# Transcripts of the Attorney General's Initiative on DNA Laboratory Backlogs (AGID-LAB) Working Group

**Tuesday, October 22, 2002**
**Courtyard by Marriott**
**Crystal City, Virginia**

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DNA INITIATIVE

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## OPENING REMARKS

MS. HART: Good morning. I apologize for getting started a little late this morning. The drive in was a bit of a challenge for everybody, and I had the cab driver who was challenged in finding Crystal City, which I didn't think was too tough, but I should have planned to give him more time. So I apologize for starting a little late here this morning.

Welcome back again this morning. I'm looking forward to another day of discussion. Lisa Forman will be here. She is stuck in traffic, but we're going to go ahead anyway. I'm going to turn this over to Chris Turner. Does everybody know Chris?

MR. TURNER: No, but I'll introduce myself.

MS. HART: He's real shy. He has got some interesting presentations today, so let's go ahead. Go ahead, Chris.

## FORENSIC RESOURCE NETWORK

MR. TURNER: Thank you, Sarah, for giving us the opportunity to present to this group this morning. I'm very excited about it, to be able to speak in front of an esteemed group of leaders and international, as a matter of fact, and I think everyone here is excited to talk to you a little bit about the Forensic Resource Network.

Some you haven't met me, maybe as much as half. I have been at NIJ for a little over six years. Initially I was a contractor before I became a civil servant, bureaucratic entrepreneur. We decided, this being a working group, we were going to just each take about five minutes to talk about what each organization of the Forensic Resource Network is going to do and then afterwords we may have some time to interact with the group if you have any questions.

NIJ formed this Forensic Research Network to be exactly that, a resource to the state and local crime laboratory community. What really guided that was the funding, and the funding comes from the Crime Laboratory Improvement Program. The Forensic Research Network, like CLIP, is interested in supporting all forensic disciplines, not just DNA; however, we have a lot of activities that are going on in the world of DNA.

NIJ was fortunate enough to have a very successful DNA laboratory improvement program, and its successor, CLIP, has also been successful, but with that success came visibility and some Congressional earmarks. So we had the public management question of how do you steer these Congressional earmarks into something that meets the program, programmatic intent, and so we established the Forensic Research Network. We've grounded it in the needs as identified in the 1999 document, Forensic Science Review of Status and Needs and the follow on CLIP summit the following May I think it was.

The member organizations, I think most of you know the leaders of these organizations. The National Center for Forensic Science, Carrie Whitcomb is the director. The acting deputy director is Dale Heideman just over from FDLE, and the associate director of research is Jack Ballantyne, who will talk later. The Marshall University Forensic Science Center is directed by Dr. Terry Fenger, who is also up here, and is assisted by Lynda Holup, who is in the rear.

The National Forensic Science Technology Center, the executive director is Bill Tilstone and the deputy director is Kevin Lothridge. The West Virginia University Forensic Identification Program, the initiative there is headed up by Max Houck, and Michael Yura is the program director of their ID program.

We got together and established a mission, and it was a pretty simple activity, noting what NIJ's mandate is to serve state and local law enforcement and the goals of the Crime Laboratory Improvement Program. We thought that the key to making this work - and I'm referring to this bottom paragraph - is to match the strengths of the individual organizations with the needs of the community and to offer a balanced portfolio of near-term deliverables with some longer term research because after all with three universities, research is their strong points, so we wanted to take advantage of that, but not just devote ourselves entirely to research and development.

So here are our goals: To enhance forensic science through research and development, to promote the application of new technologies, to work to enhance individual and organizational competency, and to provide support of operational services.

Our program areas are just really a reflection or are tied directly to our goals, and this is just a few examples of some of the activities, although no detail there, some of which will be talked about by the various member organizations.

One thing I wanted to hit on because we're very excited about it is the Forensic Resource Network's first collaborative effort where the network has matured from a paper structure to actually an organization that works together. We are doing a pilot project with Alabama to assist with accreditation and also assist with their 100,000 convicted offender sample backlog. I'm going to let Kevin and Terry talk in a little more detail, but there was some initial training, there were some initial audits, some gap analysis, and a corrective action plan. Recently they provided to train the trainers, so the various captains or team leaders within Alabama can continue to work internally. Marshall University's collaborative effort with them involves bringing a 3100 on line and some software training and the actual analysis of convicted offender samples.

The challenge is taking organizations and establishing that clear linkage to the goal of CLIP, which in a university environment is at times challenging, but we have been able to establish a network of community leaders that we could get feedback from. So far this is really the first time that we're emerging as a network that can begin to show some deliverables to the community. Thanks.

MR. LOTHRIDGE: Thank you, Chris. Kevin Lothridge. I'm taking after Paul Ferrara yesterday.

One of the things about having directed money - Chris called it an earmark; I call it directed funding - is that we actually are a cooperative agreement with NIJ, which is a little different than a grant, and we provide goods and services to operational state and local crime laboratories. I'm going to talk about a few of those programs briefly. I don't have any slides. I just want to go through these and hopefully answer some questions at the end of this, and I will spend a little more time on the Alabama project, as well Terry will be doing following me up here.

The first one I want to talk about is the DNA laboratory audit program. This element of the cooperative agreement is to provide each laboratory that does DNA analysis with biannual external DNA audits using a consensus checklist and trained auditors. As of October of this year 27 state and local laboratories have received these audits. We have 40 planned through 2000 up to 2003 right now, the early part of 2003.

We do use program managers, Mark Nelson, who happens to be here. This is meant to try to remove some redundancy in all the audits that DNA laboratories get, and it's based on a standardized checklist. We use trained auditors who are sharp end still doing the work, but it's in a manner where it's not ad hoc. It's actually a formalized program. The reports are done, and it give us more consistency to that. So it's a direct advantage to the laboratories that sign up for this program, and every laboratory can sign up for this.

Chris mentioned that there were some competency based workshops. We did those in 2000 and 2001, basically talking about laboratory auditing. From those workshops we developed a CD ROM, which shipped in July to all 366 crime labs that we've identified. 1,000 of those were printed, and as of the last week in September 757 of those CDs have been requested of the total 1,000 from NCJRS, leaving about 141 in stock, and we plan to give 100 out of those at the ASCLD meeting next week. So this is a CD ROM, interactive, just the basics of what is quality assurance and laboratory auditing.

In response to looking at individual competency we've put together a program which we call the academy concept, and it's aimed at new employees and transitioning employees. It's important to look at both of those. It's designed to provide intensive hands-on training, and it's focused at getting the person at the end of that program to be supervised casework ready or close to supervised casework ready.

One of the things we heard yesterday was that lots of people train people; they leave and go to work for somebody else. I think that's a crime because that's a resource you never ever recover. If they are trained and go someplace else, the people that funded the training get nothing out of it and they have to start all over again. So this intensive academy has been piloted with 11 people for controlled substances. We're currently working on the pilot programs with other areas, DNA being one and firearms is another.

The program is 16 weeks in duration, and then there would be a need for shorter update courses for new techniques that come out. This has been briefed to the TWGED group, and we've looked at the TWGED guidelines trying to incorporate as many of those as possible.

Another area that we're currently working on, we have two in this area, which are validation kits. Basically what we're looking at is there are a lot of laboratories that get into the validation of new equipment or changed equipment, and we wanted to put together a product for them that they can use for validation, basically defining the steps and experiments necessary prior to performing casework, looking at getting a group of consensus experts in to look at what the best practices are.

The target objective is a kit that meets the Federal Bureau of Investigation Guidelines for QA/QC of the laboratory conducting forensic DNA testing and convicted offender databasing, provide a set of form fillable documents that can be used by the customer that covers the required records for validation as defined by the standards, a set of data to assist with the interpretation generated by the customer's own laboratory, a list of reagent supplies, a list of reference articles, an experiment list that covers solution preparation, calibration of equipment prior to commencing the validation, sample methods from literature and the reference, a list of experiments to be completed, including detailed instructions on the number of samples that should be analyzed, a list of expected results, and a troubleshooting guide. We're hoping for mark one of that, which contains no biological materials, by mid-2003. We're in the process of working on that.

Just to finish up just a little bit more about the Alabama project, the project was designed to demonstrate the benefits of training internal auditors and then using those internal staff people in

two rounds of internal audits for looking at their level of preparation for in this case ASCLD-LAB accreditation, and then after doing those rounds of obs we train the trainer to bring the people in so that they would continue to marshal them through the ongoing quality assurance process because it's not a one-time event; it's an ongoing event.

Our understanding is that Alabama - we started this project with them in October of last year - are planning to apply for accreditation in the next two months. That's their choice, but that's what they're reporting to us. If we look at what the averages were, they have basically nine laboratories, and when we did the first round in February, the averages were quite low, and they're now in the high 90s. So they're moving along quite well and have taken this up. It's in conjunction with Marshall, who is doing the next piece of this, their DNA backlog, helping them validate that. We're trying to get the total package to the state to be accredited and have their DNA database on line.

MR. FENGER: I would like to thank the director for allowing us to present today. What I would like to do is give you a little bit of background about Marshall University and its agenda. Many of you may not be familiar with Marshall. We have a forensic science center that is actually composed of two components. One is a master's level forensic science program, and we've just recently graduated our sixth class. We take about 15 students per year. The other is the DNA laboratories where we work with the West Virginia State Police or historically we worked with them to do the West Virginia CODIS database.

So in actuality what happens is that the State Police collect samples from the convicted felons in their state, they bar code those samples, and then send them to Marshall. We do the ADI system, the profiler plus and co-filer, and then we return those bar coded samples back to the State Police for inclusion in the state database as well as NDIS.

What we've done with the State Police over the years has not only been the DNA testing aspect, but it has also included education. As part of our forensic science program six of the State Police criminalists took classes on a part-time basis, and they have attained their master's degree over the last six years.

We have a memo of understanding with the State Police that we will serve as their research service and educational wing, and WVU has a similar MOU with the State Police. So there is quite a bit of interaction between the universities and the West Virginia State Police.

This actually was the initiation of our interaction with law enforcement about ten years ago, and since then we've expanded our horizons to interact with Alabama. Alabama, as Kevin indicated, has close to 100,000 samples that are part of their backlog, and what we've started to do within the last half year is work with Alabama to reduce that backlog as well as to change platforms, DNA testing platforms, from the FM Biosystem to the ABI system. We are doing this in conjunction - the two labs are working in unison to make this conversion.

