensitive and intelligent collection of the evidence, just think about a bite mark—I will give you a case of a client we have in New York. A man named O'Donnell was convicted and sentenced to prison in a sexual assault case. But by the intelligent collection of the samples, they were able to get saliva from the bite-mark and do fingernail scrapings from the victim when she scratched and struggled with her assailant. DNA typing of the saliva from the bite-mark and the fingernail scrapings matched the real assailant whose profile is not in the databank and exonerated Mr. O'Donnell, who I think did about 7 or 8 years. But it was only because of the excellent collection in the rape kit and the way that was handled that we were able to solve the crime. So it all begins with the rape kit and that is absolutely critical, Congresswoman.

Mrs. MALONEY. You mentioned that we have limited resources, and we do. Where should we put our limited resources; what is the top priority?

Mr. SCHECK. Again, the ones I mentioned, and certainly the rape kit is certainly one of them. I do not know of one hospital or one law enforcement agency today that should not be using it in some fashion or form. It would be really intelligent and cost-effective to

make sure that everybody was using a similar one so that we could adequately preserve and collect the evidence.

Mrs. MALONEY. If you could make one legislative change, what would it be?

Mr. SCHECK. Boy, that is a tough one. This would be one of them. And certainly everything concerning the capacity to type the unsolved rape kits and the post-conviction ones. I would consider those unsolved very high on the list.

Mrs. MALONEY. Thank you. I have further questions, but I would like to hear from the next witnesses. Thank you.

Mr. HORN. Both the majority and the minority staff can pursue questions with all of this and put it in the record at this point. Without objection, so ordered.

We are going to have to move on now. You are certainly welcome to stay, Mr. Scheck, if you would.

We have eight witnesses on Panel II. Mr. Adams, Mr. Boyd, Mr. Asplen, Mr. Lawlor, Mr. Coonrod, Dr. Downs, Mr. Conley, and Mr. Lothridge, if you would please come forward.

[Witnesses sworn.]

Mr. HORN. The clerk will note that all of them have affirmed.

We are going to start with Mr. Dwight Adams. He is Deputy Assistant Director of the Laboratory Division of the Federal Bureau of Investigation. Mr. Adams and others have given us really marvelous documents on this. Those are all automatically in. And once I call on you, the full text is in and we would like you to sort of summarize it and give us the high points.

Mr. Adams, welcome.

STATEMENTS OF DWIGHT E. ADAMS, DEPUTY ASSISTANT DIRECTOR, LABORATORY DIVISION, FEDERAL BUREAU OF INVESTIGATION; ACCOMPANIED BY DAVID BOYD, DEPUTY DIRECTOR, NATIONAL INSTITUTE OF JUSTICE; CHRISTOPHER ASPLEN, EXECUTIVE DIRECTOR, NATIONAL COMMISSION ON THE FUTURE OF DNA EVIDENCE; MICHAEL LAWLOR, STATE REPRESENTATIVE, CONNECTICUT GENERAL ASSEMBLY, ON BEHALF OF THE NATIONAL CONFERENCE OF STATE LEGISLATORS; KEITH COONROD, CHAIR, CONSORTIUM OF FORENSIC SCIENCE ORGANIZATIONS, NEW YORK STATE POLICE FORENSIC INVESTIGATION CENTER; JAMIE DOWNS, DIRECTOR, CHIEF MEDICAL EXAMINER, ALABAMA DEPARTMENT OF FORENSIC SCIENCE; ROBERT S. CONLEY, CHAIRMAN, AMERICAN SOCIETY OF CRIME LABORATORY DIRECTORS/LABORATORY ACCREDITATION BOARD AND DIRECTOR OF THE INDIANA STATE POLICE LABORATORY SYSTEM; KEVIN L. LOTHRIDGE, DEPUTY DIRECTOR, DIRECTOR OF STRATEGIC DEVELOPMENT, NATIONAL FORENSIC SCIENCE TECHNOLOGY CENTER

Mr. ADAMS. Thank you, Mr. Chairman, members of the subcommittee, for the opportunity to speak to you about a few of the FBI's experiences in working with local, State, and Federal agencies to implement forensic DNA analysis and our Combined DNA Index System [CODIS].

CODIS began in 1990 as a pilot project involving 12 State and local forensic laboratories. During the initial testing phases, the

comments and observations of those original State and local laboratories helped to steer the course for CODIS today. Before each upgrade is implemented in CODIS, those State and local laboratories have an opportunity to serve as beta test sites and continue to assist us today in ensuring that the software that we implement is responsive to their needs as users. Without these collaborative efforts by these State and local laboratories, CODIS would not achieve the success that you read about in the papers every day.

CODIS is currently installed in 137 laboratories in 47 States, and another 24 laboratories in 12 countries internationally. The CODIS software enables State and local forensic laboratories to exchange and compare DNA profiles electronically, thereby linking serial violent crimes to each other and identifying suspects by matching DNA from crime scenes to convicted offenders. The FBI laboratory continues to provide CODIS software, installation, training, and user support at no charge to Federal, State, and local laboratories.

The concept behind CODIS is to create a database of States' convicted offender profiles and use it to solve violent crimes for which there are no suspects. As you know, all 50 States have DNA database laws that cover a wide variety of criminal offenses. All States collect DNA samples from offenders convicted of sex offenses.

The overwhelming majority of States have expanded beyond their scope of the original laws which covered just sex offenses. In fact, our research indicates that now only three States cover only sex offenders. I have attached a chart of qualifying offenses by States to my written statement. Of particular note is the fact that 10 States are now authorized to collect from all of their felony offenders, and it looks like another State, Texas, will soon be added to that group. We believe that eventually all States will be collecting from all convicted felony offenders. So far this year proposals to expand the qualifying offenses has been introduced in 30 State legislatures, with well over half of these proposals to include felony offenders.

State legislation serves as another example of how Federal and State agencies have worked together to implement DNA database programs. Beginning with the issuance of legislative guidelines in 1991, the FBI laboratory has provided technical assistance in the form of briefings on CODIS, review of draft legislation, and testimony before legislative committees to assist States in enacting DNA database legislation.

In order to plan for CODIS in the future, the FBI has observed the implementation of these database programs and has learned from each of their experiences. We realize from the steady expansion of State laws that CODIS of the future will need to quickly and efficiently search millions of DNA profiles and provide a platform that is less costly and more easily maintained by both those participating States as well as the FBI. We have been working toward those CODIS enhancements. For example, the University of Tennessee has been developing a matching algorithm that can search millions of DNA profiles in minutes. We could not have reached that point without the assistance of the Florida Department of Law Enforcement because it is they who test that new search engine for us. With recognition of DNA as a powerful identi-

fication tool, as evidenced by its use in both solving and reviewing cases from past decades, DNA databases are becoming an integral component of law enforcement's arsenal.

One final example of cooperation among local, State, and Federal laboratories, before I conclude, as well as a suggestion for an area of future collaboration. As the PCR-based technologies were being introduced into forensic laboratories across the country, the FBI realized that standards would need to be established for this new technology, as had been done previously for the earlier technology. A criteria that is crucial to the proper use of DNA database implementation is the use of consistent technologies. We knew that we would have to establish core loci for the new technology in order for the national DNA database to be successful.

The FBI convened a group of 21 Federal, State, and local authorities, as well as international forensic laboratories to validate what are known as the STR loci for use in CODIS. The FBI provided the samples and kits and reagents to all of these participating laboratories in order for them to validate the use of STR analysis. After many months of testing, the participating laboratories recommended 13 STR loci for use in CODIS. This recommendation was adopted by the FBI and is known as the 13 Core CODIS Loci.

A future and yet untapped area that would significantly benefit from collaboration between local, State, and Federal laboratories was mentioned earlier by Mr. Scheck, that involves mitochondrial DNA technology. Certain tissues like hair, bones, and teeth have little or no nuclear DNA but can often be successfully typed using mitochondrial DNA technologies. Biological evidence recovered from missing persons is often in advanced stages of decomposition with little or no nuclear DNA. But mitochondrial DNA can get results.

After many years of research and validation, the FBI laboratory implemented testing using mitochondrial DNA in June 1996. To date, we have completed nearly 700 cases. As its success and admissibility in the courts has grown, demands for its use have also grown. But those demands exceed the FBI laboratory's current or likely future capabilities. Having anticipated the need for other forensic laboratories to develop their own mitochondrial DNA capabilities, we began a training program in 1998 whereby we were training State and local laboratories to use this technology.

As you know, CODIS includes a missing persons index which can match the DNA profiles using mitochondrial DNA results. This index, however, contains very little DNA data because the FBI laboratory remains the only public crime laboratory conducting mitochondrial testing. This is an area ripe for collaboration between Federal, State, and local laboratories. One solution might be a nationwide network of six to eight State and local forensic laboratories that could provide mitochondrial analysis to the criminal justice agencies across the country. The FBI laboratory could provide administration for the network, train the personnel, and ensure audit adherences to the quality assurance standards. The FBI is committed to support the CODIS program and to continue these beneficial collaborations with Federal, State, and local forensic laboratories in implementing DNA technologies.

One last comment. You heard the very poignant testimony of Mrs. Smith this morning talking about how the use of DNA and the use of CODIS has brought her life back to her once again. That has happened countless thousands of times across the Nation. But I am here to tell you that there are also thousands and thousands of victims whose crimes have not been solved, but they have hope, they have hope because this technology is out there, it is being used, but it could be used more successfully. Thank you.

[The prepared statement of Mr. Adams follows:]

June 12, 2001

Statement for the Record of
Dwight E. Adams, Deputy Assistant Director
Laboratory Division
Federal Bureau of Investigation

on
The FBI's DNA Program

Before the House Committee on Government Reform
Subcommittee on Government Efficiency, Financial Management
and Intergovernmental Relations
Washington, D.C.

Mr. Chairman, Members of the Subcommittee, I would like to thank the members of the Subcommittee for inviting the FBI to provide an update on our activities relating to forensic DNA analysis specifically with respect to the Combined DNA Index System or CODIS, our National DNA database and our efforts to provide this technology and assistance to state and local forensic laboratories.

The importance of collaboration between Federal, state and local forensic laboratories is illustrated by that first group of Federal, state and local forensic scientists that were convened by the FBI Laboratory in the 1980's to establish guidelines for the use of forensic DNA analysis in laboratories. This group, the Technical Working Group on DNA Analysis Methods or TWGDAM (now known as the Scientific Working Group on DNA Analysis Methods or SWGDAM), not only developed the guidelines which formed the basis for our national quality assurance standards but they also proposed the creation of a national DNA database for the storage and exchange of DNA profiles developed from crime scenes. This proposal formed the genesis of the development of our CODIS program - software that enables Federal, state and local laboratories to store and compare DNA profiles electronically and thereby link serial crimes to each other and identify suspects by matching DNA from crime scenes to convicted offenders. The FBI Laboratory provides this CODIS software, installation, training and user support to other Federal, state and local forensic laboratories at no charge. Additionally, the FBI continues to sponsor semi-annual meetings of SWGDAM for over fifty Federal, state and local forensic scientists.

How does CODIS work? For example, a sexual assault is committed and an evidence kit is collected from the victim. A DNA profile of the perpetrator is developed from the sexual assault evidence kit. If there is no suspect in the case or if the suspect's DNA profile does not match that of the evidence, the laboratory will search the DNA profile against the convicted

offender index. If there is a match in the convicted offender index, the laboratory will obtain the identity of the suspected perpetrator. If there is no match in the convicted offender index, the DNA profile is searched in the forensic or crime scene index. If there is a match in the forensic index, the laboratory has linked two or more crimes together and the law enforcement agencies involved in the cases are able to pool the information obtained on each of the cases.

One of the underlying concepts behind CODIS is to create a database of a state's convicted offender profiles and use it to solve crimes for which there are no suspects. Recognizing this, as early as the late 1980's, the states began to enact laws that required offenders convicted of sexual offenses and other violent crimes to provide DNA samples. These DNA samples were to be analyzed and entered into state DNA databases. As you know, all fifty states now have such DNA database laws. All fifty of these laws cover offenders convicted of sex offenses. Well over one-half of these state laws also include offenders convicted of other violent crimes - such as murder, manslaughter, arson, kidnapping, and robbery. *See* Attachment A - Chart of Qualifying Offenses. Ten states have enacted legislation to include all offenders convicted of a felony offense, one state, Texas, has an all felon bill awaiting gubernatorial approval and proposals are pending in over twenty states to expand their databases to all felony offenders.

As developers of the CODIS system, the FBI has been in an unique position to observe the implementation of DNA databases across the nation. An identification tool that was initially thought to benefit the investigation of sexual assault cases has proven to have much wider application in the investigation and prosecution of crimes. States have observed this first hand and sought to expand coverage of their databases beyond sexual offenses - first to more serious violent felonies and then all felony offenses. Over the past several years, over one-half of the states have expanded the coverage of their DNA databases. So far this year, proposals have been introduced in over 30 states to expand their DNA databases yet again, and in most of these cases, to all felons. The enactment and now amendment of state DNA database laws is another area where the FBI Laboratory has offered assistance to the states. Beginning with the issuance of Legislative Guidelines for DNA Databases in 1991, the FBI Laboratory has provided numerous briefings to state Legislatures and their committees and reviewed legislative proposals to ensure compliance with the DNA Identification Act of 1994 and CODIS/NDIS procedures.

The DNA Identification Act of 1994 [contained within the Violent Crime Control and Law Enforcement Act of 1994 and hereinafter referred to as "DNA Act"] provided the statutory authority for creation of the National DNA Index System (NDIS) and specified the type of data that could be included in this national index. Only the following types of DNA data may be stored in the national index administered by the FBI Director:

(1) DNA identification records of persons convicted of crimes;
(2) analyses of DNA samples recovered from crime scenes;
(3) analyses of DNA samples recovered from unidentified human remains; and
(4) analyses of DNA samples voluntarily contributed from relatives of missing persons. *See* 42 U.S.C.S. §14132(a).

In accordance with the DNA Act, the FBI recommends that states include all felony offenders and misdemeanor sex offenders within the scope of their database laws. A review of other states' experiences indicate that it is valuable to include what may not be traditionally characterized as violent felony offenses, such as burglary and some drug-related offenses. States have been identifying offenders for subsequent offenses based upon their inclusion in the DNA database for such non-violent felonies.

As states have enacted and then expanded their DNA database laws, there has been a similar increase in the number of laboratories participating in CODIS. CODIS began as a pilot program in 1990 with a dozen participating state and local laboratories. Today, CODIS is in 137 laboratories across the nation representing 47 states and the District of Columbia (FBI Laboratory).

Is CODIS successful? Our primary method of gauging the effectiveness of the CODIS program is the number of investigations it assists by either identifying a perpetrator or by linking serial crimes. Thus far, CODIS has assisted in over 1,900 investigations in 31 states.

In addition to the software, the most significant feature of the CODIS program is the National DNA Index System or NDIS. The national DNA identification index has been in operation since October, 1998. Today, there are a total of 108 laboratories representing 35 States participating in the national index system. There are currently over 600,000 convicted offender DNA profiles in NDIS and 26,000 forensic samples. All DNA records in NDIS are protected from unauthorized access through administrative, physical and technical safeguards. For example, DNA records in the National database contain only the following limited information: an agency identifier representing the agency submitting the DNA profile; the specimen identification number; the DNA profile; and the name of the DNA personnel associated with the DNA analysis. It is also important to note that the DNA profiles generated according to national standards do not reveal information relating to a medical condition or disease. The Short Tandem Repeat (STR) core loci selected for use in CODIS were specifically selected as law enforcement identification markers because they were not directly linked to any genetic code for a medical condition. As previously mentioned, the DNA Act also specifies the type of information that may be maintained in the National DNA database as well as disclosure requirements for those participating in the National database.

Requisites for Success

As the states address both their convicted offender and casework backlogs, CODIS will begin to realize its full potential as an investigative tool. One of the reasons for the convicted offender backlog is the fact that states may have implemented legislation covering a larger number of convicted offenders than could be accommodated by their laboratory. Rather than risk letting a qualifying offender be released from prison or parole and probation, the state collected those DNA samples but was unable to analyze them and enter the data into CODIS. Federal grant

programs administered by the Office of Justice Programs within the Department of Justice provide funding for states to analyze their samples in-house or to contract out the analysis of these collected offender samples. In just one year's time, approximately 300,000 convicted offender samples have been analyzed and entered into state DNA databases, thereby reducing the nationwide backlog. This number is expected to more than double during 2001. Thus, the continuation of Federal grant funding for the analysis of these convicted offender samples coupled with the use of designated private high-throughput contract laboratories should result in a significant reduction, if not elimination of, the convicted offender sample backlog.

Equally as important as the analysis of the convicted offender samples, is the analysis of the biological evidence collected from crime scenes, regardless of whether a suspect has been identified in that case. A large national database containing the DNA profiles of convicted offenders alone will not solve crimes. We know that. We also know that state and local laboratories do not currently have the capacity to analyze all the cases with biological evidence that are submitted to them. Because of limited capacities, laboratories are forced to prioritize their cases based upon court dates and whether or not a suspect has been identified. This oftentimes leaves those cases for which there are no suspects - and the cases for which CODIS was specifically designed - unanalyzed in laboratory storage. Federal grant funding pursuant to the DNA Analysis Backlog Elimination Act of 2000 will soon be available to address these needs. Until the laboratories have the capacity to analyze every case with biological evidence, CODIS will continue to be underutilized.

The expansion of state DNA database laws to include all felony offenders translates into an increased number of profiles entered into and searched in CODIS. While the FBI has funded research efforts to design a new matching algorithm capable of searching millions of profiles in minutes and even seconds, further research and evaluation into this effort is needed before it can be integrated into the CODIS software. Moreover, as the number of CODIS laboratories has steadily increased over the years, the initial tiered architecture has not changed, necessitating the contractor's maintenance of and user support for three levels of software. Other approaches for the delivery and maintenance of the CODIS software and development of a new platform need to be evaluated. And lastly, as all public DNA laboratories seek participation in the national system, the telecommunication circuits and routers must be upgraded and network maintenance provided to the participating state and local laboratories.

Another key element for the full utilization of CODIS as a law enforcement investigative tool is the continuing research and exploration into new technologies that can offer the forensic community more efficient mechanisms for analyzing convicted offender and casework samples while maintaining the highest quality work. An example of such a new technology is the analysis of mitochondrial DNA (mtDNA) found in most human cells. Certain tissues, such as hair, bones and teeth, that have little nuclear DNA, can often be successfully analyzed for mtDNA when conventional DNA technologies would not be effective. Biological evidence recovered in missing persons cases is often in advanced stages of decomposition, with little or no nuclear DNA remaining intact. In such cases, mtDNA may be the only form of DNA testing possible. After

four years of research and validation, the FBI Laboratory began forensic mtDNA analysis in June 1996. To date, nearly 700 cases have been completed and testimony has been provided in 26 states, Canada and Australia. As its success and admissibility in court have grown, demands for mtDNA testing exceed the FBI Laboratory's current or likely future capacity. Anticipating the need for other forensic laboratories to develop their own mtDNA capabilities, in 1998, the FBI Laboratory began training forensic scientists in mtDNA during a two week course at the FBI Academy.