What we've done, we've used 310s over the last four years or so to do the West Virginia database, but now we've moved to the 3100. At the same time Alabama has acquired a 3100

instrument, and we're validating the instrument in unison. We go to workshops, we exchange lab analysts, and this allows us to move ahead in a more rapid and expeditious manner.

We've done sensitivity studies, reproducibility studies, carryover, and concordance studies with Alabama. As part of the quality assurance process they supplied 300 samples to us for us to test, and these are samples that they obtained using the Promega kit. They obtained the profile using the Promega kit, and they were noted to have allelic variance. So they used us to repeat that testing, which we did, and to affirm our capability to do the testing and really to initiate the whole process.

Since then we've acquired the order of 5,000 of the Alabama samples as bar coded samples, and we are working - will be working on doing DNA analysis on those samples. We're still in the process of validating the 3100, but once the 3100 is validated we will use that instrument and Idenofiler to do the actual analysis. We are also working with Alabama to institute robotics. We're wanting to move towards automation. Since they have such a large number of samples, we feel that it's important that we automate.

On the educational side five of the analysts in the Alabama system did not have certain core courses as indicated in the DAB guidelines. These include, of course, genetics and cell and molecular biology. At this point in time we're about two-thirds through a cell and molecular biology course that we're submitting to or teaching Alabama through distance education. We have a distance education center at Marshall. We provided Alabama with a PolyCom system. It's on loan, and they will take the course for graduate credit and satisfy the DAB mandate.

So in essence we have been working with Alabama at both the educational and the DNA testing side, but we've also partnered with NFSTC so far as audit training. We hosted an NFSTC run audit training seminar at Marshall, and a number of people from Alabama were in attendance at that training session.

So that's in essence a summary of what we're involved in, and we will continue to work with Alabama as well as other partners in the forensic community. Thank you.

MR. BALLANTYNE: Good morning, colleagues and friends. I have five minutes to talk about the National Center for Forensic Science. The vision of NCFS - and that's a picture of a recent building - is to provide innovative solutions to meet the challenges facing the investigative and forensic science criminal justice communities.

We do this by providing research, education, training, tools, and technology in three areas, biological evidence, physical evidence, and digital evidence. So that's the word from my sponsor.

From the forensic biology perspective our mission is quite simply to assist the national and international forensic science community by, first of all, conducting research, which contributes to the body of foreign science knowledge and is also the basis for new technology development; validating methods and technology, which facilitates technology transfer; providing operational support whenever possible. Examples would be the development of online databases for Y-STR markers, and we have civil mass fatality initiatives ongoing.

Part of our mission is also to provide vigorous educational programs, a bachelor of science and master of science in forensic science and a new interdisciplinary program, a Ph.D. program in biomolecular science where students conduct doctoral level research.

In terms of our projects, the projects that are ongoing at the moment, we have a balanced portfolio we think of research and development validation and operational support. The projects we have in house at the moment are Y chromosome markers, assessment and repair of damaged DNA templates, RNA profiling for body fluid identification to replace or to supply conventional methods for body fluid identification, determination of physical characteristics or traits from biological stains, and low copy number of single cell analysis.

In terms of the matter at hand, the AGID-LAB - the matter at hand is how do we reduce DNA backlogs, so as I was thinking about this, how NCFS could play a role, basically from the analysis side if you can develop something that's quicker or cheaper or smaller, in general you're going to have some impact on the ability to process backlogs. So we have a couple of projects that we believe that could be conducive to help solve this problem.

The two projects are the Y chromosome project and the RNA project. The reason we're interested in Y chromosome markers is that, of course, males commit most of the crime in this country. 80% of all violent crime is committed by males, 95% of all sex offenses, and the reason why Y chromosome markers are useful is simply in those cases where there is male and female mixtures where the female component is present at a very high concentration compared to the male, typically in rape kit swabs or sodomy cases.

There are a couple of other reasons why Y chromosome markers are useful. One is there is no need for differential extraction. Differential extraction, of course, is used to separate sperm from nonsperm cells,and it's a relatively time-consuming process. With Y chromosome markers in theory you don't need to do that. We can also determine quite clearly and quite easily the number of semen donors, which aids in the determination of mixtures involving multiple semen donors, for example.

With regard to Y chromosome marker projects we have, we have a major program here. We were looking at STR development. We've already developed a couple of multiplex systems that are optimized for forensic casework, and our view is that in some cases only Y-STRs can be used for certain cases. We're also developing new systems. We have 30 additional markers. So we have more than 40 to 50 STRs in house at the moment.

We're also developing a Y-STR haplotype database for those STR markers that don't presently exist in an easily obtainable form for the community. We're also interested in Y-SNP development using a new type of sequencing technology, pyrosequencing; however, in terms of aiding the backlog situation, we believe that Y chromosome markers could be used to perform a rapid analysis of rape kit evidence. For example, here is a profile of a male haplotype showing different Y-STR markers. There are 18, 19 markers there using three nanograms DA. However, if you take a post-coital vaginal swab where you do no differential extraction, just add 300 nanograms of DNA from that swab, there will be a mixture of male and female, and then you can

get quite clearly the male profile, and if you judiciously choose your markers, you can reduce any female background that sometimes exists.

So leveraging off our project on low copy number, what you can do is you can take a sample at the top of the diagram there, and you can do a direct lysis of the sample. It takes about 20 minutes, 30 minutes, ten minutes. You can do a PCR prep, you can amplify, you can do your capillary electrophresis prep and the analysis, and certainly within five hours or so, five hours, 40 minutes, you can get a complete male profile. One could incorporate - instead of an analysis you could real-time PCR and reduce that time dramatically just to show that male profile exists; however, by doing it this way you actually get a profile as well.

The other project that can be of use is the RNA project we believe because every single cell that exists, only 10 to 15 percent of the 38 to 40 thousand human genes are expressed, and the expression of these genes - each cell has a unique constellation of genes that are expressed, and one can look at proteins, but proteinomics hasn't reached that stage yet where we can do massive analysis. If we look at RNA, messenger RNA, messenger RNA can provide easy identification of body fluids with greater specificity. We have identified genes that only expressed in vaginal secretions, semen, saliva, and blood. There is a proved timeliness. We can automate this in theory, and decrease sample consumption.

Basically if you look at blood, semen, saliva, what is called the multicellular transcriptome is the range of RNA markers that are present, some of which are unique, and we would be after that. This is an example of semen specific genes where you have on the bottom there PRM1, PRM2, BPY1 and 2, et cetera. These are semen specific genes, which are not expressed in other body fluids or if they are expressed, they're expressed at different levels and a different size range.

So we believe that in conclusion what we can do if we put time and effort into this, you could take a rape kit on the upper left side there and you could take a swab cutting and you coextract DNA into RNA, and we're working on doing that. It's not as facile as it seems, but one can do it. You then can go through the DNA stream, which then is direct lysis amplification capillary electrophoresis. The RNA stream would involve multiplex real-time PCR. It would give you the body fluid identification, and then you've got a male profile or not. If you've got a male profile, then you can process a swab further for your other traditional markers. If there is no male profile, then no further action is taken.

So what this would do would enable you to ascertain the body fluids present. For example, this is blood and saliva - this is a vaginal swab that has vaginal secretions. It has blood and saliva present. It is an anal swab. It is an oral swab. It confirms that, and it will also tell you which body fluids are present. That would take less than six hours to perform that assuming everything was put in place. Thank you.

MR. HOUCK: My name is Max Houck. I'm the projects director at West Virginia University. I'm the director of what is called the Forensic Science Initiative. That is part of the identification program at West Virginia University.

Let me just give you a brief outline of that if you're not familiar with it already. It's an undergraduate program that offers a bachelor's of science in forensic identification. There are four tracks to that program, latent fingerprint and crime scene, which would be one track; biology; chemistry; and toxicology.

Essentially the students follow a pre-med program for two years, the first two years. Then they apply to the program. They get interviewed. They go through a background process, a background check process, and then somewhere around 30 or so students out of about 300 - we've got about a 10 to 1 ratio - actually make it into the program and then take upper level science courses, forensic science courses, and a handful of electives. They also then go through an internship process. So far the majority of our graduates have been placed in forensic science laboratories or in jobs that relate to forensic science.

That has been the primary thrust of the CLIP money at WVU so far. I started in January to spearhead what we're calling the forensic science initiative, which is largely research, professional education courses, and then also extending our own educational ability and building an infrastructure for continued research and for educational purposes at the university.

Some of the areas that we are working in that relate to AGID-LAB's interest, we funded the technical working group on education and training, which turned its finalized draft into NIJ several months ago now. It was delivered within 18 months of the project's start date, which included extensive commentary from not only the TWGED group, but also outside laboratories, outside of reviewers, outside forensic science professionals. We have a great deal of comment, a great deal of input, and it's an area that's obviously of great interest to the forensic science community.

The guidelines, the TWGED guidelines, have been picked up by the forensic education and professional accreditation committee, which is initially being sponsored by the American Academy of Foreign Sciences, and they're looking to use these as accreditation standards for forensic science educational programs. They're going to have five test programs in 2003, and they look to make it operational in 2004.

So the whole process of starting with TWGED and going through what is now called FEPAC is moving quite speedily, but I think that's also a reflection of the need for that type of oversight, that type of standardization and guidelines in the forensic education community.

We have a pilot project at WVU with West Virginia State Police to incorporate personal digital systems or PDAs, Windows-based PDAs, into DNA analysis so that then the PDA becomes the conduit through which the analyst then interacts with all of the instrumentation in the laboratory. So instead of carrying around 2 or 3 or 4 inch files of paper, all of the case load is carried on a PDA.

They will cradle it, identify themselves biometrically, upload the data. They can then continue filling out the forms, do the paperwork on the PDA, take it to their desk, cradle it again, reidentify, download it to the server. It can then be archived, printed, reviewed, et cetera. So the

whole idea is to speed up the work flow. The pilot project will be completed by the end of this year and a full proposal is expected to be submitted to NIJ through our research program.

In conjunction with NFSTC WVU has funded a program to provide 350 forensic scientists with all of the ASTM's forensic science standards. Additionally with those standards comes membership, and that gives 350 foreign scientists an opportunity to participate in the standardization process, in drafting, reviewing, and then publishing these voluntarily consensus guidelines that ASTM produces, which we feel is crucial to bringing more of forensic science into a standardized methodological process.

Then in terms of resources, we now have two crime scene houses. We had one for quite some time. We now have a second crime scene house, which are literally houses on campus that have been converted into facilities for making mock crime scenes, and then the students will process them. It's a learning environment, so think of it as a laboratory that happens to look like a house where we can reconfigure a variety of crimes to occur, and they can process the rooms and then go downstairs to the lecture hall, which also has additional laboratory facilities, and review their work or get further education and then go back up and reapply it. We now have a second house for that as well. Our first house is extensively wired for video and sound for producing content for educational purposes, distributed learning, that sort of thing.

In addition to these we also have some research that's ongoing on campus, one of which is determining time since deposition of blood stains, and currently the researcher has the ability to determine that out to about 12 days, how long a blood stain has been at a particular crime scene. Then also we're looking at DNA extraction from preserved samples, samples that have been subjected to formaldehyde, looking at DNA yield from that, and also new methods for analyzing mitochondrial DNA using denatured HPLC process for maybe a quick screening, but we're also looking at that as maybe a way of looking at other types of DNA information from samples obtained either at crime scenes or through other sources. Thank you.

MR. TURNER: We still have ten minutes before I open up it up to questions. Feel free to ask any of us any questions. We hope that through this presentation that there may be some ideas on how we might serve as a resource or how we may be part of an AGID-LAB recommendation or solution. That's what we at NIJ are committed to, making this resource network responsive to your needs. Are there any questions?

MR. SCHMITT: Chris, let me ask Kevin, if I may, to elaborate a little bit on the NFSTC audit versus the accreditation process for DNA labs. What do you do more of? Does the one lead to the other? Is the audit process only DNA or is it all forensic techniques?

MR. LOTHRIDGE: The audit process is required DNA audit so people can upload to CODIS. That's what the DNA audit is.

MR. SCHMITT: To meet the FBI guidelines then.

MR. LOTHRIDGE: To meet the FBI guidelines based on people that are properly trained. The people we use have been trained both to the checklist and by the FBI. So those people have all been trained. It does not lead to a certification.

We have two sides of our house at the NFSTC, if you will. One side is a cost recovery side, and we do DNA certification for private DNA laboratories, and that's totally separate from this DNA audit program, which is to go to approximately 130 publicly funded state and local DNA laboratories.

MR. COFFMAN: I wanted to ask you about your training programs you're developing for forensic scientists. What is the plan? If you had all the resources you needed, what would be your ideal plan especially for DNA? What would be involved in the training at your site? Also do they come there or is it over the Internet?

MR. LOTHRIDGE: The plan is if we had everything, it would be great. It's 16 weeks, 12 weeks of that which is located at our facility. What we're developing is the pilot programs for these and a set of instructional material. There is no way that if you're doing 12 DNA analyses, for example, and you ran two of them a year because you would really kill your people if you did more than that, that's 24. That's not even going to even meet the need that Paul Ferrara put in CNA News of 6 to 10 thousand forensic scientists in the next ten years.

So what we're developing is a set of materials. We do have hands-on site for 12 weeks. Let me go through the drug chemistry one, which is one we've already done, so we've got some experience with that. They come for an orientation. They go back to their host laboratories. Some of those people actually reported on their first day to our site, not to who hired them, so they were pretty fresh.

They came for a two-day orientation. They went back for four weeks of some online training. Then they came back for 12 weeks. There is credit college involved in this. In the first drug committee one there was eight graduate credits. So they were only at our site for those 12 weeks from 8:00 to 5:00. They were actually online after 5:00 and doing graduate course work with the University of Florida and Florida International University.

So there is the component of operational training and there is the academic component, which are both needed when we talked to the people. As far as the drug chemists went, we worked closely with everybody, and there was a real need to make sure you normalize that so when they went back, the lab's portion of their training was to train them on what they were going to do at that laboratory. We didn't give specific individual training that says if you work for the Virginia Division of Forensic Science, this is how you analyze a case. We gave them the basic underpinning so when they go back, they can identify a substance with limited direction.

The plan would be, Dave, actually to run two of those at our site because that's about as many as you can run, probably two different types of academy in conjunction, but you would need a series of places or a series of states or things like Virginia has in their academy to meet that need. When you look at numbers that are out there of 6 to 10 thousand, I don't know how we're going to meet that need.

MR. COFFMAN: So there is not necessarily a lab that they're doing wet chemistry there for the drug chemists.

MR. LOTHRIDGE: Yes. There is all the equipment. It's fully functioning, operational. As a matter of fact, if we're doing DNA, we have a 3100 sitting there ready to go for them to use. So, yes, it is laboratory space.

MR. COFFMAN: That's good.

MR. SCHMITT: Any other questions for this panel? Chris, thank you to you and your copresenters for that interesting presentation. Why don't we take five minutes for a quick break and we'll come back right back and stay on track with the agenda.

## TRANSFORMING PRACTICE THROUGH COMPETENCY BUILDING

MR. SCHMITT: If you will turn to your agenda, you will see that the next item on our schedule this morning is another block of discussion on substantive issues. This one we have entitled transforming practice through competency building, which fits nicely with what the FRN folks are talking about. I would like to call your attention to the first paragraph in your handout on discussion topics and draft recommendations under this topic heading where we discuss a training tool on forensic DNA evidence for officers of the court.

This is one of those where we call it a progress report rather than a draft recommendation, but I do want to use this as a stepping off point for discussion to help refine this because this is in the early stages. As you can see there, Sarah has asked the Forensic Resource Network to convene a group of subject matter experts to develop a CD ROM on forensic DNA evidence for officers of the court, the idea being that we've done some good work in the past on preparing materials for what every law enforcement officer ought to know about DNA, but we need to now broaden that and think of the entire criminal justice spectrum, and the next obvious stage in that progress are prosecutors, defense attorneys, and perhaps mostly important judges on what DNA is; importantly, what it is not, what it cannot do; the differences between nuclear and mitochondrial; collection issues; and the other items that you see there in that paragraph.

We are hopeful that we will be able to convene these working groups, come up with materials, and have it out the door within the next two years. I would like to solicit any reaction to this from the folks who are here at the moment and, in particular, any areas that they would care to suggest ought to be emphasized in these materials perhaps based on your own experience testifying in court on these issues.

MS. FORMAN: I'll start the ball and say that when I've testified as an expert, I find it frustrating when both sides aren't equally prepared, that it feels like I'm not serving the criminal justice system if one or the other side rolls over without even taking the time to understand what the evidence means, what it is, what it's about so that the trier of fact has a full understanding from both sides. So I guess I would hope that a product of this type would be a way of at least providing the information so that all of the officers of the court could be equally prepared.

MR. CLARKE: I can tell you that when Lisa testifies, it's a delight, having experienced that several times.

There are a lot of dynamics, as all of us know, going on at this particular stage of the process, and I think we have to remember it's an adversarial system. It's not a system like some of the criminal justice systems in other countries. That being said, and my comments are going to assume a certain threshold level of competency. Maybe that assumption is a dangerous one. I don't mean a specialist in scientific evidence, but a certain level of competency from both sides.

At trial I don't think there are anywhere near the challenges to these forms of evidence that there used to be. I think we have reached - and I made a comment about this yesterday - a different era in that now jurors fully anticipate this evidence. They want to know why it wasn't there in a

particular case. What is scary is when it's a robbery case and there is no biological evidence. But we hear time and again jurors saying that.

I'm going to digress for a moment if that's okay to a kidnap-murder case of the 7 year old child that I just mentioned. When we selected a jury in May of this year, we sent out questionnaires. The questionnaires dealt with a lot of topics. The most interesting part and the reason I want to bring it up dealt with their views on the death penalty, for what types of crime would a juror consider imposing the death penalty. Aside from the answer murder, which is the most common we see, the second most common one was cases with DNA evidence.

That's telling us a lot. That was in a good 10 to 15 percent of the questionnaires that were perhaps 300 or so, so we're talking about a lot of people saying this is what I want to consider imposing the death penalty. Had that same question been asked ten years ago, I would venture to say one or fewer might have answered that question in that particular manner.

The reason I bring that is up is jurors truly do expect this. They see it being used to exonerate people. The flip side of that is that it's a wonderful tool for prosecutors. That means okay, this is telling us this is the type of technology we will consider the most serious punishment being available.

That being said, what does it do in the courtroom? I think it's just another piece of evidence now as opposed to some new tool that everyone is distrustful of. That doesn't apply to every case, but I think it has become much more the norm rather than the exception.

MR. DIZINNO: I would just like to offer the services of the FBI and their training unit as the Forensic Research Network tries to develop a CD ROM. Jane Holmeyer, who heads the training unit, is developing a number of what we are calling distance learning modules for a number of forensic disciplines that will be available through the virtual academy, and these have either been put together already or are in the process of being completed.

I would just like to offer that service so that if this group is going to put together a CD ROM, there may be baseline information available to them through the virtual academy that they're certainly welcome to use in developing any further training.

MS. HART: I appreciate that. It's very thoughtful and helpful, and I'm looking forward to it, but I'm sitting here thinking that here we are both members of the Justice Department and the idea that they should be done separately does not really make a lot of sense in spending the money twice out of the same department. So I'm look forward to having Jane's help on this.

MR. SELAVKA: I just want to ask Joe to clarify. Am I correct in assuming that there is nothing that currently exists in the FBI training materials that is this thing?

MR. DIZINNO: My understanding is that the forensic biology module is complete for nuclear DNA and for mitochondrial DNA.

MR. SCHMITT: And it's designed for whom?

MR. DIZINNO: This is designed for scientists, so there is a little different audience here, but I'm sure there is some baseline material that could be applied to both.

MS. HART: What we're talking about here focuses on issues about how to get the evidence in the door and what the questions are, so it has to have a little different focus, and I think that ultimately my goal here is to make sure that we cover both sides of it so that it becomes a routine piece of evidence that the courts are comfortable with admitting and you don't have a lot of time being spent on issues that perhaps they don't need to be focusing on, especially when you're dealing with smaller counties that aren't as big as let's say San Diego. Smaller offices where they're not going to have the same level of competency, having something like this would certainly help people without the resources for more specialized training.

MR. SELAVKA: I was actually going to pose a question to Paul and other lab directors or those that have trained to train judges especially, it's like herding cats. They don't want to be trained in the first place or at least that's how they appear. Getting them to sit down and do something like this - we have been unable to create the proper forum in both New York and Massachusetts to launch an initiative for educating judges on things that we thought they would be interested in and wished they knew about.