CODIS includes a Missing Person Index which can match the DNA profiles of nuclear DNA technologies or mtDNA. This Index contains very little DNA data because the FBI Laboratory remains the only public crime laboratory conducting mtDNA testing. While the laboratory equipment for mtDNA analysis is similar to the other current forms of DNA analysis, three factors significantly increase the cost and difficulty of establishing mtDNA analysis. First, and most importantly, stringent quality assurance standards require dedicated laboratory rooms and equipment that cannot be used for any other purpose. Second, supplies and laboratory reagents required for mtDNA are more expensive than for any other routine forensic analysis technique, including conventional DNA analysis. Lastly, mtDNA requires special software for data analysis which is costly. One solution might be a nationwide mtDNA laboratory network of six to eight state and local forensic laboratories, affiliated with the FBI Laboratory, to provide mtDNA analyses to state and local criminal justice agencies. The FBI Laboratory could provide administration for the network and select the laboratories, train personnel, provide annual funding and ensure adherence to the quality assurance standards.

One final area for discussion is the availability of forensic scientists to implement these new technologies. There a very few advanced degree programs currently available for forensic scientists. Science majors in colleges and universities may earn a Bachelor of Science degree and if offered a position in a forensic laboratory, complete an in-house training program under the direct supervision of a forensic scientist for one to two years. The forensic scientist trainer cannot provide total dedication to his/her casework because the time must be apportioned between casework and training. One of the important contributions of SWGDAM has been the development of a training program for forensic scientists performing DNA analyses. The FBI has worked with the University of Virginia in designing a Master of Science degree program in which newly hired DNA analysts will participate in a 12 to 18 month program of study at the FBI Academy and work and validation at the laboratory where hired. Support for these collaborative arrangements with universities would assist these efforts to produce well-qualified forensic scientists.

Commitment to Quality

The DNA Act also authorized the creation of a DNA Advisory Board to recommend quality assurance standards to the FBI Director and funding for the CODIS program and for state and local laboratories to enhance or expand their DNA testing capabilities. Over its five year life,

the DNA Advisory Board recommended quality assurance standards for both forensic DNA laboratories and convicted offender DNA databasing laboratories. The FBI Director issued these quality assurance standards as national standards for CODIS and participation in the national DNA index. Compliance with these quality assurance standards is also required for laboratories receiving Federal funding for DNA purposes under the Bureau of Justice Assistance's Byrne Grant Program and the National Institute of Justice's DNA Grant Programs. Also required by the DNA Act for participation in the national index and receipt of Federal funding is compliance with a semi-annual external proficiency testing program by each analyst performing forensic DNA analyses. Compliance with both the quality assurance standards and the external proficiency testing program are monitored by annual audits of laboratories.

The Quality Assurance Standards for Forensic DNA Testing Laboratories [hereinafter referred to as "Quality Assurance Standards"] cover the following subjects: organization and management, personnel, facilities, evidence control, validation, analytical procedures, equipment calibration and maintenance, reports, review, proficiency testing, corrective action, audits, safety, and use of subcontractor laboratories. Several of the quality assurance standards specifically address contamination. Standard 6.1 provides that the laboratory "shall have a facility that is designed to provide adequate security and minimize contamination." "The laboratory shall ensure that the laboratory follows written procedures for monitoring, cleaning and decontaminating facilities and equipment." *See* Quality Assurance Standards for Forensic DNA Testing Laboratories, Standard 6.1.4. This means that during the annual audit of the laboratory, the laboratory will need to identify their procedures designed to minimize contamination as well as document that those procedures are in place and have been followed.

The Quality Assurance Standards also require that laboratories retain or return a portion of the evidence sample or extract, where possible. *See* Quality Assurance Standards for Forensic DNA Testing Laboratories, Standard 7.2. Specifically, laboratories "shall have a procedure requiring that evidence sample/extract(s) are stored in a manner that minimizes degradation. *See* Quality Assurance Standards for Forensic DNA Testing Laboratories, Standard 7.2.1. Again, these procedures and their implementation are reviewed during the annual audit. Beginning in July 2001, all DNA audits will be conducted by forensic scientists trained by the FBI Laboratory. Finally, the DNA Act provides that access to the National database is subject to cancellation if the quality control requirements are not met.

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We are often asked how can we maximize CODIS and again, having observed the implementation of CODIS across the country, we identified several factors that contribute to a successful DNA database program. First is enactment of a comprehensive DNA database law that covers the retroactive and supervised offender populations. To their credit, all 50 states have enacted laws authorizing the collection of DNA samples from certain categories of convicted offenders. As states have found, the larger the size of the database, the more crimes that are solved, a fact that is evidenced by the dozens of proposals now pending before state Legislatures

to expand the coverage of their convicted offender databases. Second, ensure that DNA samples are collected from all eligible offenders and that those samples are analyzed and entered into CODIS. We know from our annual CODIS survey that the majority of states' analyses efforts have been unable to keep pace with the collection of these convicted offender samples. Convicted offender samples, unlike casework, have been shown to be more amendable to automation and thus high throughput so that the per sample analysis costs of these samples is significantly less than casework samples. We would expect that the continuation of Federal funding would assist in correcting this imbalance and enable the states to have these samples analyzed and entered into CODIS so that if one of these convicted offenders reoffends, he/she will be identified for that first offense.

Third, and equally as important as the analysis of the convicted offender samples, is the analysis of the biological evidence collected from crime scenes, regardless of whether a suspect has been identified in that case. To maximize the potential of DNA as a law enforcement investigative tool, Federal, state and local forensic laboratories should develop the capacities to analyze all the cases (containing biological evidence) submitted to them. And fourth, compatible analysis methods must be used for both convicted offender and casework samples. With the acceptance of the 13 core STR loci as the national standard, this final factor for success has been institutionalized.

The foundation for the use of CODIS as an investigative tool has been established. The continuation of Federal funding to support these efforts in state and local forensic laboratories will ensure its full potential is realized. The FBI Laboratory is committed to the support of the CODIS program and will continue to work with state and local forensic laboratories towards that end.

We appreciate the opportunity to appear before this Subcommittee and provide this update on CODIS and our DNA program. Thank you.

FEDERAL & STATE DNA DATABASE LAWS
QUALIFYING OFFENSES

		Sex Offenses	*Offenses Against Children*	*Murder*	*Assault & Battery*	*Robbery*	*Kidnapping*	*Burglary*	*Attempts*	*Juvenile s*	*All Felonies*	*Retroactive*		
												I	*P*	*PR*
Alabama		✔	✔	✔	✔	✔	✔	✔	✔		✔	✔		
Alaska		✔	✔	✔	✔	✔	✔		✔	✔				
Arizona		✔	✔	✔			✔	✔		✔				
Arkansas		✔	✔	✔	✔	✔	✔	✔		✔				
California		✔	✔	✔	✔				✔	✔				
Colorado		✔	✔	✔	✔	✔	✔	✔	✔	✔	✔[1]		✔	✔
Connecticut		✔	✔				✔					✔		
Delaware		✔	✔						✔			✔		
Florida		✔	✔	✔	✔	✔	✔	✔	✔	✔	✔[2]	✔		
Georgia		✔	✔	✔	✔	✔	✔	✔	✔		✔			
Hawaii		✔	✔	✔			✔							
Idaho		✔	✔	✔	✔	✔	✔		✔	✔		✔	✔	✔
Illinois		✔	✔	✔		✔	✔	✔	✔	✔		✔	✔	✔
Indiana		✔	✔	✔	✔	✔	✔	✔				✔		
Iowa		✔		✔	✔		✔	✔				✔		

[1] Applies to persons sentenced to the custody of the Department of Corrections for a felony offense as of March 31, 2002.

[2] Applies to felony offenses as of July 1, 2005.

FEDERAL & STATE DNA DATABASE LAWS
QUALIFYING OFFENSES

		Sex Offenses	*Offenses Against Children*	*Murder*	*Assault & Battery*	*Robbery*	*Kidnapping*	*Burglary*	*Attempts*	*Juveniles*	*All Felonies*	*Retroactive*		
												I	*P*	*PR*
Kansas		✔	✔	✔			✔	✔	✔	✔		✔		
Kentucky		✔										✔		
Louisiana[3]*		✔	✔	✔	✔		✔		✔	✔		✔		
Maine		✔	✔	✔	✔	✔	✔	✔	✔	✔		✔		
Maryland		✔		✔	✔	✔			✔			✔		
Massachusetts		✔	✔	✔	✔	✔	✔	✔	✔					
Michigan		✔		✔			✔		✔	✔				
Minnesota		✔		✔	✔	✔	✔	✔	✔	✔		✔		
Mississippi		✔	✔				✔					✔		
Missouri		✔	✔	✔	✔		✔					✔	✔	✔
Montana		✔	✔	✔	✔	✔	✔	✔	✔	✔	✔			
Nebraska		✔	✔	✔			✔		✔			✔		
Nevada		✔	✔	✔	✔			✔	✔					
New Hampshire		✔								✔		✔		
New Jersey		✔	✔	✔	✔		✔		✔	✔		✔		

[3]Effective September 1, 2000, Louisiana was authorized to collect a DNA sample from persons arrested for a qualifying offense.

FEDERAL & STATE DNA DATABASE LAWS
QUALIFYING OFFENSES

		Sex Offenses	*Offenses Against Children*	*Murder*	*Assault & Battery*	*Robbery*	*Kidnapping*	*Burglary*	*Attempts*	*Juvenile s*	*All Felonies*	*Retroactive*		
												I	*P*	*PR*
New Mexico		✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
New York		✔	✔	✔	✔	✔	✔	✔	✔			✔	✔	✔
North Carolina		✔		✔	✔	✔	✔					✔		
North Dakota[4]		✔	✔	✔	✔	✔	✔		✔			✔		
Ohio		✔	✔	✔			✔	✔	✔	✔		✔		
Oklahoma		✔	✔	✔	✔	✔	✔	✔				✔		
Oregon		✔	✔	✔	✔			✔	✔	✔		✔		✔
Pennsylvania		✔	✔	✔					✔	✔		✔		
Rhode Island		✔	✔	✔										
South Carolina		✔	✔	✔	✔	✔	✔	✔	✔	✔		✔	✔	✔
South Dakota		✔	✔	✔	✔	✔	✔	✔	✔			✔	✔	✔
Tennessee		✔	✔	✔	✔	✔	✔	✔	✔	✔	✔			
Texas		✔	✔	✔	✔		✔	✔		✔		✔		
Utah		✔	✔	✔			✔							
Vermont		✔	✔	✔	✔	✔	✔	✔	✔			✔	✔	✔
		Sex Offenses	*Offenses Against Children*	*Murder*	*Assault & Battery*	*Robbery*	*Kidnapping*	*Burglary*	*Attempts*	*Juvenile s*	*All Felonies*	*Retroactive*		
												I	*P*	*PR*

[4] The addition of the murder, assault, robbery and kidnapping offenses is effective beginning 7/1/2001 and expires as of 7/31/04.

FEDERAL & STATE DNA DATABASE LAWS
QUALIFYING OFFENSES

Virginia		✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔		
Washington		✔	✔	✔	✔	✔	✔		✔	✔				
West Virginia		✔	✔	✔	✔	✔	✔	✔				✔		
Wisconsin		✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔		
Wyoming		✔	✔	✔	✔	✔	✔	✔	✔		✔	✔		
Federal		✔	✔	✔		✔	✔	✔	✔			✔	✔	✔
Total		51	44	46	35	29	42	30	35	26	10	36	10	10

Key

Listed under Retroactive
I *Incarceration*
P *Parole*
PR *Probation*

States listed in bold cover all felony offenders.

Revised 6/10/01

Mr. HORN. Thank you very much. That was a very useful statement.

We now have Dr. Boyd, who is the Deputy Director of the National Institute of Justice. We are delighted to have you with us this morning.

Mr. BOYD. Thank you, Mr. Chairman, and thank you and the members of the committee for this opportunity to testify before you today. My office is the science and technology component of the National Institute of Justice, the research and evaluation arm of the Department of Justice.

When NIJ first undertook to conduct research on DNA identification technology in the mid-1980's it was a very new field, barely known, and not at all used in crime laboratories in the United States. Over the next 11 years, with a modest research and development investment of about $5 million, NIJ managed to fund wholly or in part every significant advance in DNA identification technology in the United States.

Almost immediately after a former director brought DNA analysis methods from the United Kingdom to the United States in the mid-1980's, two private laboratories picked up the technology, followed by Virginia, Florida, and Minnesota, and then by the FBI. Which meant that by 1989 there were only four DNA capable crime laboratories and two private DNA laboratories in the United States. Seven years later when the NIJ began the DNA laboratory improvement program, there were still fewer than a dozen crime laboratories in the United States capable of doing DNA analysis. But today there are more than 130 laboratories in all 50 States capable of analyzing forensic DNA evidence.

NIJ scientists work closely with the forensic community to provide them with the tools they need to work more efficiently and economically, and funded the development of accreditation and proficiency testing programs through the American Academy of Forensic Sciences and the American Society of Crime Laboratory Directors. This year we have managed to find a better way to fund the analysis of DNA backlog samples so that every DNA dollar will buy about 30 percent more DNA samples this year than last, and will allow us to support the analysis of DNA samples in States with backlogs too small to have been economically acceptable before.

Working with the National Institute of Standards and Technology, we developed the reference materials kit now used in nearly every DNA capable laboratory in the United States to ensure consistency of analysis and reliability of results. In 1996, NIJ proposed, established, and funded the National Commission on the Future of DNA Evidence, about which you will hear more when Chris Asplen testifies. Much of the impetus for a number of the congressional, administration, and State initiatives, including the recent reprogramming of $25 million of asset forfeiture money, has arisen from the work of this commission.

We are working with the forensic community and a consortium of universities to identify the essential components of an acceptable curriculum for a degree in the forensic sciences, because laboratory directors tell us they have no confidence that someone with a forensic science degree actually has an adequate knowledge of the forensic sciences.

The forensic DNA research and development program continues to provide enhancements to existing methods, techniques, and technologies, and to create new tools for the future of DNA evidence. Current projects aimed to reduce the risk of loss of crucial evidence to equipment failures; to develop a mitochondrial DNA screening method that allows labs to examine old, degraded, or very small evidence samples without resorting to expensive and technically demanding DNA sequencing methods; to develop high through-put, low-cost mass spectrometry instrumentation; and to exploit nanotechnology for forensic applications. We expect the first forensic nanotechnology project, a DNA chip with all 13 of the required genetic markers for databasing, will be in the hands of practitioners for evaluation by the end of this year. This inexpensive chip can produce a reliable result in under 5 minutes instead of the several hours currently required, thus saving thousands of analyst years of productivity. This chip may even eventually offer new ways to use DNA earlier in investigations.

Unfortunately, as a recent Rand report notes, the laboratories are so overwhelmed by a lack of human resources that infusion of new technology is incredibly difficult at best. It is therefore imperative that we work to create an environment where crime laboratories can function beyond case triage and start performing the work that will save the entire criminal justice system time and resources. It is that critical investigative stage where forensic analysis could rule out suspects, direct leads with real data, and help solve crimes more quickly and more accurately than can canvassing and eye witness interviews that require the use of already overburdened investigators. Supporting the full modernization and upgrading of our Nation's crime laboratories means more than just saving time and money. It means saving lives, stopping crimes, and promoting public safety in a very real, tangible way.

We believe we have made great progress in enhancing the ability of public crime labs to analyze forensic DNA evidence. But we also believe that we have only just begun to realize the full potential of this power technology.

I would be happy to answer any questions you might have.

[The prepared statement of Mr. Boyd follows:]

STATEMENT

OF

DAVID G. BOYD
DIRECTOR, OFFICE OF SCIENCE AND TECHNOLOGY
NATIONAL INSTITUTE OF JUSTICE
OFFICE OF JUSTICE PROGRAMS

BEFORE THE

SUBCOMMITTEE ON GOVERNMENT EFFICIENCY,
FINANCIAL MANAGEMENT AND INTERGOVERNMENTAL RELATIONS
COMMITTEE ON GOVERNMENT REFORM
U.S. HOUSE OF REPRESENTATIVES

ON

JUNE 12, 2001

Good morning, Mr. Chairman. Thank you for the opportunity to testify before you today on this important issue. My name is David Boyd. I am the Deputy Director of the National Institute of Justice (NIJ) and the Director of the Office of Science and Technology. NIJ is the research and evaluation arm of the Justice Department. My office, the Office of Science and Technology, works to explore technology and other resources that could be used by law enforcement officials to solve and prosecute crimes and to better ensure the safety of law enforcement and the public. I am pleased to be here today to discuss how NIJ works with state, local and other federal agencies to strengthen the application of DNA technology to criminal investigations.

As Members of the Subcommittee may know, the National Commission on the Future of DNA Evidence is a Commission comprised of 22 nationally renowned scientists, attorneys, jurists, academics, bioethesists, victim advocates, and members of law enforcement. That Commission has identified that the backlog of approximately 750,000 collected but unanalyzed convicted offender samples in our nation's crime laboratories is one of the most serious impediments inhibiting the effectiveness of DNA for solving and preventing crime. The national attention that resulted from the Commission's recommendations to reduce the convicted offender backlog was instrumental in directing federal funds to address this problem. In Fiscal Year (FY) 2000, the Office of Justice Programs' National Institute of Justice, through the Office of Science and Technology, implemented the first national backlog reduction effort through the Convicted Offender DNA Backlog Reduction Program. This program awarded a total of $14.4 million to all 21 states who applied to have their backlog of convicted offender DNA samples analyzed. The FY 2002 budget further expands this program, to $35 million, an increase of $20

million over FY 2001. Because public crime laboratories are not equipped for immediate high volume DNA analysis, grants were awarded to states to out-source backlogged samples to private vendor laboratories. In addition, as part of the grant match requirement, states were expected to analyze no-suspect cases equivalent to one percent of the convicted offender DNA samples they out-sourced to private. (For example, if a state received funding to out-source 10,000 convicted offender DNA samples, they would be required to analyze 100 no-suspect cases). As a result of this program, approximately 300,000 convicted offender samples and almost 3,000 no-suspect cases have been analyzed and entered into the Combined DNA Index System (CODIS). While data are still being generated, as of today more than 150 CODIS "hits" have been made as a direct result of this program -- 150 cases previously unsolved have been brought back to life – a stunning example of success with more likely to come.

At NIJ's grantees meeting last week, lab after lab reported matching no suspect casework to convicted offender samples analyzed with federal funding, well beyond the conservative rate of 10 percent. The FY 2001 DNA Backlog Reduction Program will allow greater economies of scale by directly providing vendor laboratory services to states through open ended access via cooperative agreements with NIJ and all qualified vendors. These programmatic changes will allow a nearly equal number of convicted offender samples to be analyzed with the less than $9 million that have been appropriated for the Backlog Program this year. Moreover, NIJ will be awarding $25 million in asset forfeiture funds to states for no suspect casework to be conducted both through outsourcing and at the state and local level, for additional convicted offender samples to be analyzed as states increase the scope of their databases, and for the performance of quality assurance measures through time-saving expert systems.

But, as I and others have noted elsewhere, quantifying the current status of the convicted offender DNA backlog is difficult because states continue to expand the scope of their convicted offender DNA legislation. While all 50 states have passed DNA database legislation, many states are considering or have already passed legislation that requires non-violent convicted offenders to provide a DNA sample for inclusion in CODIS. Twenty-four states introduced bills this year to expand their DNA database law to include all convicted felons, while thirty-five states have introduced over 110 Senate and House bills in this legislative session to expand their state offender DNA database to include more felonies. With the stroke of their pens, state legislatures are adding tens of thousands of samples to their state's backlogs where previously the labs may have been caught up. Therefore, this national trend has not only increased the actual number of DNA samples requiring analysis, but it has also increased the number of samples requiring collection or "owed samples" (there are approximately 1 million owed samples in the U.S.). So the growth of the convicted offender DNA backlog also depends on the types of crimes that states define in their DNA database statutes. As the trend to include all felonies continues, the potential analysis case load could increase to 3 million (1998 Uniform Crime Report, FBI). In addition, it is important to note that many of the expansion bills specifically mention the need for further federal funding in order for the expansions to be implemented. Even with the large increase proposed in the FY 2002 budget, this is an unrealistic expectation. State and local governments must be willing to provide increased resources, as well.

While existing federal programs for DNA backlog reduction are beginning to address the complex breadth and scope of these issues, it is clear that our criminal justice system has only just begun to realize the investigative potential and success of using convicted offender DNA

databases. For example, one long-term benefit of populating and using the DNA database in the investigative stage of a criminal case is to make criminal investigations more efficient for law enforcement. Another important benefit is that public crime laboratories will be allowed to prioritize case work beyond the pressures of impending trials, enabling the labs to focus on the important, customized issues inherent in each case proactively rather than retroactively, ultimately eliminating the need to remediate cases at the post-conviction level. States, large and small, should work in conjunction with federal programs, provide increased funding, and plan for the integration of expanded database laws if the funding provided by Congress is to result in the greatest possible payoff for criminal justice in the United States. Even so, the convicted offender backlog may continue to grow as states expand the scope of their DNA database legislation. A table of the current and pending legislation regarding the statutes requiring DNA collection is attached to this testimony.

Questions concerning laboratory funding, standards, and ways for our labs to maintain technical currency and technology transfer in DNA must also be considered as part of the number of issues facing the investigative and forensic sciences in this country.

On the whole, crime laboratories in this country are woefully underfunded. As I've testified before, it is the job of forensic scientists working in the more than 300 public crime laboratories across the nation to reveal as much about the evidence as possible. This job, already a scientifically challenging endeavor, is made more difficult by the restrictions faced by virtually all public crime laboratories. As noted in the recent RAND report, *Challenges and Choices for Crime-Fighting Technology*, public crime laboratories face huge casework backlogs, forcing them to prioritize work according to upcoming court dates which makes it difficult for them to

perform the timely analyses that might aid or shorten investigations. Further, budgetary constraints suppress their ability to modernize or upgrade equipment, yet recent court decisions are forcing forensic scientists to re-evaluate and, in some cases, augment the science and the interpretation upon which their results are based.

Although the federal government can only fund a small part of their needs, public crime labs have been the subject of several important programs at the National Institute of Justice over the last six years. The first of these programs, the DNA Laboratory Improvement Program, a $30.7 million initiative to improve the capabilities and capacities of our nation's crime laboratories to implement and conduct forensic DNA analysis, has already shown significant and easily measurable results. When the program began in 1996 under the authority of the 1994 DNA Identification Act, fewer than a dozen states had the capability to perform forensic DNA testing. At the close of the program, in 2000, more than 130 separate laboratory facilities in all 50 states have DNA capabilities. Many of these laboratories were able to use federal funds to leverage their laboratories' priorities with their own state legislatures. In addition, a number of states such as Florida and California responded to NIJ's encouragement to form consortiums by submitting one unified strategic program proposal for their state and local laboratories to make more efficient use of funding and services.

The successor to the DNA Laboratory Improvement program is the Crime Laboratory Improvement Program (CLIP), developed to aid all facets of public crime laboratories. While this program has been heavily earmarked, important gains have been made in several areas that will improve the capacity and capability of all public crime labs. One is the creation of a Technical Working Group (TWG) of forensic practitioners, academicians, trainers, and others to

formulate a standardized curriculum for undergraduate and graduate forensic science majors that will ensure a relevant and equivalent knowledge base for professionals entering the forensic work force. Training, education, and human resource issues are those cited as the most critical issues by more than more than 95 percent of those crime laboratory directors responding to the RAND survey. The FY 2002 budget requests $35 million for CLIP, a significant increase over 2001.

In addition, the development of a Forensic Resource Network will assist the forensic science community with issues such as quality assurance, validation and evaluation, technology integration and surplus property distribution. We expect CLIP to have as significant an impact on upgrading non-DNA forensic applications as the DNA Laboratory Improvement Program had on forensic DNA in our nation. The application process itself also stimulated the professionalization of laboratories by requiring their proposals to include detailed, measurable, long-term goals and deliverables that will have important consequences for improving their productivity, capacities and capabilities well beyond the life of the grant. At the same time, NIJ has also worked to develop ways to improve the quality of forensic work in the nation's crime laboratories by encouraging the development of a more professional community of forensic practitioners by funding the early efforts of the American Academy of Forensic Sciences to develop proficiency testing for laboratory personnel and the American Society of Crime Laboratory Directors to develop a laboratory accreditation process. Working through NIJ funded Office of Law Enforcement Standards at the National Institute of Justice, we produced the first Standard Reference Materials kits to be used by laboratories to check the quality of DNA analyses and produced CD's and other materials to help train first responders so they can identify and properly collect and preserve DNA evidence.

Finally, the Forensic DNA Research and Development Program has been instrumental to providing enhancements to existing methods, techniques and technologies, as well as creating new tools for the future of DNA evidence. Such technological innovations were recognized in a report from the National Commission on the Future of DNA Evidence as important to enhancing the value of DNA in solving and preventing crime. In addition, a portion of the program's $5 million annual budget is invested in the creation of methods, techniques and technologies that will immediately improve the use of DNA in today's laboratories. Projects such as the optimization of buffers used in capillary electrophoresis offers laboratories data upon which to predict capillary failures before they occur, thereby reducing arbitrary shut-downs or risking the loss of critical evidence samples. Another example is the development of a mitochondrial DNA screening method that allows labs to examine old, degraded, or very small evidence samples without resorting to the expensive DNA sequencing that has been required in the past. The program also supports future improvements such as high throughput, low cost mass spectrometry instrumentation and the exploitation of nano-technology for forensic applications. We expect the first forensic DNA chip, with all 13 of the required genetic markers for data basing, to be in the hands of the practitioners for evaluation by December, 2001. This chip, under development at MIT's Whitehead Institute of Technology, uses standard, commercially available reagents with a capillary electrophoresis format, but instead of the several hours currently required to analyze a sample, the chip can perform the same task and produce reliable results in under 10 minutes. This kind of instrumentation will save many thousands of man-years of productivity when it is implemented in our nation's labs.

Increases in productivity such as these are crucially needed in forensic laboratories today.

We all know that forensic crime laboratories are severely overworked, and because they can not possibly work harder, we must find ways to help them to work smarter. This is a goal of NIJ's upcoming "Solicitation for General Forensic Research and Development for Fiscal Year 2001." Approximately $1.3 million has been dedicated to fund several projects under this competitive solicitation that can increase the sensitivity, speed, or reliability of traditional (or non-DNA) forensic methods in areas such as trace evidence, latent prints, toxicology, and ballistics. Targeted applicants under this program will be the broad forensics community with an eye toward stimulating the hard sciences, including physicists, to use their expertise to enhance evidence analysis. NIJ anticipates releasing the application in the near future.

However, new technologies, methods, and techniques can only help achieve better productivity when laboratories have the time and ability to thoughtfully evaluate and validate them. As the RAND report noted, the laboratories are so overwhelmed by capital and human resource issues that organizational technology adoption programs become insurmountable, making the need for local, state, and federal agencies to collaborate on crime laboratory improvements paramount before these critical gains through technology transfer can be made.

I have spent much of my testimony describing our successes in transferring the application of DNA to state and local forensic labs. But it is important to remember that DNA comprises less than 3 percent of the type of evidence needed by the criminal justice system. The attached table demonstrates that, far and away, controlled substances are the most frequently examined evidence (54 percent), followed by latent prints, blood alcohol and toxicology. It is interesting to note that if labs could modernize their equipment and, for example, add auto-samplers to recent model mass spectrometers, at a total investment of approximately

$3,000 per mass spectrometer, they could double the number of controlled substances examined on each machine, while actually decreasing the manpower needed. That manpower can then be expended on other types of analyses that will actually aid in the ongoing investigation of crimes, rather than just during the trial.

Thus, it becomes imperative to create an environment where crime laboratories can function beyond case triage and start performing the work that will save the entire criminal justice system time and resources. It is that critical investigative stage where forensic analyses can rule out suspects, direct leads with real data, and help solve crimes more quickly and more accurately than canvassing and eyewitness interviews using phalanxes of already overburdened investigators. With appropriate support and assistance from all levels of government, the voice of the evidence will be heard more quickly. Given rates of recidivism, the agony of victims, and the anxiety of communities with unsolved crimes, supporting the full modernization and upgrading of our nation's crime laboratories means more than just saving time and money. It means saving lives, stopping crimes, and promoting public safety in a very real, tangible way.

That concludes my remarks. Again, thank you for providing me the opportunity to appear before your committee today to address this very important issue. I'd be happy to answer any questions you may have.

STATE DNA DATABASE LAWS
QUALIFYING OFFENSES 3/7/01

State	*Sex Offenses*	*Offenses Against Children*	*Murder*	*Assault & Battery*	*Robbery*	*Kidnapping*	*Burglary*	*Attempts*	*Juveniles*	*All Felonies*
ALABAMA	✓	✓	✓	✓	✓	✓	✓	✓		✓
ALASKA	✓	✓	✓	✓	✓	✓		✓	✓	
ARIZONA	✓	✓	✓	✓	✓		✓	✓	✓	
ARKANSAS	✓	✓	✓	✓	✓	✓	✓		✓	
CALIFORNIA	✓	✓	✓	✓		✓		✓	✓	
COLORADO	✓	✓	✓	✓	✓	✓	✓		✓	
CONNECTICUT	✓	✓				✓				
DELAWARE	✓	✓						✓		
FLORIDA	✓		✓	✓	✓		✓	✓	✓	
GEORGIA	✓	✓	✓	✓	✓	✓	✓	✓		✓
HAWAII	✓	✓	✓							
IDAHO	✓	✓	✓	✓	✓			✓	✓	
ILLINOIS	✓	✓	✓		✓	✓	✓	✓	✓	
INDIANA	✓	✓	✓	✓	✓	✓	✓			
IOWA	✓		✓	✓		✓	✓			
KANSAS	✓	✓	✓					✓	✓	
KENTUCKY	✓									
LOUISIANA	✓	✓	✓	✓		✓		✓	✓	
MAINE	✓	✓	✓	✓	✓	✓	✓	✓	✓	
MARYLAND	✓		✓	✓	✓					
MASSACHUSETTS	✓	✓	✓	✓	✓	✓	✓			

Source: Federal Bureau of Investigation

State	*Sex Offenses*	*Offenses Against Children*	*Murder*	*Assault & Battery*	*Robbery*	*Kidnapping*	*Burglary*	*Attempts*	*Juveniles*	*All Felonies*
MICHIGAN	✓		✓			✓				
MINNESOTA	✓		✓	✓	✓	✓	✓	✓	✓	
MISSISSIPPI	✓	✓								
MISSOURI	✓	✓	✓	✓		✓				
MONTANA	✓	✓	✓	✓	✓	✓		✓	✓	
NEBRASKA	✓	✓	✓							
NEVADA	✓	✓	✓	✓			✓	✓		
NEW HAMPSHIRE	✓								✓	
NEW JERSEY	✓	✓	✓	✓		✓		✓	✓	
NEW MEXICO	✓	✓	✓	✓	✓	✓	✓		✓	✓
NEW YORK	✓		✓	✓	✓	✓	✓			
NORTH CAROLINA	✓		✓	✓	✓	✓				
NORTH DAKOTA	✓	✓						✓		
OHIO	✓	✓	✓			✓		✓	✓	
OKLAHOMA	✓	✓	✓	✓						
OREGON	✓	✓	✓				✓	✓	✓	
PENNSYLVANIA	✓	✓	✓					✓	✓	
RHODE ISLAND	✓	✓	✓							
SOUTH CAROLINA	✓	✓	✓	✓	✓	✓	✓		✓	
SOUTH DAKOTA	✓	✓	✓	✓	✓	✓	✓	✓		
TENNESSEE	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
TEXAS	✓	✓	✓	✓			✓		✓	
UTAH	✓	✓	✓	✓		✓				

Source: Federal Bureau of Investigation

State	*Sex Offenses*	*Offenses Against Children*	*Murder*	*Assault & Battery*	*Robbery*	*Kidnapping*	*Burglary*	*Attempts*	*Juveniles*	*All Felonies*
VERMONT	✓	✓	✓	✓	✓	✓	✓	✓		
VIRGINIA	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
WASHINGTON	✓	✓	✓	✓	✓	✓		✓	✓	
WEST VIRGINIA	✓	✓	✓	✓	✓	✓	✓			
WISCONSIN	✓	✓	✓	✓	✓	✓	✓			✓
WYOMING	✓	✓	✓	✓	✓	✓	✓	✓		✓
TOTALS	50	41	44	35	27	31	25	28	23	7

Source: Federal Bureau of Investigation

2001 DNA LEGISATION TO REQUIRE MORE CONVICTED OFFENDERS TO PROVIDE DNA SAMPLES INTO THE CRIMINAL OFFENDER DNA DATABASES

States that passed legislation to require **all felons** to submit DNA into the database prior to 2001:

Alabama
Georgia
New Mexico
Tennessee
Virginia
Wisconsin
Wyoming

States that have introduced 2001 legislation to require **all felons** to submit DNA into the database. As of February 24, 2001 there were 40 all felons bill in 21 states:

Arkansas

- HB 1259 – Representative Paul Verkamp

Arizona

- HB 2076 – Representative Marilyn Jarrett
- HB 2215 – Representative Russell Pearce
- SB 1171 – Senator Tom Smith

Colorado

- HB 1130 – Representative Dan Grossman

Connecticut

- HB 5413 – Representative Robert Ward
- HB 5852 – Representative Steven Mikutel
- SB 89 – Senator Kevin Sullivan
- SB 482 – Senator Andrew Roraback

Delaware

- HB 4 – Representative Ewing

Source: Smith, Ailing, Hurst Law Firm for Applied Biosystems Inc.

Florida

- SB 268 – Senator Silver

Hawaii

- SB 237 – Senator Suzanne Chun Oakland
- HB 1626 – Representative William Stonebraker

Iowa

- SF 206 - Senator Michael Gronstal
- HF 254 – Representative Clel Baudler

Kansas

- SB272 – Senator Paul Feleciano, Jr.

Kentucky

- SB 45 – Senator David Karem
- HB 33 – Representative Brent Yonts

Minnesota

- HB 237 – Representative Skogland
- HB 1093 – Representative Rich Stanek
- SB 191 – Senator Dave Kleis
- SB 273 – Senator Leo Foley

Missouri

- HB 440 – Representative Bill Boucher

Mississippi

- HB 192 – Representative Randy Mitchell
- HB 457 – Representative Daniel Guice, Jr.
- HB 632 – Representative Roger Ishee
- HB 633 – Representative Joey Fillingane
- HB 712 – Representative Gary Chism
- SB 2498 – Senator Neely Carlton

Montana

- HB 359 – Representative Paul Clark

New York

- SB 1795 – Senator Serphin Maltese
- AB 4486 - Assemblyman John Faso

North Carolina

- SB 226 – Robert Shaw

Oklahoma

- HB 1629 – Representative Ray Vaughn Jr.

Pennsylvania

- SB 429 – Senator Lisa Boscola

Rhode Island

- HB 5313 – Representative Brien
- SB 92 – Senator McDonald
- SB 187 – Senator Hunter

Texas

- HB 588 – Representative Domingo Garcia

Washington

- HB1335 – Representative Mark Meloscia

States that have indicated they are preparing 2001 legislation that will require **all felons** to submit DNA into the database:

California
Illinois
Michigan
Oregon
West Virginia

States that have introduced 2001 legislation to require more convicted criminals to submit DNA into the database, but not all felons

Alabama

- HB 315 – Representative Rogers

Alaska

- HB 143 – Representative Lisa Murkowski
- SB 99 – Senator Rick Halford

Arkansas

- HB 1376 – Representative Russ Hunt

California

- AB 673 – Assemblywoman Carole Migden

Connecticut

- HB 5106 – Representative Claudia Powers
- HB 5306 – Representative Kenneth Bernhard

Hawaii

- HB 1577 – Representative Barbara Marumoto

Illinois

- HB 452 – Representative Eileen Lyons

Kansas

- SB 263 – Senator David Adkins

Maine

- HB 1030 – Representative John Michael

Michigan

- SB 123 – Senator Jaye

Mississippi

- HB 636 – Representative Lloyd Roberson II

Missouri

- HB 563 – Representative Ralph Monaco

Nevada

- HB 54 – Representative Bernie Anderson

North Carolina

- SB 95 – Senator Tony Rand

North Dakota

- HB 1208 – Representative Lawrence Klemin

Oklahoma

- HB 1426 – Representative David Braddock
- SB 157 – Senator Fisher
- SB 725 –Senator Cain
- SB 753 – Senator Wilkerson

Pennsylvania

- HB 319 – Representative David Mayernik
- HB 502 – Representative Dennis O'Brien
- SB 259 - Senator Charles Dent

Rhode Island

- HB 5314 – Representative Brock Bierman
- HB 5327 – Representative Joseph McNamara

Texas

- SB 638 – Senator Gonzalo Barrientos
- HB 1726 – Representative Ann Kitchen

Table 15. Distribution of Evidence Received by Laboratories

Type of Evidence	Percent of Total Received[42]	Type of Evidence	Percent of Total Received
Controlled substances	53.57%	DNA	2.19%
Latent prints	15.70%	Trace analysis	1.59%
Blood alcohol	10.74%	Questioned documents	1.09%
Toxicology	6.88%	Fire debris	0.47%
Firearms, tool marks, etc.	4.51%	Computer crime evidence	0.07%
Forensic biology	3.19%	Explosive residue	0.03%

SOURCE: FTS, 22. Values are percentages for each analysis of the total number of all tests that that responding laboratories reported.

"Challenges and Choices for Crime Fighting Technology," Page 50, RAND Corporation, April 2001.

Mr. HORN. Thank you very much. And I note in your testimony where you say that the National Commission on the Future of DNA Evidence has 22 nationally renowned scientists, attorneys, jurists, academics, bioethicists, victims advocates, and members of law enforcement and you have come to the conclusion that there is a backlog of approximately 750,000 collected but unanalyzed convicted offender samples. So that is something we really have to deal with.

We now go to the next gentlemen, Mr. Asplen, executive director, National Commission on the Future of DNA Evidence and assistant U.S. attorney.

Mr. ASPLEN. Thank you, Mr. Chairman, and other members of the subcommittee. I greatly appreciate the opportunity to be here today.

In many respects, how efficient and effective we are at integrating DNA technology into our criminal justice system has a direct effect on how safe our streets and neighborhoods are, what crimes we solve, and ultimately what crimes we prevent. I look forward to sharing with you a bit of the national perspective as observed by the commission.

The commission was established in 1998 by the Department of Justice and has as its mission the maximization of the value of DNA technology in the criminal justice system. The commission's 22 scientific, ethics, and legal experts, as well as over 50 commission working group members have considered a broad range of issues arising from the use of DNA. I will take this opportunity to discuss two areas which I believe pertain most directly to the issue of efficiency—law enforcement training and education, and database backlogs.

One of the clearest impediments to the effective and efficient use of DNA is law enforcement's limited training regarding how to properly identify, preserve, and collect biological material that may yield a DNA profile of a perpetrator. Significantly limited training resources, sparingly applied to a complex and ever-changing and improving technology, often results in a failure to take full advantage of the power of DNA. Police departments are often forced to choose, for example, between essentials like bulletproof vests and the education necessary to prevent the contamination of evidence. All too often important biological evidence is missed or contaminated because first responding officers are not aware of the potential to find DNA on the saliva of a cigarette butt or the invisible skin cells left on the handle of a murdering baseball bat.