So I'm not sure - I think it's easier with defense attorneys and prosecutors. They're more interested. They have an advocacy role that they have to have some proper accommodation for to do a good job, but the judges just don't seem to want the training. I don't know if it's just not understanding them well enough, the officers of the court not giving us appropriate access to the judges, or what.

Is your experience the same I'm wondering as mine has been in New York and Massachusetts?

MR. FERRARA: Interestingly, Carl, yes, we observed early on - we had a devil of a time trying to pin the judges down, but about five years ago the situation reversed itself whereas the Supreme Court in Virginia, which provides all of the training for the circuit and general district court judges and appellate court judges, came to us and said, hey, we want to include large units of time within our judicial training programs on an annual basis to the laboratory.

We had observed that same reticence for a long time, but that's going away quickly. We find that judges are hungry for this information, particularly circuit court and now appellate court judges, who want to know the ins and outs. To that end we ended up through our Institute of Forensic Science and Medicine with three-day programs designed, one specifically for prosecutors and one specifically for the judges, and the judges just raved about the program afterwards because they had finally an understanding of the ins and outs of the technology.

I suspect that trend will continue because they're being faced with these arguments and motions about admissibility, more so now which items of evidence should be tested and which should not as well as postconviction issues, and we covered all of those in the training.

MS. HART: If I could just follow up on that, I think one of the things that's very important when you do this is to also work with judicial organizations that provide training. Simply coming in

from the outside and saying here, we'll tell you how to do it doesn't really sell them. At the science and the law conference we had Justice Ming from California, who has been very active in working to train other judges on science issues. So the idea behind this is to have something that's kind of easy, user friendly for those organizations to use and count on them encouraging their members to train.

If I could just follow up on one thing, Joe, Lisa passed me a note before she had to leave here about coordinating with Jane Holmeyer. Apparently there is coordination already going on, that NFSTC is already doing three of your modules here. So there have been efforts ahead of time. They're already working with Jane, so I'm sure that will be very productive.

Other comments?

## DEVELOPING A RESOURCE GUIDE

MR. SCHMITT: Let's move now to the second numbered paragraph on this topic area. We touched on this a little bit yesterday, the idea of developing a resource guide or best practices for including automation in a forensic DNA laboratory. The draft recommendation for your discussion again merely as a stepping off point to the debate or discussion here this morning is that the FRN could convene a working group along with ASCLD-LAB or others to create a document that provides this kind of information to state and local labs, best practices for integration and coordinated IT infrastructure.

MS. NARVESON: I would suggest that in order to get the widest participation perhaps ASCLD-LAB being a partner with ASCLD, being two separate organizations with a wide audience, and a certain portion of the ASCLD members are also accredited laboratories and therefore become members of ASCLD-LAB.

MR. SCHMITT: So the collaboration should be with ASCLD.

MS. NARVESON: That would get you the widest scope. That's not to say that ASCLD-LAB isn't also a worthy partner in this whole thing, but that would get the entire range.

MR. SIGEL: I guess from the ASCLD-LAB perspective just to emphasize, too, the accreditation program through ASCLD-LAB is for the total laboratory operation, management and operations, and is a requirement that a laboratory pursue all areas of their laboratory when becoming accredited.

The terminology that we kind of discussed yesterday on this best practices versus baseline standards is something we need to keep a very close look at. Our program continues to and I think always will struggle with that when we use volunteer inspectors, and the best practices frequently raises it to a higher level than a baseline for accreditation.

Clearly as we have new technology and automation, this validation process is one of the ones that could definitely benefit accredited labs as well as those that are not yet at that point because you have people that are very experienced in the field that have a challenge embracing the new technology, the automation, whether that is as good as having the individual looking at every step of the way.

So clearly ASCLD-LAB would embrace having some type of a participation in that process, but it's looking at what the practitioners that are doing that work will set up and would meet these minimum expectations. Clearly the DNA program for a number of years now has had far more structured guidance as it interlinks with the ASCLD-LAB program.

MR. SCHMITT: On the subject of automation, is it really the case that we can't say what the minimum standards are because you don't have to automate that much when you have a lot of people to do a lot of this sort of thing, that for something like this you would find most beneficial a document that we didn't call best practices, but that we called innovative practices or cutting edge practices, the idea that on certain areas we would have a document that's minimum

standards; this is the least you need to do to be competent, but you also I think and the community would want to know about things that are new and interesting that's happening. The fact that you can get a great system from the folks in South Africa for a million bucks, you would want to know that. It's not a minimum practice. It's not necessarily a best practice. It's a great practice perhaps, but you would want to know about it. Are we really talking here two different kinds of documents or information collections coming out of NIJ or the FRN?

MR. COFFMAN: I guess I would like to see maybe a resource guide rather than something called best practices or standards and say here is what you could - let's say your system uses liquid blood in your offender program. Here are some automated solutions that have been developed and here are the states and the people you can call to see how that would integrate in your system. If you use oral swabs on FTA, here is another resource on people using it, here are oral swabs on cotton, and then maybe list states that are delving into doing automation on casework and how they started and what they've accomplished. I think that's what we need to know so states can call them and find out how it's working in particular labs, maybe go do a site visit, which is what we did before we switched to any automation we ever did.

I think that's what you're talking about because one system is not going to be the silver bullet for the whole country because people do things differently in different jurisdictions. So I think a resource guide.

MS. HART: Would it make sense as we're talking about kind of cutting edge practices and things that are evolving that this be something that's more of an Internet-based document so it can rapidly be changed as new things come up as opposed to having a hard bound document that's going to rapidly get out of date? Would that be more useful to people in general?

MR. SCHMITT: Does anybody have strong feelings that it ought not be limited to an Internet document?

MR. BUTLER: I just was going to say that to develop a Web-based resource because technologies are so dynamic and changing, it would be nice to have a list of here are the following companies that supply these resources, this is what it cost, these are the experiences, like Dave Coffman mentioned, for different ways to process samples, and if you have all of that in one place or at least links to things - if somebody can't get on a web page, they shouldn't be trying to set up a robot.

MS. NARVESON: I think it would also be helpful based on some discussions we had last night to know exactly how many people it takes on the front end and how many people it takes at the back end to feed these automated systems. So we may want to have some kind of instructions that if you have a staff of six forensic examiners that do your screening and you have a staff of six forensic DNA examiners, what kind of automation would best suit your needs? Certainly the system that South Africa has is very impressive. Look at the number of samples that they can push through that system. How many people do you need to have on the front end screening evidence in order to feed the system and then insure that we don't have a bottleneck at the back end when all of that data comes rolling off the instruments? So I think some directives or guidance on exactly how to size the automated system for your own operation.

MR. COFFMAN: I also think that if you do design this as a Web-based document, it needs to be very clear that what is automation solutions for convicted offender labs and what are automation solutions for forensics because with the tours that we've had through our lab, I can say it until I'm blue in the face that this is convicted offender, and every time these lab directors go back and tell their people Florida is doing automation on casework, and it needs to be very clear. Even if some automation overlaps the two, make a copy and put it in both, but it does need to be made clear automation solutions, what they're currently being used for, rather than having people assume it can be easily manipulated for casework.

MS. HART: Would the idea be that people would want a list of vendors who are out there? Sometimes what has been helpful is - let's suppose one particular lab tried one particular item and found that it was wanting in certain ways. You would want to share that information with other people before they go and invest in it, too. Would the idea behind this be that you could also kind of share evaluation information with people, and are there upsides and downsides to doing that?

MR. COFFMAN: Last year at the CODIS meeting I gave one of their breakout workshops. I gave a workshop on the automated systems that we had evaluated and why we made the decision we did and said this is the Rolls Royce if you have this sort of throughput. Here is an economic system. I think that kind of thing needs to be evaluated like, for instance, the T Can robot is a pretty high-end robot. It has a lot of high-end functionality. If you're only getting a few thousand samples a year in an offender lab, you don't really need that when you can go with a more scaled down model that's a lot cheaper.

So that kind of cost, what kind of throughput you're talking about with the system so people can shop for what they need in their state or their facility.

MR. SCHMITT: Any other points to be made on that?

MR. SELAVKA: I wasn't sure if we wanted to expand the scope just a bit to add evidence control to this same recommendation. We kind of had it as a toss-in yesterday when we talked about evidence control a little bit, but this would be a place where the same resource guide could be used to help laboratories understand the availability of turnkey, quote, unquote, software and hardware for evidence control as well as DNA.

So there isn't a centralized resource for that. ASCLD-LAB routinely reviews laboratories' infrastructure for evidence control, and case management systems would be a logical connection maybe. Also should we include the National Association of Medical Examiners? That's sort of a question for Steve. Where is your own feeling on how useful that would be?

MR. SIGEL: That's something that I guess would depend upon their desire to be participatory in that. Personally I'm not aware of that where they're really looking at the DNA-type operation.

MR. SELAVKA: It just seems like collection of evidence from bodies is a place that sorely lacks for harmony across the country and across the world. Maybe we could use this as a way of

bringing our arms around them as well and having them come with us. Do it with them instead of to them. That's probably a little more out there than evidence control and case management.

MS. HART: I think there is a longer discussion here, and at this point given my recommendation has to deal with DNA backlogs, I'm going to try and limit it to that, but I think that the issues that you're raising here, and especially we touched on yesterday about some of the unidentified dead issues, is something that we have a lot of interest in. So it may be that's the next meeting or the next working group we need to kind of focus on.

## ADDRESSING THE SHORTAGE OF QUALIFIED LABORATORY ANALYSTS

MR. SCHMITT: Let's move now to the third numbered paragraph on this topic, and despite what we all might eventually hope the automation would get us, we will always need human beings to do some aspect of the laboratory work, and you've all told us time and time again that there simply aren't enough people well trained or who will come work for a government entity for a long enough period of time to help you reduce the backlog.

So we wanted to have a discussion as to what can we do in the short and near term to fix the lack of qualified laboratory analysts. The recommendation that we had drafted just as again a stepping off point is a program that would bring in short-term, less than 24-month visiting scientists to work in the laboratories. This could be a DOJ funded initiative. A group of individual states could collaborate with appropriate associations to try to identify those people, a sort of scholarship program, if you will, or a fellowship program.

Let me throw that out there, and maybe we were just taking the wrong tack entirely. Maybe it's just scholarships to universities to develop the right kind of folks. What do you all think?