Recognizing law enforcement's need, the commission developed a number of training tools to educate the entire law enforcement community. The immediate success of, and demand for these materials is testament to law enforcement's desire to take full advantage of DNA.

The first tool developed by the commission was the pamphlet "What Every Law Enforcement Officer Should Know About DNA

Evidence," and this pamphlet will be provided to all of the subcommittee members and all the committee members as well as the CD-ROMs.

Mr. HORN. That will be put in the record at this point.

Mr. ASPLEN. Thank you, Mr. Chairman.

[The information referred to follows:]

In 1996, Gerald Parker—then in a California prison on a parole violation stemming from a 1980 sentence for raping a child—was charged with the rapes and murders of five women between December 1978 and October 1979 and the murder of a fetus during a rape in 1980. DNA samples from the crime scenes were run through California's sexual assault/violent offenders database, and four of the cases were found to have been committed by the same perpetrator. After DNA tests linked Parker to the victims, he confessed to the crimes. He also confessed to a similar, fifth crime for which Kevin Lee Green had been wrongly convicted and had served 16 years in prison.

Just as today's law enforcement officer has learned to look routinely for fingerprints to identify the perpetrator of a crime, that same officer needs to think routinely about evidence that may contain DNA. Recent advancements in DNA technology are enabling law enforcement officers to solve cases previously thought to be unsolvable. Today, investigators with a fundamental knowledge of how to identify, preserve, and collect DNA evidence properly can solve cases in ways previously seen only on television. Evidence invisible to the naked eye can be the key to solving a residential burglary, sexual assault, or child's murder. It also can be the evidence that links different crime scenes to each other in a small town, within a single State, or even across the Nation. The saliva on the stamp of a stalker's threatening letter or the skin cells shed on a ligature of a strangled victim can be compared with a suspect's blood or saliva sample. Similarly, DNA collected from the perspiration on a baseball cap discarded by a rapist at one crime scene can be compared with DNA in the saliva swabbed from the bite mark on a different rape victim.

Where Is DNA Contained in the Human Body?

DNA is contained in blood, semen, skin cells, tissue, organs, muscle, brain cells, bone, teeth, hair, saliva, mucus, perspiration, fingernails, urine, feces, etc.

Similar to fingerprints

DNA is similar to fingerprint analysis in how matches are determined. When using either DNA or a fingerprint to identify a suspect, the evidence collected from the crime scene is compared with the "known" print. If enough of the identifying features are the same, the DNA or fingerprint is determined to be a match. If, however, even one feature of the DNA or fingerprint is different, it is determined not to have come from that suspect.

This brochure will explain DNA and the related identification, preservation, and collection issues that every law enforcement officer should know.

What Is DNA?

DNA, or deoxyribonucleic acid, is the fundamental building block for an individual's entire genetic makeup. It is a component of virtually every cell in the human body. Further, a person's DNA is the same in every cell. For example, the DNA in a man's blood is the same as the DNA in his skin cells, semen, and saliva.

DNA is a powerful tool because each person's DNA is different from every other individual's, except for identical twins. Because of that difference, DNA collected from a crime scene can either link a suspect to the evidence or eliminate a suspect, similar to the use of fingerprints. It also can identify a victim through DNA from relatives, even when no body can be found. And when evidence from one crime scene is compared with evidence from another, those crime scenes can be linked to the same perpetrator locally, statewide, and across the Nation.

Forensically valuable DNA can be found on evidence that is decades old. However, several factors can affect the DNA left at a crime scene, including environmental factors (e.g., heat, sunlight, moisture, bacteria, and mold). Therefore, not all DNA evidence will result in a usable DNA profile. Further, just like fingerprints, DNA testing cannot tell officers when the suspect was at the crime scene or for how long.

Where can DNA evidence be found at a crime scene?

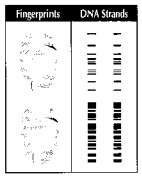
DNA evidence can be collected from virtually anywhere. DNA has helped solve many cases when imaginative investigators collected evidence from nontraditional sources (see "Identifying DNA Evidence"). One murder was solved when the suspect's DNA, taken from saliva in a dental impression mold, matched the DNA swabbed from a bite mark on the victim. A masked rapist was convicted of forced oral copulation when his victim's DNA matched DNA swabbed from the suspect's penis 6 hours after the offense. Numerous cases have been solved by DNA analysis of saliva on cigarette butts, postage stamps, and the area around the mouth opening on ski masks. DNA analysis of a single hair (without the root) found deep in the victim's throat provided a critical piece of evidence used in a capital murder conviction.

Evidence Collection and Preservation

BIOHAZARD

Investigators and laboratory personnel should work together to determine the most probative pieces of evidence and to establish priorities. Although this brochure is not intended as a manual for DNA evidence collection, every officer should be aware of important issues involved in the identification, collection, transportation, and storage of DNA evidence. These issues are as important for the first responding patrol officer as they are for the experienced detective and the crime scene specialist. Biological material may contain hazardous pathogens such as the human immunodeficiency virus (HIV) and the hepatitis B virus that can cause potentially lethal diseases. Given the sensitive nature of DNA evidence, officers should always contact their laboratory personnel or evidence collection technicians when collection questions arise.

Identifying DNA Evidence



Since only a few cells can be sufficient to obtain useful DNA information to help your case, the list below identifies some common items of evidence that you may need to collect, the possible location of the DNA on the evidence, and the biological source containing the cells. Remember that just because you cannot see a stain does not mean there are not enough cells for DNA typing. Further, DNA does more than just identify the source of the sample; it can place a known individual at a crime scene, in a home, or in a room where the suspect claimed not to have been. It can refute a claim of self-defense and put a weapon in the suspect's hand. It can change a story from an alibi to one of consent. The more officers know how to use DNA, the more powerful a tool it becomes.

Evidence	Possible Location of DNA on the Evidence	Source of DNA
baseball bat or similar weapon	handle, end	sweat, skin, blood, tissue
hat, bandanna, or mask	inside	sweat, hair, dandruff
eyeglasses	nose or ear pieces, lens	sweat, skin
facial tissue, cotton swab	surface area	mucus, blood, sweat, semen, ear wax
dirty laundry	surface area	blood, sweat, semen
toothpick	tips	saliva
used cigarette	cigarette butt	saliva
stamp or envelope	licked area	saliva
tape or ligature	inside/outside surface	skin, sweat
bottle, can, or glass	sides, mouthpiece	saliva, sweat
used condom	inside/outside surface	semen, vaginal or rectal cells
blanket, pillow, sheet	surface area	sweat, hair, semen, urine, saliva
"through and through" bullet	outside surface	blood, tissue
bite mark	person's skin or clothing	saliva
fingernail, partial fingernail	scrapings	blood, sweat, tissue

Contamination

Because extremely small samples of DNA can be used as evidence, greater attention to contamination issues is necessary when identifying, collecting, and preserving DNA evidence. DNA evidence can be contaminated when DNA from another source gets mixed with DNA relevant to the case. This can happen when someone sneezes or coughs over the evidence or touches his/her mouth, nose, or other part of the face and then touches the area that may contain the DNA to be tested. Because a new DNA technology called "PCR" replicates or copies DNA in the evidence sample, the introduction of contaminants or other unintended DNA to an evidence sample can be problematic. With such minute samples of DNA being copied, extra care must be taken to prevent contamination. If a sample of DNA is submitted for testing, the PCR process will copy whatever DNA is present in the sample; it cannot distinguish between a suspect's DNA and DNA from another source.

Transportation and storage

When transporting and storing evidence that may contain DNA, it is important to keep the evidence dry and at room temperature. Once the evidence has been secured in paper bags or envelopes, it should be sealed, labeled, and transported in a way that ensures proper identification of where it was found and proper chain of custody. Never place evidence that may contain DNA in plastic bags because plastic bags will retain damaging moisture. Direct sunlight and warmer conditions also may be harmful to DNA, so avoid keeping evidence in places that may get hot, such as a room or police car without air conditioning. For long-term storage issues, contact your local laboratory.

To avoid contamination of evidence that may contain DNA, always take the following precautions:

- Wear gloves. Change them often.
- Use disposable instruments or clean them thoroughly before and after handling each sample.
- Avoid touching the area where you believe DNA may exist.
- Avoid talking, sneezing, and coughing over evidence.
- Avoid touching your face, nose, and mouth when collecting and packaging evidence.
- Air-dry evidence thoroughly before packaging.
- Put evidence into new paper bags or envelopes, not into plastic bags. Do not use staples.

National Commission on the Future of DNA Evidence

Identifying ***DNA Evidence***

Elimination samples

As with fingerprints, the effective use of DNA may require the collection and analysis of elimination samples. It often is necessary to use elimination samples to determine whether the evidence comes from the suspect or from someone else. An officer must think ahead to the time of trial and possible defenses while still at the crime scene. For example, in the case of a residential burglary where the suspect may have drunk a glass of water at the crime scene, an officer should identify appropriate people, such as household members, for future elimination sample testing. These samples may be needed for comparison with the saliva found on the glass to determine whether the saliva is valuable evidence. In homicide cases, be sure to collect the victim's DNA from the medical examiner at the autopsy, even if the body is badly decomposed. This may serve to identify an unknown victim or distinguish between the victim's DNA and other DNA found at the crime scene.

When investigating rape cases, it may be necessary to collect and analyze the DNA of the victim's recent consensual partners, if any, to eliminate them as potential contributors of DNA suspected to be from the perpetrator. If this is necessary, it is important to approach the victim with extreme sensitivity and provide a full explanation of why the request is being made. When possible, the help of a qualified victim advocate should be enlisted for assistance.

COmbined DNA Index System—CODIS

CODIS (COmbined DNA Index System), an electronic database of DNA profiles that can identify suspects, is similar to the AFIS (Automated Fingerprint Identification System) database. Every State in the Nation is in the process of implementing a DNA index of individuals convicted of certain crimes, such as rape, murder, and child abuse. Upon conviction and sample analysis, perpetrators' DNA profiles are entered into the DNA database. Just as fingerprints found at a crime scene can be run through AFIS in search of a suspect or link to another crime scene, DNA profiles from a crime scene can be entered into CODIS. Therefore, law enforcement officers have the ability to identify possible suspects when no prior suspect existed.

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National Commission on the Future of DNA Evidence

What Every Law Enforcement Officer Should Know About

Mr. ASPLEN. The pamphlet explains the biology of DNA, the CODIS database, contamination, and lists examples of evidence that may contain a perpetrator's DNA. Because the first printing run of 1 million copies was depleted in 5 months, NIJ committed to another 500,000 copies, totaling 1.5 million. The pamphlet was then converted into two interactive CD-ROMs. NIJ is already receiving State requests to provide one to every officer. Our initial supply of CD-ROMs, however, is a limited 124,000 for both.

The tangible benefits of this educational tool, particularly the pamphlet, were quickly made apparent. Within 6 months a rape-homicide was solved directly as a result of that pamphlet. Authorities in Texas investigating the strangulation/rape homicide of a woman sent the cord used to strangle the victim to the laboratory specifically for DNA testing. Now while the cord would have been collected as evidence in the ordinary course of the investigation, this time it was submitted for DNA analysis because one of the investigators read the pamphlet identifying ligatures as potential sources of DNA. After a match to the perpetrator, it was determined that the suspect, in an attempt to avoid capture by DNA, had worn not only a condom but also rubber gloves. However, when struggling with his victim in the process of strangling her, one hand was required to hold her down while the other hand grabbed the cord wrapped around her neck. The only thing left to pull the other end tight enough to kill his victim was his mouth, thereby depositing saliva and thus his DNA on that cord. He was subsequently linked to several other murders.

The pamphlet's success is illustrative of two important points. The first is the tremendous need by law enforcement for these kinds of training materials. When available and economically feasible, law enforcement has taken advantage of educational opportunities. The second, however, is the important role the Federal Government can, and did, play in improving the efficiency and effectiveness of DNA through education.

Now effective DNA database utilization is at its very core all about efficiency. Absent the analysis of a crime scene DNA sample and its comparison to the convicted offender database, crimes are solved in the traditional fashion. Manpower is used to track down leads and establish an array of suspects. Each suspect must be examined and investigated, which uses valuable financial and human resources. The time and money spent on every wrong suspect is time and money wasted when a rapidly analyzed crime scene sample run through the database could potentially solve the case.

Our use of DNA technology only becomes more effective and efficient as we move the point of analysis closer to the time the crime was committed. A crime scene sample that takes 6 months to analyze, and under current circumstances, please understand 6 months is a relatively quick turnaround time, that means six more months of human and financial costs—six more months of time and money tracking down suspects who are the wrong suspects, six more months of innocent people being caught in a web of suspicion that, even if they ultimately are not arrested, carry a life-long stigma by nature of the investigation, and every day crimes are committed by individuals who could be arrested by DNA technology for previous

crimes but are not because of the forensic and convicted offender backlogs and because of the lack of laboratory infrastructure.

Our success at optimizing DNA technology will depend on our commitment to law enforcement and our forensic laboratories. The number of lives we save from victimization will be in direct relation to law enforcement's ability to identify, preserve, and collect the evidence; and our laboratories' ability to quickly analyze that evidence and enter that profile into the DNA database.

Again, I appreciate the opportunity to be here today. I look forward to any questions that you might have.

[The prepared statement of Mr. Asplen follows:]

STATEMENT

OF

CHRISTOPHER H. ASPLEN
EXECUTIVE DIRECTOR, NATIONAL COMMISSION
ON THE FUTURE OF DNA EVIDENCE
NATIONAL INSTITUTE OF JUSTICE
OFFICE OF JUSTICE PROGRAMS

BEFORE THE

SUBCOMMITTEE ON GOVERNMENT EFFICIENCY,
FINANCIAL MANAGEMENT AND INTERGOVERNMENTAL RELATIONS
COMMITTEE ON GOVERNMENT REFORM
U.S. HOUSE OF REPRESENTATIVES

ON

JUNE 12, 2001

Thank you, Mr. Chairman, Congresswoman Schakowsky, and other members of the Subcommittee. My name is Christopher Asplen and I am an Assistant United State's Attorney – currently serving as the Executive Director of the National Commission on the Future of DNA Evidence. I greatly appreciate the opportunity to be here today.

In many respects, how efficient and effective we are at integrating DNA technology into our criminal justice system, has a direct effect on how safe our streets and neighborhoods are, what crimes we solve, and ultimately what crimes we prevent. I look forward to sharing with you a bit of the national perspective as observed by the Commission.

The National Commission on the Future of DNA Evidence was established in 1998 by the Department of Justice and has as its mission the maximization of the value of DNA technology in the criminal justice system. The 22 member Commission included scientists, judges, defense attorneys, prosecutors, law enforcement officers, a victim advocate, and a bio-ethicist. To consider the broad range of issues arising from the use of DNA, the Commission's work was divided among five separate working groups: Postconviction, Legal Issues, Crime Scene Investigation, Laboratory Funding Issues, and Research and Development. Each Working Group consisted of up to 12 people, thereby extending the scope of input into the Commission process to more than 70 experts from various fields.

Law Enforcement Training and Education

One of the clearest impediments to the efficient and effective use of DNA technology in law enforcement's limited training and education regarding how to properly identify, preserve, and collect biological material that may yield a DNA profile of the perpetrator. Significantly limited training resources, sparingly applied to a complex and ever-changing and improving

technology, often results in a failure to take full advantage of the power of DNA. Police departments are often forced to choose, for example, between essentials like bulletproof vests and the education to prevent the contamination of evidence. All too often, important biological evidence is missed or contaminated because first responding officers are not aware of the potential to find DNA on the saliva of a cigarette, the invisible skin cells left on the handle of murdering baseball bat, or the sweatband of a hat.

Recognizing the significance of law enforcement's need in this area, the Commission, through its Crime Scene Working Group, developed a number of training tools to educate first responders, investigators, evidence technicians, and law enforcement executives. The immediate success of and demand for these materials is testament to law enforcement's desire to learn and to take full advantage of DNA.

The first training tool developed by the Commission was the pamphlet, *What Every Law Enforcement Officer Should Know about DNA Evidence.* It explains the biology of DNA, explains the CODIS database, offers suggestions on how to avoid contamination and lists examples of evidence that may contain a perpetrator's DNA. At the Commission's suggestion, NIJ's Office of Science and Technology agreed to produce and distribute one pamphlet for every law enforcement officer in the country, a volume in excess of 770,000 copies. Because the first printing run of one million was depleted in five months, NIJ committed to printing a total of 1.5 million copies.

The tangible benefits of this educational tool were quickly made apparent. Within six months, the Commission was told of a rape homicide solved directly as a result of that pamphlet. In Texas, investigators were looking into the rape homicide of a woman committed by

strangulation. In that particular case, when the investigators collected the cord used to strangle the victim, they sent it to the laboratory specifically for DNA testing. While the cord would certainly have been collected as evidence in the ordinary course of the investigation, this time it was submitted for DNA analysis because one of the investigators read the pamphlet specifically identifying ligatures in strangulation cases as potential sources of DNA. Upon further investigation, and after a DNA match to the perpetrator, it was determined that the suspect, in an attempt to avoid capture through DNA, had worn not only a condom but also rubber gloves. This could have prevented the depositing of DNA in places investigators would ordinarily consider. However, when struggling with his victim in the process of strangling her, one hand was required to hold her down while the other hand grabbed the cord wrapped around her neck. The only thing left to pull the other end tight enough to kill his victim was his mouth. The saliva found on the cord yielded the perpetrator's DNA.

The experience of the Commission's pamphlet is illustrative of two important points. The first is the tremendous need by law enforcement for these kinds of training materials. When available and economically feasible, law enforcement has taken advantage of educational opportunities. The second, however, is the important role the federal government can and did play in improving the efficiency and effectiveness of DNA through education. There is nothing jurisdictionally specific about the science of DNA or where a thoughtful investigator may be able to find it. As such, there is no need for individual state or local jurisdictions to "reinvent the wheel" or to create their own pamphlet and CD ROMs when their overall department budgets clearly do not allow. The Commission's and thus the Department's efforts in this regard provides an excellent example of effective federal, state, and local partnership.

DNA Database Backlogs

Effective DNA database utilization is, at its core, all about efficiency. Absent the analysis of a crime scene DNA sample and its comparison to the Convicted Offender Database, crimes are solved in the traditional fashion. Manpower is used to track down leads and establish an array of suspects. Each suspect must be examined and investigated, which uses valuable financial and human resources. The time and money spent on every wrong suspect is time and money wasted when a rapidly analyzed crime scene sample run through the database could potentially solve the case.

DNA technology and its potential, however, cannot always be harnessed. While all 50 states have passed legislation creating convicted offender databases, in most instances adequate funding was not forthcoming to actually implement those databases. Laboratories, never designed for high-volume testing, were inundated with thousands of samples and little, if any, increase in laboratory capacity. The immediate backlog of collected and uncollected convicted offender samples represent significant unrealized potential.

Similarly, the inability of laboratories to analyze crime scene evidence, such as the rape kits developed from rape examinations, represents a failure to maximize the value of the technology. When the victim of a sexual assault participates in this difficult process, however, it is with the hope and expectation that the examination will result in evidence ultimately identifying the perpetrator. However, a report authorized by the Commission and executed by the Police Executive Research Forum, found that there are over 180,000 rape kits sitting on the storage shelves of police departments and laboratories across the country. All are cases in which our most powerful crime solving technology has not been applied.

Some jurisdictions are working for alternatives to address the backlog problem. To its great credit, New York City has chosen to outsource a large number of its unanalyzed rape kits. With that outsourcing will come the identification and prosecution of many sexual offenders. Because the database links crime scenes not only to offenders, but also to other crime scenes, New York City will also get a clearer picture of the number and nature of its serial offenders. However, we will also get a picture of those crimes that could have been solved sooner through DNA, thus preventing further serial crimes.

Our use of DNA technology only becomes more effective and efficient as we move the point of analysis closer to the time the crime was created. A crime scene sample that takes six months to analyze (under current conditions a relatively quick turn around) means six more months of human and financial cost. Six more months of time and money tracking down suspects who are the wrong suspects. Six more months of innocent people being caught in a web of suspicion that, even if they are not arrested may carry a lifelong stigma. Every day crimes are committed by individuals who could be arrested by DNA technology for previous crimes, but are not because of the forensic or convicted offender backlogs.

The current backlog reduction programs managed by the National Institute of Justice will save thousands of lives. It is an excellent example of effective partnerships between the federal government, state and local jurisdictions, and the private sector. By significantly expediting the entry of DNA data into both the forensic and convicted offender indices, crimes will be solved, in many instances years earlier than they would have been absent federal funds. The clear trend, however, is towards increased database utilization and expanded convicted offender databases. Future efficiency, therefore, will depend on laboratory infrastructure.

Our success at optimizing DNA technology will depend on our commitment to law enforcement and our forensic laboratories. The number of lives we save from victimization will be in direct relation to law enforcement's ability to identify, preserve, and collect the evidence and our laboratories' ability to quickly analyze that evidence and enter the data into the database.

Again, I appreciate the opportunity to be here today and look forward to any questions you might have.

Mr. HORN. Thank you very much.

Our next presenter is the Honorable Michael Lawlor, State Representative, Connecticut General Assembly, who is coming here representing the National Conference of State Legislatures; that is all 50 States.

Mr. LAWLOR. Plus a few Territories, Mr. Chairman.

Mr. HORN. That is correct.

Mr. LAWLOR. Good morning, Mr. Chairman. Thanks to you and Representative Maloney, I know both of you agreed that the NCSL was an appropriate group to have at the table this afternoon, and I appreciate the opportunity on their behalf. Let me just indicate, since, like you, I am an elected official, I represent East Haven and the Short Beach part of Bramford in the Connecticut Legislature and I think they would be happy to hear me say that. But more importantly, I chair the Judiciary Committee in our legislature, and for the past 2 years I have been the chair of the Law and Justice Committee of the National Conference of State Legislatures, which is our policymaking board.

Mr. Chairman, 10 years ago when DNA as an issue in the criminal justice system first emerged on the scene, I think many of my colleagues were nervous about the implications of this new concept. But I think most of the concerns and really most of the philosophical objections to this process have faded away and now we are left with the practical aspects of this. I would like to highlight a few of the statistics that are included in my written testimony. But I would encourage you to take a look at that as well since I really do not have time to get to all of them.

As has already been pointed out, all 50 States since 1994 have required that all convicted sex offenders provide DNA samples to be catalogued. In addition to that, 34 States require persons convicted of many other violent felonies to provide samples; 26 States have a similar requirement for juvenile offenders; 18 States are now on-line with the CODIS system, as I understand it; and just last year 9 States have added a wide variety of new offenses to the list of crimes conviction for which require a sample to be provided. New York, for example, last year went from 21 crimes to 107 crimes.

I think we have already talked about the practical implications of those policy changes. It is extraordinarily expensive and complicated to ensure that, notwithstanding the law requiring it, the system actually does collect those samples and properly catalogues them. In addition, Alaska, Colorado, and Florida have extended the requirement to submit DNA samples to certain probationers, with Colorado and Florida also adding burglary to the list of offenses for which a DNA sample is required. In West Virginia, enactment adds to the list offenses that include extortion, involuntary manslaughter, burglary, counterfeiting, certain larceny and arson crimes. In New Jersey, my colleagues have added homicide, assault, kidnapping, and luring offenses committed by adults or juveniles. California will collect samples from qualifying offenders who are convicted in other States. And Georgia law expanded the list of sex crimes that require a sample. Other States made procedural changes in collection of samples. Among them, measures in Arizona, Colorado, Georgia, and Iowa requiring that samples be col-

lected from qualifying offenders before they are released from custody.

I think every State is in essence heading in that direction. That is the important thing that I wanted to emphasize today. In particular in my State, in Connecticut we have been collecting samples from sex offenders for a long time. We are also blessed with the leadership of Dr. Henry Lee, who has already been mentioned here today, who is the head of our crime lab in Connecticut and is our former commissioner of public safety, and also of O.J. fame. I think everyone knows Dr. Lee. But he has really been the spiritual leader for this concept in Connecticut and he has convinced many skeptical colleagues of mine that this is as important for victims as it is for offenders who may be wrongfully convicted.

Just last year, in fact, with this in mind, Connecticut retroactively extended backward its statute of limitation for sex offenses, reaching back 20 years to the advent of DNA as a technology, to ensure that persons, where these crimes were reported in a timely fashion to the police, if they are apprehended now as a result of a DNA identification, the prosecution can go forward with or without a John Doe warrant. I think that is an important change. And at the same time, in the same bill, Connecticut made it clear that we would no longer have a limitation on a request for a new trial where the basis for that request is new DNA evidence. In other cases there is a 3-year limitation on the time for which people can request a new trial after conviction.

This year Connecticut considered, and our session has just ended, this year we considered extending the requirement of collecting DNA to all convicted felons, which has been discussed here earlier. That, unfortunately, fell by the wayside. It is a tight budget year in Connecticut, as it is in many States, but our fiscal note on that proposal indicated it would cost $552,000 to test just the 4,700 offenders currently incarcerated in our State, and that is a half a million dollars we just did not have to spend. It may not seem like a lot of money to you, but in a tight budget which we are experiencing in our State, and that is Connecticut, the wealthiest State in the Nation, it is actually a problem. So we would welcome some Federal assistance in that regard.

Mr. Chairman, the jurisdiction of this committee is intergovernmental affairs. I think that is a topic that the National Conference of State Legislatures is very concerned about. I want to mention a couple of considerations which I hope you will make as you consider the concepts being discussed today.

First of all, keep in mind that flexibility ought to be the hallmark of any policy change on the Federal level, such as the ones that are being discussed today.

Keep in mind that sex offender statutes, probation, parole, the concept of juvenile all have different meanings in different States. So when persons talk about parole in Connecticut, it is a very, very different concept than when it is being discussed in New York, just for example. In Connecticut, juveniles are persons under the age of 16. But we are one of only three States that treat all 16 year-olds as adults. And when Federal mandates have a one size fits all type mandate, then that does create unanticipated and unintentioned problems around the country. Connecticut, for example, does not

even have county government at all, and many of the proposals here talk about funneling money to the county government level. In many States prison has a different concept. In Connecticut, we have no county jails, we only have a State Department of Corrections. And so mandates, though well-intentioned, sometimes tend to confuse things on the ground level.

I would point out in recent years in juvenile justice reform proposals, in the end, the differences that each State has in designing its criminal justice system have been taken into account. I would only encourage you to do that in this regard.

And finally, I would just like to indicate that there is a very important role the Federal Government can play on this topic, and that is allowing States and localities to come together in national forums to compare best practices, to find out what is working and what is not working in other States as we determine what we should accept in our States.

And just as important as the DNA technology and how to apply it to convicted offenders, the issue of privacy is also important. I think that has really been the frustrating factor for many State legislatures is we want to make the criminal justice change but we are nervous about other ways that this information could be misused, for example, and concerns that people bring forward kind of stops some of that legislation dead in its tracks. If we could meet on a national basis with Federal, State, and local policymakers and discuss ways that we could enact appropriate safeguards, I think that would open the door to the kind of widespread collection of DNA samples that have been discussed here today.

I think the partnership we have forged in recent years can work effectively, and I look forward to helping in that regard in any way I can or the NCSL can. Thank you very much.

[The prepared statement of Mr. Lawlor follows:]

NATIONAL CONFERENCE *of* STATE LEGISLATURES

The Forum for America's Ideas
WASHINGTON OFFICE: 444 NORTH CAPITOL STREET, NW SUITE 515
WASHINGTON, DC 20001
202/624-5400; 202/737-1069 FAX

STATEMENT OF

THE HONORABLE MIKE LAWLOR
CHAIR, JUDICIARY COMMITTEE
CONNECTICUT HOUSE OF REPRESENTATIVES

ON BEHALF OF THE
NATIONAL CONFERENCE OF STATE LEGISLATURES
REGARDING DNA TESTING IN THE STATES
BEFORE THE

SUBCOMMITTEE ON GOVERNMENT EFFICIENCY, FINANCIAL MANAGEMENT AND INTERGOVERNMENTAL RELATIONS
OF THE
U.S. HOUSE COMMITTEE ON GOVERNMENT REFORM

June 12, 2001

Statement of Mike Lawlor
Chair, House Judiciary Committee
Connecticut General Assembly
On behalf of the National Conference of State Legislatures

June 12, 2001

My name is Mike Lawlor and I serve as the Chair of the Law and Justice Committee of the Assembly on Federal Issues, the policy-making body of the National Conference of State Legislatures. I am here today representing NCSL. I would first like to thank the Chair of this Committee, Representative Horn and additionally Representative Maloney for inviting me here today to speak to DNA testing in the states. My testimony this morning will address in broad terms the many state legislative activities in the area of DNA collection, and the limitations faced by the states in the use of this DNA to its fullest crime-solving potential. DNA as a resource for solving crimes is invaluable. State legislatures have responded and reinforced this point by enacting legislation requiring DNA testing in certain cases. All fifty states have enacted statutes requiring the collection of DNA from persons convicted of sex crimes. Thirty-four states require the collection of DNA for other serious offenses in addition to sex crimes. Twenty-six states have passed laws requiring the collection of DNA from juvenile

offenders. Eighteen states are connected with the FBI's Combined DNA Index System. Last year, at least nine states amended their DNA collection statutes to include more crimes. For example, New York has expanded its database from 21 to 107 crimes for which offenders must provide a DNA sample. Alaska, Colorado and Florida extended the requirement to submit a DNA sample to certain probationers, with Colorado and Florida measures also adding burglary to the list of offenses for which a DNA sample is required. A West Virginia enactment adds offenses that include extortion, involuntary manslaughter, burglary, counterfeiting, and certain larceny and arson crimes to those that require a DNA sample from offenders. New Jersey lawmakers added certain homicide, assault, kidnapping and luring offenses committed by adults or juveniles. California will collect samples from qualifying offenders who were convicted in another state, and Georgia law expanded the list of sex crimes that require a sample. Other states made procedural changes in collection of samples. Among them, measures in Arizona, Colorado, Georgia and Iowa require that samples be collected from qualifying offenders before they are released from custody.

In my state, Connecticut, we have required the collection of DNA samples from convicted sex offenders since 1994. Just last year we retroactively extended the statute of limitations for sexual assault, reaching back 20 years to include reported rape cases solved by DNA. In that same bill we eliminated the 3 year

limitation on Petitions for New Trial based on DNA evidence. This year a bill requiring collection of DNA samples from all convicted violent offenders emerged from committee, but was allowed to die when the budget could not be amended to include $552,000 for four new analysts and equipment to process the approximately 4,700 samples from convicted offenders. The fact is that no state currently has the means to test all relevant offenders or to process all victims' samples in a timely manner.

Connecticut also created a Commission of the Death Penalty this year, which will, examine the procedures, including DNA testing in place to insure that innocent persons are not executed in our state. The fact of the matter is that state crime labs are set up to process crime-scene evidence. The task of profiling DNA samples is one which requires different equipment, technology and training. There is no question that all levels of government -- federal, state and local are on the same page with respect to policy. For the states, one problem lies in the implementation process. For example, Louisiana enacted legislation in 1997 that requires DNA samples to be taken from individuals arrested for sex crimes and other serious felonies. The Louisiana legislature, however, delayed the effective date of this law until such time as it could properly fund and equip a state crime lab

to handle the unique requirements of DNA testing and analysis.[1] Other states, like Arizona, have developed a staggered implementation process to permit their infrastructure to "catch up" with their policy. In addition, as more states increase the list of offenses for which DNA must be collected, state facilities simply cannot keep up with the demand for testing and analysis. This, in turn, forces state lawmakers to pause before pushing for enhanced DNA testing. This dilemma has presented itself in New York, where there have been recommendations made to expand the state's database by including more crimes, but the fact remains that the labs cannot handle the additional workload.

States have not turned a blind eye to this problem, but are looking toward traditional and creative solutions. For example, last year California, Florida, Minnesota, New York, Pennsylvania, Texas, and Washington received funding of more than $7 million from the U.S. Department of Justice for DNA sample analysis. This funding permitted approximately 150,000 samples to be analyzed and entered into the state system. Pennsylvania has allocated an extra $1.4 million in state funding for additional lab space and is weighing the feasibility of purchasing robotic lab equipment to enhance processing. Some states, like Ohio as well as some larger localities, like New York City are turning to public-private

[1] It should be noted that taking DNA samples from arrestees is not the current trend in the states and may in fact raise privacy issues beyond the scope of this hearing. The Louisiana statute is used as an example in this testimony to show the lag between state policy-making and implementation due to infrastructure deficiencies.

partnerships in which the state contracts with a private lab with DNA profiling capabilities to reduce the state DNA database backlog.

There are also two new federal initiatives in place this year that will help the states deal with the growth in the use of DNA samples to solve crimes. The 106th Congress passed two helpful pieces of legislation toward the end of last year. The first was the DNA Analysis Backlog Elimination Act of 2000. This new program provides $170 million to states for the purpose of conducting DNA sampling and reducing state databank backlogs. The second piece of federal legislation was the Paul Coverdell National Forensic Sciences Improvement Act of 2000. This Act provides $738 million in grants to states over six years to improve the state crime lab facilities and to provide for equipment, supplies, accreditation, personnel, training, and education. Both of these bills will help states cope with increasing reliance upon DNA in the area of criminal justice.

Congress, has however, attempted to tie these vital grant programs to another piece of legislation – the Innocence Protection Act (H.R. 912/S. 486). This legislation requires that states enact specific statutes pertaining to the availability, use, and preservation of DNA in the post-conviction context. Although that legislation is outside the jurisdiction of this subcommittee, it is relevant to our discussion today because H.R. 912 and S. 486 endeavor to tie the receipt of the federal funds under the DNA Analysis Backlog Elimination Act of 2000 and the Paul Coverdell

National Forensic Sciences Improvement Act of 2000 to meeting the federally mandated one-size-fits-all requirements of H.R. 912. In other words, all that has been gained under the two vitally important grant bills will be lost if states are forced to comply with the terms contained in H.R. 912, because until a state comes into compliance with the latter, funding under the former will be cut off. Tying the two grant bills to the mandates of H.R. 912 may force some states to simply not apply for the federal funding rather than attempt compliance with what may be for some states, overly burdensome federal mandates.

Finally, every state policy maker would welcome federal assistance in developing privacy protections for DNA data banks. Victims and offenders alike have expressed concerns in this regard and no state has developed an adequate protection for misuse of data. Federal funding which will facilitate exchanges between policy makers and privacy experts would be an appropriate form of assistance. We know that several states are leaders in the development of best practices in this regard and we would all benefit from a timely exchange if ideas.

To conclude, all levels of government must work together to bring the status of our country's DNA databanks up to speed. Funding is a key part of this effort. Through programs like the DNA Analysis Backlog Elimination Act of 2000 and the Paul Coverdell National Forensic Sciences Improvement Act of 2000, states can move toward a more efficient and streamlined DNA analysis process. Thank

you for your time this morning. I would be happy to answer any questions from the subcommittee.

Mr. HORN. Thank you very much for coming.

We now move to Keith Kenneth Coonrod. He is Chair of the Consortium of Forensic Science Organizations, New York State Police Forensic Investigation Center. I take it you are director of toxicology, drug chemistry, trace and breath testing in the Forensic Laboratory System. The Consortium of Forensic Science Organizations comprises seven leading forensic organizations. You might want to spell those out. So, we are glad to have you here. You have a lot of authority and academic recognition.

Mr. COONROD. Good morning, Mr. Chairman and members of the subcommittee. I would like to thank the subcommittee for this opportunity to provide testimony here today regarding the role of State and local crime laboratories and how they interact with the Federal Government.

My name is Keith Coonrod, I am currently employed by the New York State Police as Director of Toxicology, Drug Chemistry, Trace and Breath Testing in the Forensic Laboratory System; and I am here as the Chair of the Consortium of Forensic Science Organizations which is comprised of seven leading forensic organizations, which include: The American Society of Crime Laboratory Directors [ASCLD], which represents over 400 crime laboratory managers and directors from local, State, and Federal crime laboratories, and I am currently President of this organization; the American Society of Crime Laboratory Directors/Laboratory Accreditation Board [ASCLD/LAB], which is the accrediting body for forensic crime laboratories for which I am currently an ex officio member of the Board of Directors and have been team captain responsible for many inspections of laboratories undergoing the accreditation process; the International Association for Identification [IAI], which is the oldest and largest forensic identification association in the world; the American Academy of Forensic Sciences [AAFS], which is a professional organization representing numerous forensic specialties such as: criminalistics, engineering sciences, jurisprudence, odontology, pathology and biology, physical anthropology, psychiatry and behavioral sciences, questioned documents, toxicology, and a multi-disciplinary general section; the National Association of Medical Examiners [NAME], which represents medical examiners, coroners, and other physicians who conduct death investigations; the National Forensic Science Technology Center [NFSTC], which is dedicated to assisting forensic science facilities to achieve the highest quality of operations; and finally, the National Center for Forensic Science [NCFS], which provides research, education, training, tools and technology to meet the needs of forensic science, investigative, and criminal justice agencies.

While the public thinks of forensics as DNA, it is essential that the committee understand that this is just one of the many tools available to the criminal justice community by our forensic laboratories. Although DNA is indeed an important discipline, forensic science is broadly defined as "the examination of all evidence submitted by criminal justice agencies to forensic laboratories for the purpose of determining how that evidence pertains to the law and/or the courts."

Forensic laboratories support the criminal justice community by offering services in clandestine laboratory investigations, explosives

analysis, controlled substance analysis, firearms examinations, alcohol analysis, tool mark examinations, toxicology, impression evidence, arson analysis, trace evidence examinations, death investigations, digital evidence, physical match, crime scene investigations, training, as well as biological examinations, including DNA.

While over 90 percent of all forensic examinations are conducted by local and State crime laboratories in the United States, it is important that local, State, and Federal laboratories maintain a close working relationship with one another. There is no single local, State, or Federal laboratory that can possibly meet the vast needs of the criminal justice community. Currently, there exists a close working relationship between the Nation's local and State laboratories and the various Federal laboratories. Let me provide you with just a few examples.

The DEA laboratory provides a training course for new forensic drug chemists from local and State crime laboratories. This supplemental training provides valuable information as well as advanced technical information gathered from DEA laboratories. The DEA also provides assistance to local and State laboratories in many other drug related issues, such as clandestine laboratory seizure training, awareness in newly encountered drugs, and technical support in cases involving drugs rarely encountered or analyzed.