MR. FERRARA: Paul Ferrara on a soapbox. We've said early on in this meeting and in previous meetings and the Commission on the Future of DNA Evidence and everything else that reduction of backlogs of convicted offender samples is a lot easier problem to solve than the backlog of crime scene evidence, and I think that's a given. We've also said that automation, robotics, streamlining operations, and training are all critical functions. We've talked about undergraduate, graduate academic programs, some of the work of NSFTC, but the fundamental problem that concerns me as a forensic science laboratory director - and Kevin alluded to this issue - is that there is a disconnect from the time when somebody gets a bachelor's degree - to pick Lee in Virginia, somebody goes through the Virginia Commonwealth University program or any program, gets a bachelor's of science degree in forensic science or biology or any of the natural sciences. Typically they then complete a master's program in forensic science.

At that point they are least one year in a working laboratory on the job before they become effective examiners. It's as simple as that. I keep telling our universities don't let these kids think the idea that they're going to get a bachelor's degree in forensic science and go to work in a lab and start doing casework. Typically you need the advanced degree, but there is on-the-job training.

What have forensic laboratories done historically for all of these years? You get one or two positions. You hire somebody that's fresh out of school without any experience. You take your active casework examiners, and they spend a year for DNA, two years for firearms, two and a half years questioned document examiner, maybe six months for a drug chemist, et cetera, and you've hired them, you've committed to them, you're paying them a salary, and then you complete that training, certify, competency testing, and put those people to work on casework.

Now, that's all well and good, but, as Kevin alluded to, at that rate - if 100 laboratories or let's say 200 public forensic science laboratories around the United States each train two forensic scientists a year, we're nickel and diming the problem to death.

One approach - and this isn't the only approach, but one approach that we took in Virginia was the creation of this Institute of Forensic Science and Medicine where we've now trained over the last three years some 35 forensic scientists. That means taking individuals with the academic credentials, all the DAB standards, for example, educational standards for DNA analysis, and have trained them in our laboratory for a year on both major platforms used for DNA examination. We haven't been able to hire them all ourselves because I don't get that many positions, but at least I have produced for the last three years six fully qualified DNA examiners that have gone to other laboratories all over the country and are now productive case examiners. I hired three the first year myself, and within one month each of those three not only were doing casework, but they also had cold hits in actual casework.

I don't know how NIJ - how we could address funding support for institutions of this nature. Ours is one program. California has established the California Forensic Science Institute in conjunction with the LAPD and LASO Laboratories and Cal State University. We do it, of course, with other division of forensic science in Virginia and VCU. The University of Illinois at Chicago and Illinois State Police have a program. Mark Dale in New York State, the same concept. I suspect there are others around, and if I've neglected to mention them, please forgive me.

These are seminal programs which have the capability with proper funding and personnel to start pumping out for hiring by forensic science laboratories a large number of forensic scientists that are going to be needed. That 5 to 10 thousand figure, I don't think that's outrageous. In fact, it may even be an underestimation.

Our institute is a 501C3. We depend on donations. We provide an $18,000 a year stipend to a student. It's extremely hard to get into this program. This is the crem de le crem of these programs that get into this institute, and, of course, even at that point we have people wash out of that institute. How many of our laboratories have spent six months, a year training somebody only to find out that they just ain't going to cut it, and you drop them, you terminate them.

Here is an ability where you screen out all of these during those training programs. Yet my institute is dependent right now on donations. I don't believe it's eligible for NIJ grants. We actually have presented a grant proposal to the division where we would contract with our institute to provide training, but the one thing that we have not really addressed head on is how are we going to close this gap from well-educated young aspirant forensic scientists and make them fully qualified, functioning examiners in large numbers, meeting, of course, TWGED's standards and such.

If you look around, I don't know if there is such a program. I mean we did six DNA examiners a year for three years and four this year. I don't know. Probably Dave, Susan, Joe, they have probably trained two, three people. Mostly we try to recruit and hire an examiner from another laboratory that's already qualified. I mean that's great, but in the overall scheme of things -

MS. HART: You're robbing Peter to pay Paul.

MR. FERRARA: Exactly.

MS. HART: I think what I would like to do here is not look at this from what exists today that you can use as opposed to what recommendations should we be making to the Attorney General about how we see this going down in the future. I think that it seems to me based on the discussions that we have had both the last time and this one that what we're saying is that there is a need for more analysts. We need to make sure that they have a better educational program up front. We also need to make sure that they're trained with kind of on-the-job training so they can in fact do it. We need to encourage people to go into this field and remain in this field as opposed to training them and having them sucked out somewhere else, and that to me looking at how can you support that.

That's the general goal. The specifics we may not be able to flush out here today. It may be that down the road somebody will try a program that works, but the idea being I think that certainly we have a consensus in the room that that is something that needs to be done, that we need to be figuring out a way to encourage better education, on-the-job training, retention, and hiring of analysts.

Is there something else beyond that that we also need to be recommending?

MR. GIALAMAS: I just wanted to add I guess a couple of comments. One is that, like Paul's experience, our problem isn't necessarily recruiting people, getting people interested in the field. The O.J. Simpson trial and shows like CSI have revolutionized the interest in this field, so getting people attracted and coming in isn't really the problem.

It's, as Paul mentioned, that transition from education, being educated in a university environment to bringing them to practical experience. It's a huge drain on these laboratories and more so on smaller labs than it is on larger labs.

One approach that California has taken as a state is they've recently drafted some legislation in the Senate which deals with an internship program where the state will pay for someone to be an intern for a minimum of 1,500 hours, which equates to about nine or nine and a half months of full-time work. What that does is essentially the state is paying for them. There is no obligation for an agency to provide employment, but at least avails themselves to get trained in and on the job type setting, which helps close this gap between where we are.

We've seen models like this. A good example, the closest analogy to DNA is what ATF has done with their firearms examiners school, a very extensive, long-term program, several months. It takes a little more than a year I believe to complete the entire program. We had an examiner go through that program. It's typically a two-year on-the-job in-house training, and within a year we had an examiner who being fresh out the door is, quite honestly, a better examiner than some of the people we have had working in our unit for five years.

If we can develop a program like that, that would be wonderful. I think the big key is how are we going to address these huge numbers that everyone needs because we all need a high number of people, and with the influx that we will need and expect to get in forensic science, that I think is going to be the ultimate challenge, how do we address those large numbers of people getting trained in a reasonable amount of time.

MS. SAMPLES: I think another problem is that if there are these training programs, is having the laboratories, the users of the graduates of these programs, feel comfortable and confident in the product of these programs because you bring someone in and you have laboratories who will just say, well, that's all well and good, but they're going through my training program anyway. So you haven't really gained anything in terms of time saved, the time lag to where you have an independent case working analyst.

I know we've been poached from our laboratory and a laboratory has taken one of our staff members, and they still end up going through that laboratory's entire training program even though they may have been with us for two or three years. So what is going on there? Well, it's we want it done our way and our way only I think.

MS. NARVESON: One other thing I would point out is that of all the applicants we get - and these are people with a bachelor of science degree in chemistry - 50% of them wash out in the background checks. So the best bang for my buck is that I get to hire the person who passes all the background checks, and then I can participate in a program where I can send them to a training academy. That means I can keep my experienced examiners on the bench doing casework, but I can have this person that I'm paying off getting training. This way I know it's a quality person and I'm not going to have any problems. There are no misgivings on the student's part or the employee's part either.

So I would point that out as one other type of issue that needs to be addressed because I think oftentimes these people come out of forensic programs or even out of B.S. science programs and they don't recognize that to work in law enforcement and the laboratories you have to meet a very high standard.

MR. SELAVKA: I'll say it for Max. He would probably want to say it anyway. The TWGED process looked at foundational education at both the graduate and undergraduate level as well as training that occurs after initial competency, but we did find the on-the-job competency development and assessment period to be an area that was unworkable in the time frame of TWGED, and so it still remains, and maybe this is where the initiative related to this body could fill a gap, and that is the forensic institute and tradesmen's aptitude development is a place we didn't have time in TWGED to do it. The academicians didn't want to take it because education is a very different process than skills development. Laboratories, we don't have the resources in the lab to do this easily. Paul was eloquent in his point.

So there is this gap, and I think this recommendation is an excellent addition to those that you will make. How exactly to craft the language about what you want to do, I think this is pretty close actually, to have a very small group get together and make some recommendations about how to make it happen nationally and internationally needs to be done. Max would probably

have good ideas even for language because we did play with it a bit in the beginning of TWGED, and then we decided we couldn't get there in the time frame that we had. Chris kept us on point, and we just knew we wouldn't get there. There may be some documentation already available to include in your recommendations.

MR. SCHMITT: If there were an institute or institutes that were developed along the lines that Paul was saying, and the lab directors had confidence in the skills, training that was going on there, would you be comfortable after you hired someone to send them off on this what is called the NIJ Institute for Forensic Skills Development for nine months and then when they came back, cut them loose in your lab or would you feel burdens from people above you to put them through your own lab's training process, al beit perhaps a smaller one?

MR. TILSTONE: The drugs academy which we ran as a pilot was put in place really to see whether this concept worked or not, and I guess the most important part at this stage is the matrix about whether it works or not, and if it does, what are the limitations to it? The main point is we're getting that information six months downstream, and that's not here yet. So want I want to say is preliminary data.

Of the students that we had the range of experience was from one, which was probably a waste of everyone's time and money, through reasonably well to very well to exceptionally well. I think it's worthwhile passing on the information about the feedback that was exceptionally well because this came from Illinois.

Illinois is one of the places that has got an established and very highly regarded training program across the globe, and they took in a number of new staff for controlled substances at the same time, and the one who - they just absolutely ranked in the value - the person who got through farther than I who went back there to begin supervised casework is now on the bench doing unsupervised casework way ahead of the people they took on at the same time and are still in school in their own in-house training program.

There are two caveats. The first one is - and someone has got to say this - the problem has got a certain degree of intractability in it because of Generation X. We saw a bit of fear of Gen X behavior in the students. They don't want to learn. They're not going into the crime lab as a career. It's a job. I've got a degree, tell me which buttons to push, give me a piece of paper to sign, and I'll be there three or four or five years, and then I'm going to move on. All the discussions we have had with everyone really support this.