The New York State Police Laboratory recently sponsored a Northeast Regional Quality Assurance Seminar with assistance from the FBI Laboratory. Attendees from Maine to New Jersey enrolled in this course which was designed to assist non-accredited laboratories with the identification and implementation of numerous quality principles and practices. The classes were held at the New York State Police Forensic Investigation Center, and taught by instructors from New York State Police as well as FBI and instructors from other organizations.

With local and State laboratories providing the backbone of forensic analysis for our Nation's criminal justice community, insufficient resources are available to these laboratories to meet demands. These laboratories must focus their limited resources on examination of cases versus extended training or research and development of new technologies critically needed by the forensic community. While Federal laboratories play a major role in providing valuable assistance in areas such as extended training, research and development, it remains the mission of our Nation's local and State laboratories to support the needs of the criminal justice agencies.

Finally, Mr. Chairman, I would like to thank the members of the committee for passing the Paul Coverdale National Forensic Science Improvement Act. What I have tried to bring out to this committee is the importance of, as Mr. Scheck said, a very broad support. As I have said, forensic science is made up of not only DNA, but of many other sections. For instance, our laboratory, I am in charge of the Trace Section, evidence that we see today did not exist 5 years ago for potential DNA analysis. Today, we get in bags of vacuum cleaner bags and which we are being asked to look for a particular hair that might be one of thousands of hairs to determine if it is probative for subsequent DNA analysis, and this is being done by the Trace Section.

So the point that I would like to make to this committee is the importance of broad support of forensics to all disciplines, not just DNA, because DNA affects the complete laboratory which is made up of multiple disciplines.

As you know, we are working toward appropriating the law this year, and appreciate your support in this matter. Again, Mr. Chairman, thank you for the opportunity to testify before the committee, and I look forward to your questions.

[The prepared statement of Mr. Coonrod follows:]

Statement
of
Keith Kenneth Coonrod
Chair of the Consortium of Forensic Science Organizations
Before the
Subcommittee on Government Efficiency, Financial Management and Intergovernmental Relations
On
June 12, 2001

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- the American Society of Crime Laboratory Directors (ASCLD) which represents over 400 crime laboratory managers and directors from local, state and federal crime laboratories - I am currently President of this organization;
- the American Society of Crime Laboratory Directors/Laboratory Accreditation Board (ASCLD/LAB) which is the accrediting body for forensic crime laboratories for which I am currently an ex-officio member of the Board of Directors and have been Team Captain responsible for many inspections of laboratories undergoing the accreditation process;
- the International Association for Identification (IAI) which is the oldest and largest forensic identification association in the world;
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- the National Association of Medical Examiners (NAME) which represents medical examiners, coroners and other physicians who conduct death investigations;
- the National Forensic Science Technology Center (NFSTC) which is dedicated to assisting forensic science facilities to achieve the highest quality of operations; and
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Forensic laboratories support the criminal justice community by offering services in Clandestine Laboratory Investigations, Explosive Analysis, Controlled Substance Analysis, Firearms Examinations, Alcohol Analysis, Toolmark Examinations, Toxicology, Impression Evidence, Arson Analysis, Trace Evidence Examinations, Death Investigations, Digital Evidence, Physical Match, Crime Scene Investigations, Training as well as Biological Examinations including DNA.

While over 90% of all forensic examinations are conducted by local and state crime laboratories in the United States, it is important that local, state and federal laboratories maintain a close working relationship with one another. There is no one single local, state or federal laboratory that can possibly meet the vast needs of the criminal justice community. Currently, there exists a close working relationship between the nations local and state laboratories and the various federal laboratories. Let me provide you with just a few examples. The DEA laboratory provides a training course for new forensic drug chemists from local and state crime laboratories. This supplemental training provides valuable information as well as advanced technical information gathered from DEA laboratories. In addition, the DEA provides assistance to local and state laboratories in many other drug related issues such as clandestine laboratory seizure training, awareness of newly encountered drugs and technical support in cases involving drugs rarely encountered or analyzed. The New York State Police Laboratory recently sponsored a Northeast Regional Quality Assurance Seminar with assistance from the FBI Laboratory. Attendees from Maine to New Jersey enrolled in this course which was designed to assist non-accredited laboratories with the identification and implementation of numerous quality principles and practices. The class was held at the New York State Police Forensic Investigation Center and taught by instructors from the NYSP, FBI, as well as instructors from other organizations.

With local and state laboratories providing the backbone of forensic analysis for our nations criminal justice community, insufficient resources are available to these laboratories to meet demands. These laboratories must focus their limited resources on examination of cases versus extended training or research and development of new technologies critically needed by the forensic community. While federal laboratories play a major role in providing valuable assistance in areas such as extended training and research and development, it should remain the mission of our nations local and state laboratories to support the needs of their criminal justice agencies.

Finally, Mr. Chairman I would like to thank the Members of the Committee for passing the "Paul Coverdell Forensic Science Improvement Act" last year. As you know

we are working toward appropriating that law this year and appreciate your support on this matter.

Again, Mr. Chairman thank you for the opportunity to testify before the Committee and I look forward to your questions.

Mr. HORN. Thank you very much. That is very helpful because I do want to get in to that, with Mrs. Maloney, in terms of the forensics and the laboratories that you have seen.

We will now go to Dr. Jamie Downs, the director and chief medical examiner of the Alabama Department of Forensic Science.

Dr. Downs, glad to have you here.

Dr. DOWNS. Thank you, Chairman Horn and distinguished committee members, for the privilege of coming before you today. As director of one of the few fully integrated Forensic Laboratory-Medical Examiner systems in our country, and as a practicing Forensic Pathologist myself, I hope to bring to you a perspective from the State and local level on the status of our Nation's forensic laboratory systems.

An ideal forensic laboratory requires three things: objectivity, competent and dedicated employees, and resources.

The creation of Alabama's forensic system was tied, in large part, to a tragic miscarriage of justice related to evidence—DNA evidence. The 1931 cases of nine young Black men, known as the Scottsboro Boys, who were unjustly convicted of rape, pointed out the absence of a competent and impartial forensic agency within our State. In 1935, Alabama's Legislature changed that by creating our department to serve as independent and unbiased scientists charged with the collection and analysis of scientific evidence. Our scientists are certified as peace officers and have the power to enter any crime scene in the State for the purpose of securing evidence. All reports of our investigations, both on the scene and in the lab, are public record. These reports clearly indicate factual results and scientific expert options based on those results.

If I could, allow me to walk you through a typical homicide case recently broadcast on television. I have submitted a copy for introduction into the record, if that is acceptable.

In May 1994, the badly beaten body of an 85 year-old woman was found floating in a pond. Her elderly son was the suspect. At the scene, our department recovered a cigarette butt. The evidence was taken to our DNA section and later proved to have the son's DNA on the surface. At trial, the defense challenged the evidence, questioning how it had been collected, stored, transported, and analyzed. Because this case had been handled properly, there was no difficulty in chain of evidence or in having the criminalistics expertise on hand for pre-trail and courtroom presentation. Because I had found that cigarette butt at the scene and personally transported it to the lab, I was able to not only testify as to the handling of the evidence, but also to produce on the stand a scene photograph of the evidence. The successful prosecution of this case hinged on that cigarette butt. That was possible because the local laboratory had done its job.

This story is not unique, it happens every day in medical examiner and forensic laboratories across our country. It happens because good people who care do their jobs. On the whole, you will find no finer group of employees than our Nation's forensics personnel.

Our difficulty then is not with a question of neutrality or ability, rather it has been a question of resources—more accurately, a lack of resources. My parents taught me a long time ago you get what

you pay for. If you want quality, you have to be prepared to pay for it. In the business world, income must meet expenses in order to make ends meet. We have to make ends meet in the realm of forensic sciences and we can only adjust three things: quantity, quality, and timeliness. Quantity of evidence is beyond our control. Cases are made based on evidence coming in and being analyzed. Quality is not on the table. One does not strive for mediocrity in any area, particularly when someone's life literally hangs in the balance. That leaves only timeliness. We work as many cases as quickly as we can, but our caseload has grown while our budgets have stayed level. The result is staggeringly large backlogs, delays in issuing the reports—6 months in drug cases, 12 months in toxicology, 21 months in DNA.

Competent, complete, and timely analysis of forensic evidence is expensive, very expensive. My department's annual budget is approximately $15.5 million for some 80,000 cases, or about $195 per case. In the area of DNA analysis, our agency spends approximately $140 per DNA sample analyzed, about $25 for each CODIS database sample, and over $135,000 for each cold CODIS hit. Is it worth it? Mrs. Smith spoke to that issue. I cannot answer the question except to say that for a victim or their family the answer would be obvious.

Consider, if you would, the plight of a father who came to me recently to ask if evidence in the rape of his 12 year-old daughter had shown who had violated his little girl. Imagine his surprise when I told him that the 6-months he had already been waiting was really not all that long, since the average wait time in Alabama was almost 2 years for DNA analysis. Consider if, for purely financial reasons, we had to limit the number of samples our lab could process in a case. In this 12 year-olds rape, two pair of panties had been recovered. Suppose we only could look at one. I hope we get the right one.

This case points out the importance of skilled crime lab analysts available locally to screen and process evidence in order to maximize the value of what evidence is collected at the crime scene. Good scene work is the evidence of all forensic sciences and all medical examiner work, including, but not limited to, DNA evidence. If we learned nothing else from the case of the people v. O.J. Simpson, we learned that the existence of evidence alone is not sufficient. All evidence must be collected, stored, and analyzed competently, expeditiously, and impartially if our court system is to work as designed—that is, to ensure justice.

We must recognize and accept the old adage that one cannot be all things to all people. Federal support should be directed at complimenting rather than supplanting the State and local forensic efforts. Crime scene work is best handled on a local basis. If we are to ensure that the public, law enforcement, district attorneys, defense attorneys, judges, and the courts have fair access to the truth, we must strive for sufficient resources at the State and particularly the local level to provide personnel, facilities, and equipment.

Now, rarely, there are needs for highly specialized tests. A system should not be inverted to work to the rarity, but should maximize services provided to the most people. We must first ensure

that the local and State forensic laboratory has the ability to meet the needs of the population served. In an area of limited resources, we must target available funds where they will do the most good. Put that another way, if 99 out of 100 forensic cases are delayed due to the inability to perform toxicology analysis and 1 out of 100 is due to the lack of DNA infrastructure, then we should address the greater need first. Put the money where it will do the most good for the most people.

The recently passed Paul Coverdale National Forensic Sciences Improvement Act directs significant Federal assistance to State and local crime labs but is as yet unfunded. The real strength of this law is that it requires States to formally adopt a plan to deal with local and Statewide forensic and medical examiner issues as a condition of receiving funding. For the first time States will have to implement a plan to deal with all involved interests within a State. Now that is a reform that creates efficiency in government.

I humbly suggest we not stop there. I believe a National Commission on the Future of Forensic Laboratories should be established. Said commission should allow representatives of local, State, and Federal crime lab and medical examiner communities to come together with various nationally recognized independent scientific authorities, the judiciary community, district attorneys, defense bar, and investigating agencies. This would allow the various States and concerned Federal entities to create a broad vision for the future of all forensic laboratory and medical examiner concerns nationwide. In working together, we can successfully complete the fundamental mission of all crime laboratories and medical examiners.

My department's mission statement is simple: To strive for excellence in all endeavors; to seek to serve as stewards of the public trust; to find the truth, whatever that might be; and not to yield to forces which would attempt to compromise the former. To strive, to seek, to find, and not to yield. With full funding for the Coverdale Act and the DNA Backlog Elimination Act of 2000, a lack of resources will continue injustice through continuing delays in evidence analysis. We have the desire. We have the ability. We lack the resources. The Nation's crime labs are literally drowning in a sea of DNA and all other types of evidence. We ask for your help before we go under for the final time. Thank you very much for your attention on this important matter.

[The prepared statement of Dr. Downs follows:]

U.S. House of Representatives
Government Reform Committee
Government Efficiency, Financial Management, and Intergovernmental Relations Subcommittee Hearing,
Washington DC, 12 June 2001
"How Effectively Are State and Federal Agencies Working Together To Implement the Use of Newly Developed DNA Technologies?"

Testimony of
Dr. Jamie Downs
Director/Chief Medical Examiner
Department of Forensic Sciences, State of Alabama

Thank you Chairman Horn and distinguished committee members for the privilege of coming before you today. As the Director of one of the few fully integrated Forensic Laboratory-Medical Examiner systems in the country, and as a practicing Forensic Pathologist myself, I hope to bring you a perspective from the state and local level on the status of our nation's forensic laboratory systems.

An ideal forensic laboratory requires three things: objectivity, competent and dedicated employees, and resources.

The Alabama Department of Forensic Sciences is an independent agency within the Executive branch. The Director is appointed by the state Attorney General. Our department has been independent since its inception. The creation of Alabama's forensic system was tied, in large part, to a tragic miscarriage of justice related to evidence – biological (DNA) evidence. The 1931 cases of nine young Black men (known as "the Scottsboro Boys") who were unjustly convicted of rape, pointed out the absence of a competent impartial forensic agency within the state. In 1935, Alabama's legislature changed that by creating our department to serve as independent and unbiased scientists charged with the collection and analysis of scientific evidence. Our scientists are certified as peace officers and have the power to enter any crime scene for the purpose of securing evidence. All reports of our investigations, both on the scene and in the lab, are public record. Departmental reports of analyses clearly indicate factual results and scientific expert opinions based on those results.

Allow me to walk you through a typical homicide case, recently broadcast on television (a copy of which is submitted for the record). In May of 1994, the badly beaten body of an 85 year-old woman was found floating in a pond. Her elderly son was the suspect. At the scene, we recovered a cigarette butt. The evidence was taken to our DNA section and later proved to have the son's DNA on the surface. At trial, the defense challenged the evidence – questioning how it had been collected, stored, transported, and analyzed. Because this case had been handled properly, there was no difficulty in chain of evidence or in having the criminalistics expertise on-hand for pre-trial and courtroom presentation. Because I had found that cigarette at the scene and personally transported it to the lab, I

was able to not only testify as to the handling of the evidence but to produce the scene photograph on the stand. The successful prosecution of this case hinged on that cigarette butt. That was possible because the local laboratory had done its job. This story is not unique, it happens every day in medical examiner and forensic laboratories nationwide. It happens because good people who care do their jobs. On the whole, you will find no finer group of employees than our nations forensics personnel.

Our difficulty then, has not been with a question of neutrality or of ability, rather it has been a question of resources, more accurately lack of resources. My parents taught me a long time ago that you get what you pay for – if you want quality, you must be prepared to pay for it. In the business world, income must meet expenses in order to remain financially solvent. To make ends meet in the realm of forensic sciences, we could only adjust three factors: quantity, quality, and timeliness. Quantity is beyond our control – in order to make criminal cases, evidence must be collected and analyzed. Quality is not on the table – one does not strive for mediocrity in any area, particularly when someone's life literally hangs in the balance. That leaves timeliness – we work as many cases as quickly as we can, but our caseload has grown while our funding has stayed level. The result is staggeringly large backlogs, delays in issuing scientific analyses: 6 months in drug cases, 12 months in toxicology, and 21 months in DNA.

Competent, complete, and timely analyses of forensic evidence are expensive. Very expensive. My department's annual budget is $15.6 million for some 80,000 cases, or $195 per case. In the area of DNA analysis, our agency spends approximately $140.00 per DNA sample analyzed, about $25.00 per CODIS database sample, and over $135,000.00 for each cold CODIS hit. Is it worth it? I cannot answer that question, except to say that to a victim or their family, the answer would be obvious.

Consider the plight of a father who came to me recently to ask if the evidence in the rape of his 12 year-old daughter had shown who had violated his little girl. Imagine his surprise when I had to inform him that the 6 months he had already been waiting was not all that long, since the average wait time in Alabama was almost 2 years for DNA analysis. Consider if, for purely financial reasons, we had had to limit the number of samples our lab could process in a case. In this 12 year-old's rape, 2 pair of panties had been recovered. Suppose we could only look at one – hope we get the right one.

This case then points to the importance of skilled crime lab analysts available locally to screen and process evidence in order to maximize the value of what evidence is collected at the crime scene. Good scene investigation is the cornerstone of all forensic sciences and medical examiner work, including but not limited to DNA evidence. *If we learned nothing from the People versus O.J.Simpson, we learned that the existence of evidence alone is not sufficient.* All evidence must be collected, stored, and analyzed competently, expeditiously, and impartially if our court system is to work as designed – that is to ensure justice.

We must recognize and accept that old adage – "one cannot be all things to all people." Federal support should be directed at complimenting, rather than supplanting, the state

and local forensic efforts. Crime scene work is best handled on a local basis. If we are to ensure that the public, law enforcement, district attorneys, defense attorneys, judges, and the courts have fair access to the truth, we must strive for sufficient resources at the state and particularly the local level, to provide personnel, facilities, and equipment. Rarely, there are needs for additional, highly specialized tests. A system should not be inverted to work to the rarity but should maximize services provided to the most people. One must ensure that the local or state forensic laboratory has the ability to meet the needs of the population served.

In an era of limited resources, we must target the available funds where they will do the most good. Put another way, if 99 out of 100 forensic cases are delayed due to inability to perform toxicology analyses and only 1 in 100 due to lack of DNA infrastructure, then one should address the greater need first. Put the money where it will do the most good for the most people. The recently passed Paul Coverdell National Forensic Sciences Improvement Act (PL 106-561) directs significant federal assistance to state and local crime labs but is, as yet, unfunded. The real strength of this law is that it requires states to formally adopt a plan to deal with local and statewide forensic and medical examiner issues as a condition of receiving funding. For the first time, the states will have to implement a plan to deal with all the involved interests within the state. Now that is a reform that creates efficiency in government.

I humbly suggest that we not stop there. I believe a National Commission on the Future of Forensic Laboratories should be established. Said commission should allow representatives of the local, state, and federal crime lab and medical examiner communities to come together with various nationally recognized independent scientific authorities, the judiciary community, district attorneys, defense bar, and investigating agencies. This would allow the various states and concerned federal entities to create a broad vision for the future of all forensic laboratory and medical examiner concerns nationwide. In working together, we can successfully complete the fundamental mission of all crime labs and medical examiners.

Our department's mission statement is simple:

To strive for excellence in all endeavors,
to seek to serve as stewards of the public trust,
to find the truth – whatever that might be,
and not to yield to forces which would attempt to compromise the former.

To strive, to seek, to find, and not to yield.

With full funding for the Coverdell Act and the DNA Backlog Elimination Act of 2000, a lack of resources will not create injustice through continued delays in evidence analysis.

We have the desire. We have the ability. We lack the resources. The nation's crime labs are literally drowning in a sea of evidence. Local and state crime labs and medical examiners need your help to keep us from going under for the last time.

Thank you for your interest in this most urgent and important issue.

Mr. HORN. Thank you very much. That is very helpful. And I will get back to your proposal on a National Commission on the Future of Forensic Laboratories when we go to the questioning.

We now have Mr. Robert S. Conley. He is chairman of the American Society of Crime Laboratory Directors and the Laboratory Accreditation Board, and he is also Director of the Indiana State Police Laboratory System.

Mr. Conley, welcome.

Mr. CONLEY. Thank you and good morning. I am speaking to you this morning as the chairman of the American Society of Crime Laboratory Directors, Laboratory Accreditation Board [ASCLD/LAB].

Our accreditation program was initiated by the American Society of Crime Lab Directors. The first accreditation occurred in 1982. In 1984 the Laboratory Accreditation Board, by plan, became independent of ASCLD, assuring autonomy in the management of the accreditation process.