The second caveat to it is that it's an extremely intensive program for everyone concerned including students. If you are going to produce an effective academy, then you have to have the laboratory teaching facilities and the accommodation facilities that will take a reasonable number of students. That's asking someone to be away from home for 12, 16 weeks before they're doing anything else, and there are a lot of pressures that come from that, which kind of make it more difficult to implement, which is a pity because one of the benefits I think to the community from the NIJ funded pilots that we're doing is at the end of it we can hand over to the community the curriculum. Here are the lesson plans, here is the program, here are the resources we require,

here is what you have to purchase, and you can take that away and produce an academy. There aren't a lot of facilities out there that can take that and actually implement it. There are some.

So the issues were just to recap, yes, it does work, and the feedback from them was a valuable reference point with Illinois was it works extremely well. The second point is that any solution related to solving the current shortage of trained staff is going to suffer from the Gen X situation. The third thing is if you've got a critical mass of students in an academy, there are demands on students and the facility that provides it.

The last point I wanted to make is a very important piece of the discussions, and that's CCI. CCI in California has been doing the sort of things we've been talking about here for a very long time and I think reasonably successfully, but it might be worthwhile looking at some of the reasons why CCI has not been as successful as you might have thought to see what the lessons are that we can learn in the other places.

To go back a little bit to this whole issue, it's all very well to take 10 or 12 or 20 students and say you're going to train them, but where can you do it? If you're going to do it at one or two or three or four or five limited centers that have the facilities, then there is a cost in it, an emotional cost and a dollar cost for those people being away from their base. The paradox says if you do it at home, you're only going to do one at a time, and probably the lab which is trying to keep up with the casework anyway, there is not going to be the resources to be able to do the training. So it's a very difficult situation.

MR. GIALAMAS: Just two quick comments. One has to do with CCI. Just in case it's not known, I am on their users advisory board, and their focus of training is short-term training. It tends to be typically one-week type courses. So they have not ventured into the area of long-term training as we're talking about here in creating, so to speak, a semi-qualified DNA analyst.

My second comment, Glenn, is just to answer your specific question, as a lab manager or director, what would I do or how would I look at a program. I would want to have input and understanding of how the program operates so I am at least assured that I have confidence in the training that takes place and I know that I'm getting a reasonably qualified person out of the program.

The reality will be is you can never create a program where anyone is going to come out trained and you're just going to put them to work the week that they come back. There is always going to be some kind of a transitional process from learning the basics and mechanics that I would hope an academy like this could handle in understanding how we do things at our agency. Every agency has a different twist to an extraction method or an interpretation of procedure, how you handle mixtures.

So there is going to be integration that has to take place between this conceptual academy and the actual employment or use of their capabilities now, but we can significantly shorten that. I can do that within a few weeks, perhaps a month instead of taking the typical 12 or 18 months it takes to take someone through the entire process.

MR. KRESBACH: In a number of ways we had this years ago when the FBI was providing their four-week DNA course. Granted, four weeks is not enough time to learn all of the nuances and all the underlying theory that might be required once you actually get to the job site and take on the on-site learning requirements, how do I fill out this paperwork, how do I push the buttons in the right order for the way the system is set up where I'm going to work.

I'm thinking that with the number of academic institutions that are providing forensic training, the Forensic Resource Network integrated with some help from the FBI, that certainly a number of different locations could be provided around the country that could set up these institutes, if you will, providing training that would last anywhere from three, four months. There is still going to be that high learning curve for the local activities, but the bulk of the people I think in the laboratories that would benefit from these types of programs are going to be people that they have already hired, as Susan had indicated, and they know where they're going to go. They're not going to be sent to a program or applying for a scholarship for a program that may or may not exist for them in an employment fashion down the road.

I think that if a scholarship type of thing were available, that the scholarship should be available through the person's hiring laboratory so that they go to a program, NFSTC or the FBI or Virginia or wherever the program could be located to get that basic specific information after they've already completed that bachelor's or master's degree.

While the concept of scholarships for people that are already working on an academic program but not yet hired by an agency is nice, there are a lot of scholarships already out there. There are a lot of programs already out there. I don't think the problem in any way is trying to find or attract individuals that are interested in this work. As someone down this way said earlier, with CSI and all the other programs - that's why I went into forensics. Everyone remembers Quincy. Granted, he generally burned his fingers when he touched the gas chromatograph, but aside from that, that's how I got into it. There are plenty of people that want to do this work, whether they go into it initially as an academic program specifically towards a forensics program or they start working on a bachelor's degree in molecular biology and decide the angle or the direction that they want to go is forensics versus the private sector.

There are plenty of people out there that are going to be there. It's just a matter of can we get them specifically trained for the tasks that we have and then also get them in a cost effective manner trained so that the smaller agencies are not saddled with shutting down their casework program while they're trying to do the training.

I've rambled. I apologize.

MR. SCHMITT: No. I think that was fine. It seems as though there is consensus that the area of the gap that most needs to be addressed is this area after graduation from either a bachelor's or perhaps a master's program and before you can turn them loose unsupervised in a laboratory. It's that on-the-job training component. It also sounds to me from what other people have said and especially what John had said that the people who we think ought to go through this won't want to go through this unless they know they have a job. In other words, they would need to be hired by a Paul Ferrara or David Coffman with the understanding - and you're not committed to this -

that the next thing after they're hired is they go to this thing to get their training, and the expectation that you would have is that they come back and but for some unique aspects of your lab, you know, where does this go, who is this person, you could turn them on and let them start doing casework when they get back from whatever this thing is.

It seems to me that that being the case, as far as cost sharing, it might be that we could reasonably expect that the labs would pay the person's salary because they're going to be an employee and you're going to pay them whether they're being trained by you or they're being trained by this other entity, but that the overhead cost of this entity to do this thing would not necessarily be borne by the labs. That might be the federal component. Paul, I see that you have something that you want to say.

MR. FERRARA: From our limited experience, one, when we have accepted after screening and accepted six DNA students that they're going to spend the next year in our laboratory being taught by our examiners, who incidentally are being paid supplementally to do this training, and in addition they are expected to continue doing their own casework - I mean this concept is this is no longer academia. This is the real world. This is what it is that you're going to face day in and day out and things that you have to learn.

When we finish selecting the people, the first thing we tell them is, look, there is no promise at the end of this year that you will be able to be hired by the Virginia Division of Forensic Science at any of our laboratories because I cannot guarantee from year to year how many new positions I will get. With a cadre of six examiners, I'm, quite frankly, not going to get six new examiner positions each year; however, I have said to them and the facts have borne me out that if you successfully complete thisprogram, you can write your ticket and go anywhere in this country that you want because labs like myself and all of those labs represented here are clamoring for people that are well educated and well trained on the job.

The irony here is that I lost the million and a half dollars a year of funding that I was getting from the State of Virginia because the State of Virginia said why should we give you a million and a half dollars to train people to go to other states? I felt like saying why do we have state operated universities, you know, but that was the mentality.

So fundamental in this we have found that the students - I mean the biggest problem is struggling on an $18,000 or a $20,000 stipend, but typically these kids have gone - they've got a bachelor's degree, a master's degree, and all you're doing is asking them to spend one more year. It's a residency. It's an in-service program. If they're going to be professional, you almost have to have that expectation. If you're going to specialize in medicine, you're going to serve a residency, and it's going to be a difficult period. Perhaps when you complete that residency, you would like to stay in that particular hospital or you say I am now going to pick up my marbles and go somewhere else.

What I'm talking about is a source of fully qualified examiners that laboratories all over the country can draw on without having to have hired somebody that you don't know anything about I mean except for an interview process and then send them off someplace else to be taught and you're paying the salary. I mean if I hire somebody in Virginia as a forensic scientist trainee,

we're paying about $35,000 a year. That's $35,000 a year out of my budget for a nonproductive individual for a year to say nothing of the much greater costs that I'm losing in terms of my own manpower. I would love to have some other institution around that I could hire the people directly from, and there isn't any, so I had to create our own.

MS. HART: I'm just kicking this around because I'm trying to figure this out, and it strikes me that there are a couple of common themes that I hear here. One is you need this extra training in a setting outside of the lab because you can train a larger number of people with a smaller - it's more cost effective to do it than the one-on-one training in the lab. You do a certain amount of training outside of the lab here. You need to reserve that training for people who could pass background checks even if they're not hired now. In many ways local or state hiring freezes impair your ability to commit a job to that person before they get the training down the road. People are also reluctant to fund these if they can't be guaranteed to get the people at the back end.

Hypothetically what if there was a situation like this where there was some sort of institute or whatever which was funded by - if their graduates were hired with this training, the states would reimburse them or pay back what was the cost of that training to that university to help self-fund it? So the people who are actually doing the hiring and getting the benefit of it were the ones that were paying belatedly for the training. Is that at all workable? Is there some sort of idea like that that's worth thinking about or kicking around with other people to look at that? You do have this problem with everybody being reluctant to commit their funds to it because they're not going to necessarily be the beneficiaries of it down the road. You can say this is a bad idea, folks.

MR. FERRARA: No. I'm trying to digest that and thinking out of the box. Offhand I would be certainly willing to reimburse my institute the $20,000 as a bonus, as it were, an extra expense in exchange for hiring a fully qualified examiner who, again, meets each and every requirement of CODIS and ASCLD-LAB and competency testing. A $20,000 bonus for having somebody fully qualified, that's still a deal.

I don't know how I would do it mechanically within the state government. That would throw them for a loop, I know, but conceptually there is some merit there.

MS. HART: I also wonder about whether with flexibility over some of the crime lab improvement stuff whether additional flexibility here would help encourage that. I think this is something that I would like to try and think of down the road, how to do it, and I'm sure we will be calling on some of you to further perhaps develop this concept, but I think that some of the ideas, the common theme here is that we've got some people with some impediments to the training because people can't commit the funds up front without a guarantee they're going to get people and how do we perhaps work around that so that the people who actually are hiring the people are the ones paying for the training even belatedly. So I look forward to further ideas on this.

MS. NARVESON: Just more comment. I think that what we've heard is there are a number of institutes that exist right now, and the ones that were named actually cover various regions of the country. The other thing that we've seen is that it's very difficult to get people to relocate. So

very likely someone trained in Paul's institute probably would not be overly anxious to move out of the eastern corridor and move to Arizona; however, someone trained in California might be very interested because that's familiar territory to them and they may have family. What we're seeing with this Generation X is they like to stay close to the family, so I would definitely support regionalization of these institutes if that is looked to.

MR. SCHMITT: Any more thoughts on this point?

MR. BUTLER: I think what we've heard, too, is you need to have - there is definitely going to be training for core competencies like how to use genome typing software or extract, things you wouldn't learn necessarily in school, but then there is the polishing, if you will, of what is needed in the individual laboratory.

So I think what needs to be done as well as laboratories have to define how they could break those things up. If they could define and say, well, we can get training, the core competency training from somewhere else, from another institute, but these are the actual tasks that they need to have refined in our laboratory.

Individual labs have to do that. I don't know how you would get all of the information back, but you could then here is what the core competencies are. Here is what we use as the curriculum for a facility or an institute.

MR. SCHMITT: I think that's a good idea. I'm reminded, as John mentioned, of kind of the Federal Law Enforcement Training Center model here where the majority of federal law enforcement agents go to one place. There is one curriculum. It's a core curriculum, if you will, that has been developed by a board on which are representatives from all the different federal law enforcement agencies which send its people to that place.

After you complete this course then there is often one, two, or four weeks of follow-on training at your individual law enforcement agency, sometimes in that same location; sometimes in their own training center or someplace else, but they've all decided here are the basic skill sets that a federal law enforcement agent needs to have, and it works just fine. That's I think really what you're saying, John.

Any other thoughts on this?

MR. SIGEL: One more comment to the tail end of this process. There is the accreditation process for those labs that are accredited that they must have a competency testing within their own system before they put an examiner on, whether they be through a training program such as this or hired from another laboratory, but there is not a requirement by the accreditation program that it has to be full-fledged training.

So something about Carl's comment about the extension of the TWGED emphasis on the educational program, a similar type concept for the training aspect that we're talking about could assist that transition to reduce that amount of time in the individual laboratories.

## OTHER DISCUSSION ITEMS

MR. SCHMITT: Before we break for lunch, let me just turn your attention to No. 4, which is the other discussion items category and see if there are things there that folks would like to comment on. I'm particularly interested in hearing from folks who have had experience with SANE and SART nurses, if working with them is easier or whether evidence gathered by those folks turns out to be better than gathered by nontrained folks or people who are not trained in those techniques and just how that fits with what you all do.

MS. SAMPLES: In my former life I was a criminalist in California, and my jurisdiction made extensive use of SART/SANE nurses, and once the counties that we covered started using those nurses the quality of our evidence greatly increased, and it was a wonderful thing. We were intimately involved in training them during their training program.

Now fast forward to New York City, which although it's five counties, it's hundreds of hospitals and thousands of transient nurses and doctors, and some hospitals have those sorts of programs; some don't. Most don't. The turnover there is very, very high. It has been very difficult to try and have any sort of continual improvement of the collection of sexual assault evidence. So it's very, very spotty, and any efforts to try and standardize it, require it, or otherwise implement it over everybody I think would only be of benefit to everything.

I mean we have had cases where we've opened up a sexual assault kit and there has been nothing in there because whoever collected the kit forget to put it in there. They sealed the box up and sent it to us, but it was gone. In that particular case the guy who had been arrested, the judge dismissed all the charges because the potentially exculpatory evidence was gone.

MR. GIALAMAS: Just to let everyone know, in California there is a program that is currently in place through UC Davis. It's called the California Medical Training Center, and it is a statewide program that teaches nurses and physicians how to collect forensic evidence in sexual assault cases. I am an instructor on that program.

They have put together I believe it's a four-day course that nurse practitioners and physicians go through with hands-on training and Power Point slide lectures. It's a very worthwhile program, and we've seen the success of that program. We now work very closely with our SANE/SART nurse programs, and we encourage them to come and take a tour of the laboratory, come and talk to the analysts on how their collection methods and techniques that they use are being applied, and we've found that to be a tremendous success in the increase in the high quality of evidence that we get.

MR. FERRARA: Just two quick points. One, there is a new publication, national publication that's out titled Forensic Nurse, which I think is an indication of the development and interest and also can be a valuable educational platform in itself.

Secondly, the design of Virginia's physical evidence recovery kit or rape kit was done in conjunction with working with the sexual assault nurse examiners or forensic nurses so that we developed a kit that was not only specifically designed to work well with ultimately an

automated process in the laboratory, but one that also has first and foremost in the mind the comfort and ease and lack of further trauma to the victim themselves.

MS. NARVESON: The Phoenix area has really established what I think is a very excellent program that couples the expertise of well-trained SANE nurses along with the investigators for the Family Investigations Bureau. We actually have a Family Advocacy Center where the SANE nurses are on call and they do all the examinations. They work very closely in conjunction with the laboratory, with the prosecution attorneys, and with the victims' advocates. What we are seeing is the quality of the evidence is dramatically improved, and they are continually asking if there is something more that they could do to make it even better.

What we're looking toward is to even find a way where they may be able to assist the laboratories in screening some of the sexual assault kits. In other words, they can do the sex assault examination, but they do also microscopics for spermatozoa. We feel that we can train them to the level and utilize digital images that can be transmitted back to the laboratory along with records, and they essentially serve as our technicians in that regard.

So when it comes to outsourcing nonsuspect sex assault cases, we feel there might be an opportunity there for us to be able to get them to do some of the work on the front end and be able to send those cases immediately out for outsourcing and reduce the burden on the laboratory.

MR. SELAVKA: A couple of points just to follow up on what Susan said. There is the American Society of Testing and Materials, now called ASTM International, has a subgroup of the E30 committee on forensic science methods, and there is a working group that's looking at sex assault related evidence collection and testing of materials.

A huge argument that is not resolved is whether sex assault nurse examiners or other specialists in a hospital setting should do examinations. I don't think there is any consensus at all in the field about that. It may work in some places; it might not work in others. So I guess I politely would disagree with whether the locals should do anything without the crime laboratory's involvement.

What I wanted to say also is that you probably have already gotten the feeling we're all very proud of how the sex assault evidence collection kits when performed by a well-qualified SANE is running in each of our jurisdictions. We all make tremendous investments in that program. Our laboratory scores the kit quality and provides that feedback to the SANE trainers for their annual recertification, and you can localize it to a specific nurse when there is an issue, which is an important metric, and probably most of the programs that are doing it as well have a metric like that, but in a national model you would want to include that metric as well.

MR. CLARKE: I am a huge believer in the sexual assault either response team or SANS system. Having tried cases under both systems, I think the benefits far outweigh the disadvantages. I'll mention a little about the disadvantage in my view. But certainly the collection of evidence, the relatively, if not immediate response, instead of the delays of what could be hours for an examining physician to look at a sexual assault victim.

The collection of evidence I think is much more detailed and cleaner. I think a lot of that is the use - and again the majority, if not all, jurisdictions in most cases perhaps - I know in California the state mandated forms be filled out, and that provides the sexual assault nurse examiner to ability to follow a checklist, which is very important in these cases. There are many steps in a proper sexual assault examination for not only detailing the findings, the collection of physical evidence, and so forth, and those required forms I think are excellent in insuring that each of those steps are taken.

The only disadvantage I have encountered is by way of testimony, not for lack of anything on the part of the nurse examiner - well, occasionally, but mostly when the issue becomes physical or anatomic injuries and so on where the defense may call an actual emergency room physician, and that can be an unbalanced situation, but fortunately that doesn't arise too frequently. More I think is gained by the use of these examiners because they are much better at the detailed process in my experience than physicians are.

MR. SCHMITT: Other thoughts?

MR. COFFMAN: I was going to say we looked at the nurses helping in the screening for spermatozoa, and I just would say go with caution because we don't have a lot of SART and SANE programs in Florida, but it took us years to get them to stop looking at the slides because we found that between 60 and 70 percent of the time the doctor - typically the doctor was wrong. He would say no sperm present or unsolved sperm. We even had them say they saw motile sperm and there was nothing there, and then we're in court trying to say you're not a medical doctor. Who are you to disagree with the doctor?

So I would say just be careful. They're in a hurry. They've got a lot of people in and out. Their primary concern is the victim's care and medical care. It's not looking for the forensic evidence. So just be cautious in doing that because we saw, like I said, 60 to 70 percent of the time they were wrong and put down the wrong conclusion.

MR. SCHMITT: Susan, do you want to respond?

MS. NARVESON: I must say that early on I was not an advocate of the SANE nurses; however, since we have a great deal of control over the facility that they use and also who they are and work in very close collaboration with them, I feel confident that we can make this program work, but I do think the success of any SANE nurse program is it's just absolutely critical that they work in close collaboration with the forensic laboratories so they understand the forensic aspects of what they do.

MR. COFFMAN: I don't want to leave it that you thought I was against the SANE and SART. Doing the sperm searches for you was the only comment I was being cautious on. We're very supportive of those programs.

MR. FERRARA: The issue of sperm searches aside, we have seen time and time again not only the quality of the collection of the evidence, but the specificity of the information that the properly trained sexual assault nurse examiner can provide to the laboratory. It's a practical issue.

When we're armed with good information and samples, when we open that kit, we know from the information provided in that kit which evidence to go after first.

In cases - we had one recently where a young 15-year-old girl was digitally penetrated. No sperm searches - I mean sperm searches all were negative, but the sexual assault nurse examiner had taken enough care to ask the victim if the perpetrator had touched her in any other way, and she indicated well, yeah, he sort of sucked on my earlobe. She had an earring on. They collected that earring and we got a good profile off that earring and made a hit.

So I think there is a tremendous value there in the same way as we would look at training crime scene investigators, medical examiners, anyone who is involved in collecting evidence in one way, shape, or form.

MS. HART: I just wanted to mention one thing. The Office on Violence Against Women at the Department has been mandated to provide some specific recommendations to Congress on a number of these issues, and so we will make them aware of the discussions that are going on here today since they are really the ones that are going to be taking the lead on this particular issue.

MS. HERD: I just wanted to make a comment before we adjourn for lunch. Wearing my prosecutor hat now, I really think there needs to be a much more substantial investment in training and technical assistance with prosecutors in the area of DNA, and while in some jurisdictions they have the luck to have somebody like a Woody Clarke or a Steve Reading, most jurisdictions have really no one they can turn to if they have a significant admissibility hearing that's coming up or a significant trial or if there is a new DNA technique that they want to use. This really has a huge impact on backlogs in crime laboratories for all the obvious reasons.

I know in the past there really has not been a very substantial investment financially in training for prosecutors, nor technical assistants. I think the more that you make prosecutors aware and the more that you give them the tools needed to handle an admissibility hearing or to argue with their legislatures about the need for more funding for labs or changing statutes of limitations or just educating line prosecutors to be sensitive to the needs of crime laboratories in terms of letting them know when there has been a case disposition and that sort of thing, that until you really address that and focus a lot of investment in that, you're not going to reduce the backlogs as quickly.