During the program's first 14 years, 131 laboratories were accredited. During the last 5 years, 83 additional labs have become accredited, bringing the total to 214. Of these, 199 are within the United States. At this time there are 21 applications pending from new laboratories entering the program, and 15 more applications are anticipated by the end of the year. At year's end, we hope to have approximately 235 laboratories accredited. There are, however, over 200 labs still not accredited.

I would like to briefly characterize the ASCLD/LAB accreditation program this morning. An accredited laboratory must use internally validated written procedures, maintain training programs in each functional discipline, and competency test new employees before they perform casework. Reports are subject to systematic technical review to assure that findings and conclusions are supported by case file documentation. Scientists are subject to educational standards and they must participate in a proficiency testing program. The Accreditation Board monitors the laboratory's proficiency test performance. The security of the laboratory and the integrity of evidence under its control must be demonstrated, precluding its contamination or deleterious change. An accredited laboratory must have a functional quality system that ensures appropriate corrective actions remediate any deficiency identified by proficiency testing, casework review, audits, or any other means.

These requirements and a host of others are verified by a stringent external audit conducted by trained inspectors who are currently employed in accredited laboratories. A laboratory must audit and report its continuing compliance with the program standards. The Accreditation Board reserves the right to inspect a laboratory upon an indication of noncompliance. It has a procedure to consider evidence of noncompliance and to impose sanctions, including the revocation of accreditation.

Regarding DNA specifically, ASCLD/LAB has historically supported the will of Congress to assure the quality of DNA analysis performed in accredited laboratories. Upon passage of the DNA Identification Act of 1994, our program standards were modified to incorporate the requirement to comply with guidelines developed by the Technical Working Group for DNA Analysis [TWGDAM].

Upon publication of the Quality Assurance Standards for Forensic DNA Testing, those standards were incorporated in place of the TWGDAM guidelines. Additionally, the board entered into a Memorandum of Understanding with the FBI laboratory to conduct an approved audit of the Quality Assurance Standards to document each accredited lab's compliance with the congressional intent to ensure the integrity of the forensic analysis of DNA and the Combined Offender DNA Indexing System.

In closing this morning, I feel I must comment on the funding matter. As you can imagine, with the increased reliance on forensic science by the criminal justice community, we have received an influx of new applications and an increased obligation to periodically inspect accredited laboratories; coupled with the board's intention to attain recognition as an international standards organization accrediting body, the board is at a crossroads financially. While we recognize that the Paul Coverdale National Forensic Sciences Improvement Act requires grant recipients to be accredited or to prepare and apply for accreditation, that act is not funded. Laboratory budgets remain insufficient to meet criminal justice needs. We therefore believe that the act should not only be funded, but should include funds to be set aside supporting the accreditation process in addition to the operation of the laboratories.

Mr. Chairman, this morning I would like to submit a copy of our accreditation manual for the expressed purpose of a review by the committee. I will remain available to answer any of your questions pursuant to that review. Thank you.

[NOTE.—The publication of the American Society of Crime Laboratory Directors entitled, "Laboratory Accreditation Board Manual," may be found in subcommittee files.]

[The prepared statement of Mr. Conley follows:]

Statement
Of
Robert S. Conley
Chairman, ASCLD/LAB
And
Director of the Indiana State Police Laboratory System
Before the
Subcommittee on Government Efficiency,
Financial Management and Intergovernmental Relations
On
June 12th, 2001

Good morning, I am Robert Conley, Director of the Indiana State Police Laboratory System. I am speaking to you this morning as the Chairman of the American Society of Crime Laboratory Directors, Laboratory Accreditation Board, commonly referred to as ASCLD/LAB©.

Our accreditation program was initiated by the American Society of Crime Lab Directors. The first accreditation occurred in 1982. In 1984 the Laboratory Accreditation Board, by plan, became independent of ASCLD, assuring autonomy in the management of the accreditation process.

During the program's first fourteen years, one hundred, thirty-one (131) laboratories were accredited. During the last five years, eighty-three (83) additional labs have become accredited, bringing the total number to two hundred fourteen (214). Of these, one hundred, ninty-nine (199) are within the United States. At this time there are twenty-one applications from new labs entering the program and fifteen more applications are anticipated by the end of the year. By the end of this year we hope to have two hundred, thirty-five (235) laboratories accredited. There are, however, over two hundred (200) labs still not accredited.

I would like to briefly characterize the ASCLD/LAB© accreditation program. An accredited laboratory must use internally validated written procedures, maintain training programs in each functional discipline, and competency test new employees before they perform casework. Reports are subject to systematic technical review to assure that findings and conclusions are supported by case file documentation. Scientists are subject to educational standards and they must participate in a proficiency-testing program. The Accreditation Board monitors the laboratory's proficiency test performance. The security of the laboratory and the integrity of evidence under its control must be demonstrated, precluding its contamination or deleterious change. An accredited laboratory must have a functional Quality System that ensures appropriate corrective actions remediate any deficiency identified by proficiency testing, casework review, audits or any other means.

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Mr. Chairman, I wish to submit a copy of our accreditation manual for the expressed purpose of a review by this committee. I will remain available to answer any questions pursuant to your review.
END OF STATEMENT

Mr. HORN. Thank you very much. That document will be put in the record at this point, without objection. I think that would be very helpful to a lot of people who would want to study that manual that you have just presented.

We now have the last presenter, Mr. Kevin L. Lothridge. He is deputy director, director of strategic development of the National Forensic Science Technology Center. We are glad to have you here.

Mr. LOTHRIDGE. Great. Good afternoon, Chairman Horn, and members of the subcommittee. I am pleased to have this opportunity to discuss with you my organization's role in assuring the quality of the work of the Nation's crime laboratories and to act as a resource.

In a past life, I was the director of an accredited crime lab, and past president of the American Society of Crime Lab Directors [ASCLD]. I am also a Diplomat of the American Board of Criminalistics, the personal certification board.

The NFSTC was established by the American Society of Crime Lab Directors in 1995 and began operating in July 1996. It is an independent not-for-profit organization located in Largo, FL. Its operations are supported by Federal funding and by recovery of costs directly from client laboratories.

The vision of the NFSTC is that all forensic science services will have the complete confidence of users and the community. And our mission is to help all of forensic science achieve the highest quality of operations. It achieves this by providing services such as accreditation of forensic DNA testing facilities to the congressionally mandated national DNA standards, provision of certified standard materials to validate test methods and the competency of analysts, and training and education programs to ensure that the analysts have the skills and knowledge to conduct their tests.

Good science is the bedrock of service quality in crime laboratories. However, good science does not just happen. It requires substantial resources to provide the physical plant, scientific equipment, and skilled personnel required to protect the integrity of the evidence, ensure that it receives timely, fault-free analysis, and ensure that the subsequent testimony is fair and accurate.

Having reviewed the operation of over 100 of the Nation's crime laboratories in the last 5 years, I can tell the subcommittee that there is a very wide range of levels of resourcing and performance. Service quality demands that sufficient resources are provided to ensure that these standards continue to be met. Maintenance of quality also requires that appropriate operational infrastructures be put in place.

The forensic science community has been working toward the use of a triad of processes to ensure the quality of work that is performed in crime laboratories across the country. This triad of accreditation, individual certification, and competency testing has made the profession stronger. Accreditation addresses the systems that are in place in the laboratory. Certification addresses the skill and knowledge of the analyst. Competency testing measures the ongoing performance achieved by the accreditation and certification.

We are fortunate that there already exists both a well-developed accreditation program provided by the American Society of crime

Lab Directors/Laboratory Accreditation Board and a well-developed certification program provided by the American Board of Criminalistics. However, these organizations are currently funded by fees and were established within the community of service providers and experience all the resource related issues that such organizations face.

In contrast, the NFSTC is an entirely independent organization, it does not have a conflict of interest by also being service provider-directed, and has a staff of full-time professionals. The NFSTC's services compliment and provide vital support to the accreditation and certification programs of ASCLD/LAB and the ABC. NFSTC also provides the vital third step in the quality triad by providing competency standards to crime laboratories.

The NFSTC is also providing leadership in bringing together organizations to avoid needless duplication and to leverage effective contributions to quality. For example, we are a member of the Forensic Resource Network being institutionalized by the NIJ Office of Science and Technology to assist State and local crime laboratories. We cooperated with the FBI and ASCLD/LAB to develop a uniform checklist for auditing DNA laboratories. And we are using some of our funding to provide a national DNA laboratory audit service to laboratories in the CODIS database.

Mr. Chairman, I have attempted to describe for the subcommittee the role the NFSTC plays in assuring the work of the Nation's crime laboratory has a solid foundation of good science. I believe that now and in the future the scientific analysis of physical evidence will aid more investigations and enhance the criminal justice process.

However, good science is not cheap. It is imperative that funding is available to make sure that forensic laboratories are accredited and staffed with well-trained, competent, and professional analysts. The NFSTC has a history of assisting the community in the aforementioned areas. Laws like Pubic Law 106–561, the Paul Coverdale National Forensic Science Improvement Act, and Public Law 106–546, the DNA Backlog Elimination Act of 2000, can assist this. It is vital that funding authorized by these laws be fully appropriated so that State and local laboratories receive the funding they need to provide timely, fault-free, and necessary services to the public safety of their citizens.

The NFSTC wants to be a resource to this subcommittee on matters concerning forensic science. And I would be pleased to answer any questions you may have. Thank you.

[The prepared statement of Mr. Lothridge follows:]

Statement
Of
Kevin L. Lothridge
Deputy Director
And
Director of Strategic Development
National Forensic Science Technology Center
Before the
Subcommittee on Government Efficiency,
Financial Management and Intergovernmental Relations
On
June 12th, 2001

Good afternoon, Chairman Horn, and Members of the subcommittee, I am pleased to have this opportunity to discuss with you the National Forensic Science Technology Center's role in assuring the quality of the work of the nation's crime laboratories, and to act as a resource for the committee.

My name is Kevin Lothridge and I am the Deputy Director and Director of Strategic Development for the National Forensic Science Technology Center (NFSTC). I am the former director of an accredited crime laboratory and past president of the American Society of Crime Laboratory Directors (ASCLD). I am also a Diplomat of the American Board of Criminalistics (ABC).

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Good science is the bedrock of service quality in the crime laboratory. However, good science does not just happen. It requires substantial resources to provide the physical plant, scientific equipment and skilled personnel required to protect the integrity of the evidence, ensure that it receives timely, fault free analysis, and ensure that the subsequent testimony is fair and accurate.

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Accreditation addresses the systems that are in place in the laboratory, certification addresses the skills and knowledge of the analysts, and competency testing measures the on-going performance achieved by the accreditation and certification.

We are fortunate that there already exist both a well-developed accreditation program provided by the American Society of Crime Laboratory Directors Laboratory Accreditation Board and a well-developed certification program provided by the American Board of Criminalistics. However, these organizations are currently funded by fees and were established within the community of service providers, and experience all the resource related issues that such organizations face.

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NFSTC is also providing leadership in bringing organizations together to avoid needless duplication and to leverage effective contributions to quality. For example: we are a member of the Forensic Resource Network being institutionalized by NIJ Office of Science and Technology to assist State and Local crime laboratories; we cooperated with the FBI and ASCLD/LAB to develop a uniform national checklist for auditing DNA laboratories; and we are using some of our congressional funding to provide a national DNA laboratory audit service to laboratories and the CODIS data base.

Mr. Chairmen, I have attempted to describe for the subcommittee what role the NFSTC plays in assuring that the work of the nation's crime laboratories has a solid foundation of good science. I believe that now and in the future the scientific analysis of physical evidence will aid more investigations and enhance the criminal justice process.

However, good science is not cheap. It is imperative that funding is available to make sure that forensic laboratories are accredited and staffed with well trained, competent and

professional analysts. The NFSTC has a history of assisting the community in the aforementioned areas.

Laws like PL 106-561 the Paul Coverdell National Forensic Science Improvement Act and PL 106-546 The DNA Backlog Elimination Act of 2000 can assist this. It is vital that the funding authorized by these laws be fully appropriated so that state and local laboratories receive the funding that they need to provide a timely, fault free and necessary service to public safety to their citizens.

The NFSTC wants to be a resource to this subcommittee on matters concerning forensic science.

At this time, I would be pleased to answer any questions the subcommittee has regarding NFSTC and forensic science.

Thank you.

Mr. HORN. Thank you very much.

We are now going to go to general questions for all of you as a group or individually. It is going to be 5 minutes per round. I will start with Mrs. Maloney, 5 minutes, then I will take 5 minutes, then we will have a second round.

The gentlewoman from New York.

Mrs. MALONEY. Thank you, Mr. Chairman. I would like to ask David Boyd, has NIJ done any research as to standardizing evidence collection kits? And do you believe that the laboratories would be more effective and efficient if they were all working off the same evidence collection standards?

Mr. BOYD. NIJ has over the last 2 years published a series of guides, beginning at the direction of the Attorney General, with a guide on the collection of evidence at homicide scenes. We now have produced additional guides for crime scenes in general, for the handling of eye witnesses, explosion and arson investigations. These guides represent a consensus of what needs to be done at the crime scene in collecting and preserving forensic evidence.

Each of the States inevitably adjusts these in keeping with the laws regarding evidence in their jurisdictions, and they have to do that. But I think it is imperative that the community begin to think very extensively about how to develop a series of appropriate guides that establish what the minimum standards are for the collection, preservation, and analysis of forensic evidence.

Mrs. MALONEY. Keith Coonrod, do you agree, and would you like to elaborate? Would the process be easier if there were standardized evidence recovery practices?

Mr. COONROD. I can speak for New York State because we did standardize the kit. For a while we had two kits and we have now standardized that to one kit now. And that has been beneficial to the laboratories in New York State having one type of kit where we know exactly what items are to be collected, how they are to be collected, what the instructions are within that kit for the collecting agency. So, from the perspective of one State's view, absolutely it has been very beneficial.

Mrs. MALONEY. And you mentioned the backlogs. Are they throughout all areas, or are they specific just to DNA testing?

Mr. COONROD. Backlogs are being exhibited throughout all areas. And as I made as a reference, DNA affects many areas. For instance, one of them I used as an example, trace evidence, where we are now getting in vacuum cleaner bags, our trace evidence section must go through those vacuum cleaner bags because what is considered to be potential DNA evidence now is much different than it was 5 years ago. So we must identify hairs, full hairs with roots, partial hairs, and determine are they suitable for DNA analysis, and if so, make some decisions as to whether we can possibly even consider analyzing all of this potential evidence that exists. So DNA affects many sections of the laboratory and, hence, there are many backlogs of all sections.

Mrs. Smith had mentioned the SANE nursing. There are a lot of other issues when we are talking about sexual assaults or rapes dealing with these rape kits, and that also includes drug facilitated rape or sexual assault. There are a lot of other issues that are being generated as a result of DNA and sexual assault, etc., and

these impact all of our laboratories. New York State does not have the resources to do DFR testing, drug facilitated rape. So there are backlogs across the broad spectrum.

Mrs. MALONEY. Many of you talked about backlogs. Mr. Scheck in his testimony talked about how he worked with the police commissioner in New York City to attack the backlog. They outsourced it and they still could not attack the backlog even with the private resources and the public resources. And he mentioned earlier that you should really attack the evidence between 7 or 10 days to have the best effect. So we have this wonderful tool but we are not really using it efficiently across the Nation. I would like to hear if there are any ideas of how we can address this. Anyone's comment?

Mr. ADAMS. I would like to respond to that, if I might. To give you one idea of what might be done, research and development has shown over the years that we have been able to reduce the time it takes to perform DNA testing. When we began performing DNA testing in the late 1980's it would take 6 to 8 weeks to perform one test. Now that has been reduced to days. So, therefore, the research and development moneys that have been allocated to DNA efforts have greatly reduced the amount of time it now takes. And as Dr. Boyd mentioned in his statement, additional research in the area of chip technology is also looking to reduce the amount of time it takes.

But I might point out that is the amount of time it takes to do the DNA process alone. That does not count toward the time it takes to identify a stain or an item suitable for DNA testing. When you are talking about hundreds of items of evidence submitted in one particular case, it may take days or weeks to find that one particular stain that then can go through DNA testing.

Mrs. MALONEY. Given the fact that it takes such a long time, and again going back to Mr. Scheck's testimony, he suggested that possibly we should have a State or a Federal standard that you do certain crimes first. Obviously, if you are in prison, do not do the DNA check. But many States are doing DNA checks of prisoners first. Should we not have a Federal standard that those on parole be attacked first for the backlog? I just wanted your comments on that, or anyone's comments on that.

Mr. ADAMS. I have known Mr. Scheck now for well over a decade and I can tell you that he and I have not always seen eye-to-eye on things. But today he and I see eye-to-eye on almost everything. And his priority list is exactly right. The priorities of reducing the backlogs but not forgetting the cases that are happening today and being able to attack those cases right now, his priority of seeing mitochondrial DNA testing placed in the crime laboratories at the State and local level, those are proper priorities that should be addressed.

Mr. HORN. Dr. Boyd and Mr. Adams, I would like to know how much money is the Federal Government providing to the States and local forensic laboratories.

Mr. BOYD. The National Institute of Justice will have this year a total of $30 million which is available directly to State and local forensic laboratories, and that is for DNA and general forensic work as well. Some of that is earmarked but it all goes to States for forensic applications. In addition to that, we have just received

authority to reprogram $25 million of asset forfeiture money to help with the CODIS backlog. That also will go to the States. So that gives you a total of about $55 million this year which will go to State and local laboratories. That is far and away the largest amount ever provided in a year to State and local crime laboratories.

Mr. HORN. Any comments on that, on the money? Is it too much, too little, or what? It is always not enough, right?

Mr. SCHECK. I would say—I'll speak for these gentlemen, I am sure they will not disagree with this—it is not nearly enough. But I think that the issue is somehow directing the priorities so that you get the most return for the investment. One of the things that I am sure Mr. Asplen and Dr. Boyd could testify to is that some of the backlog money, the $14.4 million that was being sent out, I know that NIJ was encouraging State and local labs to do more of the unsolved cases. I think, what was it, Chris, the initial request was that 2 percent of the appropriations go toward unsolved cases. And when we are talking about the unsolved cases, we are talking about those rape kits like Debbie Smith's rape kit. And they argued with NIJ and they said given all our priorities, given the pressures that the States are putting on us to show some results for convicted offender backlog, we cannot do 2 percent, we have to have it at just 1 percent.

So there has to be a way of redirecting the priorities. It is very true what they are saying about more trace evidence now is going into the laboratories. We need training on how people can identify which are the appropriate stains so they can be more efficient. But I again have to come back to this point—what can be more efficient than typing those rape kits because we know that those sexual assault cases are going to give the identity of the semen donor. And there is no more powerful application of DNA than those untested rape kits.

Mr. HORN. Well let me ask Dr. Boyd, do we have a training kit for laboratories that has been worked out by the National Institute of Justice so that you would have some uniformity across the country? Science is science and how do you best deal with it? I think everybody here has given the impression of priorities. If there are priorities that you heard that you do not like, and if there are others that you want to put in, let me know right now.

Mr. BOYD. On the training program, there are a couple of issues with training. The FBI offers, I think, probably the best DNA training available in the United States. But they are also constrained when it comes to resources. It costs some amount of money to train these personnel, it costs some amount of money to get those personnel to a place where they can be trained. Even when they go out to the field to provide the training, you are talking about laboratories that are overwhelmed that have to free up people to go to the training. We have, if I can steal from Chris here, we have developed a series of compact disks, CDs on DNA evidence. This is actually aimed at every police officer so that, ideally, it provides reasonable training for the first person who is on the scene so that person knows how to protect the evidence and with any amount of luck does not destroy the evidence before it can get to the crime laboratory and be analyzed. This CD, interestingly

enough, has now been requested by the British who like it and are interested in using it.

One other point I think it is important to make. We have had a number of people who have talked about DNA evidence and other sources of evidence. It is important to remember that DNA represents less than 3 percent of all the material that comes into crime laboratories for analysis. It is an important 3 percent because it is so powerful and has so great a payoff that its payoff is out of proportion to the amount of the evidence. But it is still important to remember that the crime lab has to face that whole range of evidence. And so it manages to keep them pretty overwhelmed.

And the last point I would make is the priority issue is a little bit of a chicken and the egg kind of problem. So far there have been 150 cold hits just by requiring the 1 percent, because so many States told us they simply could not do more than 1 percent. Nevertheless, it is also true that if we do not populate the database itself, then we cannot get hits when we do no suspect data. And if we populate that and do not do the no suspect analysis, then we are not going to get the hits we want.

Ultimately, I think there needs to be some effort to look at funding both ends of this equation, because it is very much a sine qua non; the one is required to make the other one really pay off.

Mr. HORN. My time is up. Mrs. Maloney has 5 minutes now for questioning.

Mrs. MALONEY. Because of the huge backlog, some of you testified that the statute of limitations runs out and some States are responding by eliminating the statute of limitations or other adjustments. Mr. Scheck in his testimony mentioned a proposed New York State law that would allow John Doe warrants to keep that case alive, thereby not doing away with the statute of limitations, which has some benefit in certain cases. I would like to ask Mr. Scheck to elaborate if you would like, but I would like each of you to state whether or not you think that is a good idea.

Mr. SCHECK. There are a number of different States that have proposals. The reason I think that my colleagues here might like the one in New York is that it says——

Mrs. MALONEY. Which, by the way, has not passed as yet.

Mr. SCHECK. It has not passed, it is proposed. It makes the State legislators put money into the crime labs to deal with the backlog. It is not going to do any good for anyone, frankly, to say let's not have anymore statute of limitations on rape cases. Frankly, I can think of a class of cases where the individual charged, is it a consent offense, DNA is going to be irrelevant, and you prosecute somebody 15 years later or some number of years later. That is not fair to anybody.

But unless the States pass this John Doe warrant type statute, with additional moneys to the crime labs so that they can actually do the testing on these unsolved rape cases, it is not going to be effective. So that is what is good about the Silver bill is that it says we will extend the statute of limitations by a year or two, so as the statute is beginning to run out on these cases the crime labs have a tremendous incentive to go through all their unsolved rape kits just before the statute is going to expire and type all of them.

Mrs. MALONEY. I would like members of the panel to comment whether you support it or oppose this proposal, and why.

Mr. ASPLEN. I would agree with Mr. Scheck that as a vehicle to bring attention, No. 1, to the issue of rape kits that are being thrown out in cases that we are literally losing every day by the thousands, it is an excellent vehicle for that, especially if it brings money along. I am not sure that it is necessarily a legal requirement in terms of actually filing the John Doe warrant.

The first John Doe warrant on a DNA basis was filed in Milwaukee, WI, and we have had a number of them since then in States that do not have a statutory permission to do that. The John Doe warrant is not a new concept in criminal justice. We have been doing it for years based on a.k.a., we have been doing it based on physical description. It is just an infinitely better way of doing.

So, again, it may not be a legal requirement. But I would certainly agree that as a mechanism to bring home the extent of the problem that we face by these cases that are being lost every day, I would agree with it.

Mrs. MALONEY. Any other comments?

Mr. LAWLOR. If I could just repeat what I said earlier, which was that in Connecticut it was not a proposal, it actually has become law last year. It was a retroactive extension backward of the statute of limitations 20 years. The only requirement was that the report had to be made to the police within 5 years of the occurrence. But assuming that happened, then we could indict someone today based on an incident which occurred 18, 19 years ago. And the reason we did this was because of the advent of DNA evidence where it would be possible to identify the person involved.

This question of consent was discussed. Consent can always be a defense, obviously, in most sexual assaults, and that is a continuing problem. But nonetheless, we did it and it has stood up so far.

Mrs. MALONEY. On the costs that the chairman brought up, I would like to go to Dr. Downs. In your statement, I believe you said that there was an average of $195 per case, and specifically for DNA approximately $140 per sample, approximately $25 for CODIS database sample, and then I believe you stated that $135,000 for each cold CODIS. Can you explain the tremendous jump in price from $25 to $140 to $135,000? What is entailed in that amount?

Dr. DOWNS. Yes, ma'am, I would be happy to. The $140 per DNA evidence sample, in a homicide case, a typical homicide case, we might have at least 10 evidence samples in that case. So right away you jump to more like $1,500. The numbers that were broken down were by the total number of cold hits that we have had in Alabama, which are 10. So we have taken all of the funds that are targeted to the DNA operation to break it down to show you the cost per cold hit. As more cold hits come——

Mrs. MALONEY. But $135,000 versus $25?

Dr. DOWNS. That is per sample that is entered into the database. That is a very cost-effective thing to just put the clean samples into the database and store those samples in the computer database for later comparison purposes.

Mrs. MALONEY. OK. My time is up.

Mr. HORN. I thank the gentlewoman. Let me note, Dr. Jamie Downs, director, chief medical examiner of the State of Alabama, I am interested in your proposal that there ought to be creation of a National Commission on the Future of Forensic Laboratories which should be established, and that the said commission should allow representatives of local, State, and Federal crime laboratories and medical examiner communities to come together with various nationally recognized independent scientific authorities and the judiciary, the district attorneys, the defense bar, the investigating agencies. I know Dr. Downs is for it. Anybody else? Any concerns one way or the other, to get them all in the room? Would that be a worthy endeavor?

Dr. Boyd.

Mr. BOYD. I think with a properly drawn charter that there are significant advantages in bringing together the broad community to address any of these issues that are of concern to the field. We have had a great deal of success I think with the National DNA Commission in looking very broadly at DNA issues separate from all of the institutional imperatives. And so I think there is a great deal to be said for a similar kind of approach.

Mr. HORN. Now, as I remember, the Attorney General of the United States often brings that type of a conference together. Sometimes it is the President through a White House this or that, like a White House Conference on Youth. I have been to that one. Do you think the Attorney General might have an interest in doing that, because it is focused on a particular area that is strictly justice?

Mr. BOYD. I would have to refer that to the department.

Mr. HORN. Well we might make it a recommendation in our report to the House.

Mr. ASPLEN. Mr. Chairman, from the perspective of the National Commission on the Future of DNA Evidence, I think the potential for that kind of deliberative body, it is important for a number of reasons. In many respects, the importance of a commission like that is as much the process as anything, in that I guess one of the overriding philosophies behind this commission, the DNA Commission, was how do you maximize the value of DNA, its investigative value, while at the same time engender public trust in the system. The fact that we were able to, on a national level, in a very open forum, discuss important issues like privacy, like funding, and even some of the scientific issues I think were very important and ultimately enabled us to advance things even more quickly. It enabled us to integrate the technology more quickly.

Our ability, for example, when arresting testing first came up, it was a very touchy subject. But at that time, the discussion was being held on CNN or on Larry King Live one night with Commissioner Safer, the next night with the ACLU. When the Attorney General came to the commission and said I would like you folks to discuss this, the playing field was leveled and the public had an opportunity to hear what was going on and to participate in it. And I think the nature of the process itself is incredibly important.

I think the more tangible benefits, though, I think are important also. We would not be really talking that much about backlog reduction through outsourcing if the commission had not started to

make that recommendation 3 years ago. The community had talked about it, the forensic community had talked about it, but we had not set it forth as a proposition. And I think that was one of the great accomplishments of the commission.

Mr. HORN. Now there is a commission right now with some members on it, is there?

Mr. ASPLEN. The National Commission on the Future of DNA Evidence is still in existence; however, its charter expires in August. We have existed for 4 years now and that charter will expire.

Mr. HORN. Does the Attorney General appoint those individuals to that commission?

Mr. ASPLEN. No, they were not appointed by the Attorney General. It was a commission created by the Attorney General, it was administered through the National Institute of Justice, the appointees were made through the Director of NIJ, at that time it was Director Travis.

Mr. HORN. I have an interest in this because Norville Morris, who I think a lot of you know, a very distinguished lawyer in the University of Chicago Law School, also Robert Kutak, he is no longer alive but he was one of the founders, and I just tagged along with them, and we created the National Institute of Corrections at the request of Chief Justice Burger. He called us in and said, "For Heaven's sake, try to get the States to get up to the standards that we have in the Federal Bureau of Prisons." And we did that. We went through 11 Attorney Generals doing that. But it worked.

We put out money. It did not take much. All you had to do was get a lot of them to get a cup of coffee and sit up there at Lake Tahoe and have great thoughts. And we did that to bring all the parties and stakeholders together. And things did change. A new generation jail was accepted by the State of Florida in Miami-Dade. All of that did not take very much money but we changed their approach to it. In fact, they issued a day to honor our individual in charge of jails and prisons, Mr. Nelson.

So I think this type of bringing people together will help, and obviously the money helps, too, in the specific way of accreditation. And I take it you would not be giving the money if they had not been accredited in their laboratories; is that correct?

Mr. BOYD. That is correct. They have to meet a number of qualification requirements and they have to be properly eligible for accreditation.

Mr. HORN. That makes sense.

Does the gentlewoman from New York have any other questions?

Mrs. MALONEY. I would just like to ask Mr. Scheck, earlier I asked Mr. Boyd and Mr. Coonrod and they said that they supported having a national standardized test for evidence. I would like to hear your comments on that. Would you have one just for all evidence, or just for rape victims? And I would like to hear any other members of the panel comment whether they think it would help in solving crimes, make it more efficient, save money, and help us find criminals faster.

Mr. SCHECK. I think the rape kits may be a good and simple and easy way to start. I think, as Dr. Boyd pointed out, NIJ has put out guides to law enforcement in a whole series of areas. The idea of, for example, standards on collecting and packaging evidence I

think are pretty important, particularly since these technologies are so sensitive and it is so easy to confound investigators by getting extraneous DNA samples on pieces of evidence. Everybody here knows that can create real problems in the case. So, I think that there is room for establishing national standards.

I think that each jurisdiction is going to be a little bit different and they will probably be developing their own variations. As long as it is within a certain national standard in some of these things, I think it could be helpful.

Mrs. MALONEY. Would anyone else like to comment?

Mr. CONLEY. I might volunteer that in the State of Indiana a program that has been real successful is we have a State statute that assists victims of crime, sexual assault victims particularly, by paying for the medical expenses for the examinations performed. In order for the hospital to apply directly for those funds, a standardized sexual assault evidence kit must be used that is approved by a committee of the State, including forensic scientists from our State crime laboratories. That has been a real successful program I think, and that is just one idea I might share with you.

In regards to the overall concept of evidence collection, the accreditation program in the year 2001 added the new discipline of crime scene processing, which is an additional discipline that accredited laboratories may participate in. I think that this is going to go a long way toward causing the agencies to create, with guides such as have already been mentioned, internal systems of managing how crime scenes are processed. There is a history in law enforcement and in field investigations that if we write down no rules it is a little more difficult to evaluate our weaknesses. It is going to take time, it is going to take years, but this is a good start in the development of more consistent high quality processing of crime scenes.

Mrs. MALONEY. Thank you. Other comments?

Mr. ASPLEN. I think that there is an important difference between standardization, per se, for example, of a rape kit, and minimum standards, particularly when you are dealing with jurisdictional specifics. For example, some rape kits are equipped with the ability to take blood for blood alcohol content. Some jurisdictions do not do that, they do not want to do that; however, some consider it important at that stage. So I think it is important to understand and to keep in mind the distinction between minimum standards around which individual jurisdictions can accommodate their own requirements as opposed to standardization such as one rape kit which would apply to all different jurisdictions.

Mr. LAWLOR. If I could just add something very briefly on that. I would agree some type of minimal standard is important, but flexibility is crucial because jurisdictions can be very different. We did adopt a statewide standard in Connecticut and we actually included, as part of the hospital regulatory process, that they be required to have a standard operating procedure, that the medical professional is required to have specialized training in collection of this evidence, not just on the scientific side but the human side of dealing with victims in that situation. And finally, the most surprising thing of all, was we found out that some hospitals in our State actually billed the victims for the cost of the collection of the

evidence as if it were a medical procedure, and we have now outlawed that.

But I think in discussing these procedures you will uncover the horror stories that are out there of extraordinary insensitivities that take place every day with regard to victims of crime, and beginning this discussion only helps resolve those problems.

Mrs. MALONEY. I want to thank all of you for your thoughtful and excellent testimony today. Thank you.

Mr. HORN. Let me just ask a few questions and then we will wrap it up. What are the privacy policies of these labs? Are there any problems in terms of privacy or something?

Mr. Adams.

Mr. ADAMS. Mr. Chairman, first of all, the DNA Act of 1994 which established the CODIS and the National DNA Index System had built into it certain requirements which allow for the samples to be imputed into the national system, but done so with very limited information; a unique identifier for the sample, an identifier for the laboratory that performed the analysis, and the identity of the laboratory analyst that did the testing. Very limited information. Second, it is limited as far as access, only accessible by those laboratories approved to perform DNA and enter them into CODIS. And then, third, limited as far as accessibility with regard to buildings, they are in secure locations.

We have attempted to adhere to the need for maintaining strict compliance with privacy issues. That is at the Federal level. Of course, as you are probably familiar, many States have enacted confidentiality legislation, I think 46 of the 50 States, over half of the States have criminal penalties associated with improper disclosure. So privacy has been an important issue that was also discussed by the Commission on DNA as well as the DNA Advisory Board.

Mr. HORN. Does some of that also include the so-called disgruntled employee where they damage some of the samples. Have you ever had that in any of the laboratories, and is it part of the accreditation system?

Mr. ADAMS. I am unfamiliar with that aspect.

Mr. HORN. Well, Mr. Conley, you have probably——

Mr. CONLEY. Well, in terms of the possibility of a disgruntled employee doing something that would be damaging to a database, certainly I believe in an accredited laboratory situation that would not go undiscovered and it would not go unaddressed. The data in the form that it is stored in a database really does not mean anything to anybody who is concerned about the likelihood for somebody to die early of a disease or to pass on a genetic defect or something like that. This, in and of itself, helps to build in some security.

In terms of some damage to the database, typically those of us who have the responsibility for maintaining State databases do maintain, under high security, samples in order to have the ability to reconstruct it if necessary in the future. I hope that is responsive to your question.

Mr. HORN. A DNA sample that, say, proved a person could be exonerated, what happens to the sample?

Mr. CONLEY. It is frequent that we have had hits, certainly in our State, where people have been identified after the laboratory

test has excluded a suspect. Those suspects would not meet the definition of our State law, which basically fits the Federal regulations and the Federal law, and the profile of an innocent person or a person who was excluded could not be put into the database. Only forensic samples, unknown samples in cases that have not been solved. There have been some case-to-case hits, obviously, between specimens recovered in separate criminal investigations, separate crimes. We recently had some in Indiana that were on opposite sides of the State, then a suspect was developed in one of the cases and successfully charged, at least to this point, in both counties.

Mr. HORN. Mr. Scheck.

Mr. SCHECK. The issue here is not the CODIS system. You have the national computer and you have the State and local computers, and there are very strict requirements, as Dwight Adams said, for putting those samples in. We put those into the 1994 act. That is not the problem. If all the State and local authorities would live with precisely the CODIS rules, that would be fine. But they are not.

It is a pretty simple matter to extract the DNA profile. And what is happening now that State and local authorities have the capacity to do their own DNA typing is, let's say—because we found out in our national commission that this has apparently happened—they take a sample from a rape victim and from let's say a husband whose sample was taken for elimination purposes, or, what is very frequently happening I believe, the police will say to some individual we want your sample for elimination purposes because you live in this area or you are near a crime scene, right, and we just want it for this case, or they suggest it is just for this case, then those samples cannot be put into CODIS but they can be put into that State and local databank. And those, unfortunately, are not regulated, they are not subject to the CODIS rules.

I think, to the extent that States are not dealing with this issue, and lab directors—I will give you a very specific example. We have a client in New York, he was exonerated, the man I talked to you about before, the case with bite mark evidence, they took the saliva stain and then the fingernail scraps, they matched them up, he is exonerated, he leaves jail. Under our CODIS and State rules, his sample will come back to him. But the New York City Medical Examiner's Office has that DNA profile and they say I have no authorization to get rid of it, we are just going to keep it in our computer. Now that is the reaction, unfortunately I think, in all too many places.

I think that is a terrible mistake because the laboratories on this privacy question should be as clean as Caesar's wife, otherwise there is going to be an error, there is going to be some kind of privacy problem and a lot of people who are very concerned and sensitive about this issue are going to come back to these very gentlemen who are here asking for money, and I support putting money into this, as I have indicated, and they are not going to get it because there is going to be this problem. And so, really, more attention has to be paid to these privacy issues.

And incidently, it is no longer good enough to say that all these STR markers or all these DNA markers are all "junk DNA." Well, we sequenced the genome; we realize this junk DNA is very mean-

ingful. One of these markers, incidently, THO–1 is actually implicated in I think a disease, I may be wrong about which one, but I think it is a marker for some form of diabetes. So we just cannot say that anymore.

Mr. HORN. Any comments anybody else wants to make on the record? Yes, Mr. Asplen?

Mr. ASPLEN. I would agree wholeheartedly that there are still a lot of discussions that need to be had over the issue of State and local databases and who needs to go in. One example that I would give was the dragnet scenario, for example, in Ann Arbor, MI, where an individual investigation was conducted and blood samples were taken from over 150 African-Americans. They gave their samples voluntarily. When the case was ultimately solved and the real perpetrator was identified, when those individuals went back and asked for their samples back, that was refused. It was refused because law enforcement took the position that they had lawfully obtained it. And they had. It was true they had lawfully obtained it. However, I would venture to say that the next time that the Ann Arbor police department decides to try to enlist the voluntary help of its citizens it may find itself in a difficult position.

I go back to the importance of privacy from the standpoint of, if we are going to maximize the investigative value of this technology, we must do it in a way that engenders the public trust along the way.

Mr. HORN. Well, thank you. Any of you that want to make statements, we will be glad to include them in this part of the hearing. If you think of something on the airplane or in the automobile, gee, I wish I had that idea, just send it in to us and we will deal with it.

I want to thank each of you. It has been a long morning and you have all offered some excellent ideas. Hopefully, I think we will have that national conference that the Attorney General ought to do and get you all in the room again. Thank you for coming.

I am going to now thank the staff for their help. Mrs. Maloney had a number of staff members I believe for the minority staff. Of course, Michelle Ash, professional staff; Jean Gosa, minority clerk. If you have anybody else that helped with this hearing, put them on the list. We thank you all.

And then for the majority staff, J. Russell George, staff director/chief counsel for the subcommittee; Bonnie Heald, to my immediate left, the professional staff member that put this together and is also director of communications; Scott Fagan, assistant to the subcommittee; Chris Barkley, staff assistant; interns Alex Hurowitz, Ryan Sullivan, and Fariha Khaliq. And not the end of it all but she is here always from beginning to end, and that is the court reporter, Geri Lyda. We thank you, Geri, again. This was a long day for you.

With that, we are adjourned.

[Whereupon, at 1 p.m., the subcommittee was adjourned, to reconvene at the call of the Chair.]

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