I know I keep arguing for that, but it doesn't really seem to change, and there doesn't seem to be that much funding that comes, and I think it's a critical need and I think the benefit of it would be enormous in terms of what you would see in terms of the impact.

MR. SCHMITT: Any other thoughts before we go to lunch?

MR. DILLINGHAM: Let me just say that I do have a little recommendation at an appropriate time later in the meeting that I would like to submit for consideration on that point.

MS. HART: Do you want to say it now?

MR. DILLINGHAM: Sure. I've got it here. I wanted to see how things went, but I guess the bottom line is we appreciate representing the prosecution community, just being here with the lab directors and others, and I know your focus is on backlog reduction and you have a number of complex and specific topics you're addressing, but I think there is a commonality in all of them, and that is one of resources and one of improved practices. When you take out those commonalities, you're still left with the bottom line on the resources, which is associated with the improvement of practices.

The National District Attorney's Association, which I'm wearing that hat today, has passed a resolution on DNA in which they embrace a public investment for the fair administration of justice in DNA testing. They also have specific recommendations where they embrace increased testing for the laboratories, et cetera.

The recommendation that I would have for NIJ to consider - actually for the Department to consider is one that is within the control of the Department of Justice and is one that does not necessitate any new legislation or even doesn't necessitate the funding, but it would be one that would recommend a certain option that I typed out last night here that I'll read to you.

It recognizes that NIJ has exercised leadership in the DNA area and continues to do so in research and development as well as in technology, but there is a sister agency, the Bureau of Justice Assistance, and there are other offices within the Office of Justice programs and the Department that also come into play in these areas.

The largest provider of state and local assistance, as you well know, to the law enforcement and criminal justice community is the Bureau of Justice Assistance. It does have state block grants, and within those state block grants you have purpose areas that are authorized. One specifically is for DNA, and it is caged in terminology for assisting the laboratories, the forensics labs in the DNA indexing.

Within the local law enforcement block grants there is no mention of DNA, and within discretionary grants, to the extent that there are any discretionary grants that aren't earmarked, the purpose areas of the state block grants apply.

The bottom line is this: I think DNA could be given a raised priority within the Department and its funding practices with federal funds for state and local law enforcement assistance. The recommendation that I drafted, which I tried to make it as flexible and as nonspecific as possible that the Department could finesse and maybe tighten up is this:

The Department of Justice consider establishing through its state and local law enforcement assistance a program that encourages all states to dedicate resources for the purposes of expanding and enhancing DNA testing, practices, and promoting the effective use of DNA evidence. This program should include a special fund or mechanism for state and local prosecutors to request support for DNA tests in emergency or exceptional circumstances. This program should also provide law enforcement officials, laboratory personnel, and prosecutors with state-of-the-art training in DNA technologies and its effective use to promote coordination, improve practices in the fair administration of justice.

So it's a very broad provision under existing funding programs of the Department of Justice that I think could provide more impetus and emphasis to DNA testing, training, et cetera. So I would recommend, even though this group is focusing on backlog reduction, that you can't get away from the resource issue and the better practice issue and that it does have implications for funding mechanisms. So I throw that out.

MR. SCHMITT: I appreciate that, Steve. Reactions to Steve's comments and suggestion?

MR. SELAVKA: The lack of the words "Public defender" in two places there would seem to me places that you could add it.

MR. DILLINGHAM: Let me address that, and I may not be the -

MR. SELAVKA: Since they need the training, too, and access to testing.

MR. DILLINGHAM: That is not excluded here, and it says that prosecutors would be eligible. I did have the specific provision there for emergency and special circumstances that prosecutors could request. I might be able to debate with you that prosecutors do have a unique role in the criminal justice system with professional and ethical responsibilities for the fair administration of justice that may not be incumbent upon defense counsel in some circumstances.

So whether to engage in that debate - we're not against expanded DNA testing at all and we're for the fair administration of justice. So I would allow the Department of Justice in its guidance as well as the states that receive these federal funds to come up with their own criteria and formulas and process, but I would say that it would be very important that prosecutors be eligible to request in special exceptional circumstances funding to support DNA tests.

MR. SELAVKA: I guess I would be more interested in the last paragraph about training. It would be very important to make sure that public defenders have the same training.

MR. DILLINGHAM: Sure.

MS. HERD: I do think also that there are a lot of training mechanisms or training funding pots available to federal defenders and other public defenders - at least that's what I have been told - more so than you might realize. Maybe it's getting out there in the community, but I do know firsthand that there really has not been very much on a national basis, I mean probably less than a million dollars over the last ten years available for 27,000 prosecutors. The turnover rates in prosecutors' offices are tremendous, so you're constantly having to educate and make people aware.

So I agree that it's important to train the defense bar. I do think those mechanisms are available, and I know that NIJ is supporting looking at additional mechanisms, but just for awareness issues.

MS. HART: Steve, I would like to get a copy of that when you feel it's something you can distribute, and I appreciate the thoughts. They're very good ones here, but given the exact

language, I think that I appreciate the fact that you're trying to keep this a flexible a recommendation.

I think we're all very mindful that at the end of the day we're talking about evidence that has to be used in a court, and so if we have everything perfect in the crime lab arena and it's not usable in a court and people don't know what to do with it, then we haven't solved the problem. So it's part of this overall question about how do you make sure that DNA evidence is maximized to its full potential, everything from collection to the very end of the criminal justice system. That's one big issue.

MR. COFFMAN: Are judges trained? Can you train the judge?

MR. SCHMITT: To do what?

MR. COFFMAN: The reason I say that is a perfect example is what is going on in Minnesota where they just obviously don't understand the DNA - the community and the progression of the community, and the judges end up having the ultimate word. Are they supposed to be somewhat like the jury? They can't be - I don't know how to say it.

MS. HART: Tampered with?

MR. COFFMAN: You know how typically they want a judge that doesn't have any personal knowledge of the facts being presented to them. Are judges somewhat the same way? I just was curious because I think somehow they need to know the progression of forensic DNA in the country so they can make better decisions.

MS. HART: Sometimes there are issues when judges are trained based on training that's provided by one particular party. Let's suppose that you have plaintiffs in an asbestos case. If the plaintiffs' bar sponsored major training for judges, there could be a complaint that was biased towards the plaintiff's point of view. So it's very important that training materials be developed that are balanced and by an objective agency, and that's also why you need to go through the court's own training.

I mean, frankly, if MBAA developed the best judge training program in the world, it would not be as popular or used because it would be perceived as coming from one side. So I think NIJ can provide a very valuable role for spurring those kind of objective information exchange and being the honest broker of information.

We're going to break for lunch.

## NIJ-SUPPORTED RESEARCH

MR. SCHMITT: We're delighted today and very lucky to have Tim Schellberg and Lisa Hurst from the Smith Alling Lane law firm here in Washington to discuss the status of their research projects. As we discussed yesterday, Sarah has funded research projects with them on kind of the extent of the backlog here in the United States and some related issues, and I'll let them discuss those issues. So while you continue to eat we'll turn it over to Tim and Lisa.

MR. SCHELLBERG: Good afternoon. Again, Tim Schellberg with Smith Alling Lane and also Lisa Hurst from Smith Alling Lane. For those of you that have sat through many of our various presentations over the last few years, you will be happy to know that we're not going to be focusing on redundant data about the status of all the legislation around the country. We're going to merely talk about the projects that we have been awarded for NIJ regarding the assessment of issues that will help facilitate everything you have been working on.

The format is I'm going to explain briefly the United Kingdom project that was recently awarded to us just about a week ago. Then I'm going to go back to the main project that we are fully engaged in at the moment, which is the assessment here in the United States, and remind you how we got here, some of the issues that we're looking at, and then turn it over to Lisa that's going to walk you through the process, for example, how they developed the questions and the time lines.

To kind of start, to remind you - first of all, actually I'll start with the United Kingdom. The project, like I mentioned, was awarded to us about a week ago, and the goals of this project - and it's going to be conducted by Chris Asplen, who is an employee of Smith Alling Lane that resides in London - he is going to basically get a working document of how the United Kingdom's system works, what is their hit rate over there, how many casework samples they're doing.

We're hearing a lot of anecdotal stories about how successful they have been, but why is that and how does it compare to where we're at here in the United States at the moment. So hopefully that project should be done we believe in July and will be done at that time and hopefully address all of those questions that you're asking about.

The project we are completely underway with is the project here in the United States that the NIJ has put forward. To kind of walk you through how this developed and what we're after, if you remember, this slide is from our last presentation we gave to this group. Basically we identified some end goals that we believe this group was involved with; that is, we believe this group was looking at all felon databases in all but a few states in a few years, casework backlogs cleared as an objective, and finally routine casework at all relevant crime scenes.

In order to obtain all of those objectives let me remind you there are various decision makers that we identified that are involved. Of course, the state legislators are needed to pass the all felons legislation.The state agency responsible for the crime labs are in place to implement those laws. Congress and the Department of Justice, of course, are involved in helping facilitate the finances to get these programs off the ground, and, of course, law enforcement is in total control of doing

the casework, which would include prosecutors, and also city and governments which are also in a position to fund a lot of this as perhaps the Federal Government may move out of funding eventually in the future.

To fund or to move those objectives considering these decision makers, what would a group like this need to perhaps educate those decision makers? Of course, a group like this it's best positioned to educate these decision makers through data. So what we thought about is what kind of data would be most appropriate for these decision makers?

I think you can look at data involved with forensic DNA in two ways. One is what I'll call political data, things such as what is the hit rate of having a large database in doing aggressive casework against it, easy, simple political data that you can see some of these decision makers moving forward with.

The second issue is practice data, things that we're talking today about the need to educate people in our labs, automation, things like that, things that, quite frankly, the decision makers here are not interested in on a simple level. So we're talking about political data that could be available for these decision makers, and that's what we're structuring this report after.

The questions as I see it break down into four major categories. One is what does passing DNA database expansion legislation do to the odds of solving a particular crime? We've all heard recently about the new phrase the hit rate. What is the hit rate involved in having larger databases and running casework against it? That's one of the questions that we're going to work to solve.

Number two, with funding to complete all DNA casework how many crimes will be solved? Basically this is a review of all of the backlog rape kits, homicides, where potential DNA could be yielded to run against the database. So given a certain hit rate, how many crimes potentially could be solved given that info?

Number three, what is the prevention angle of larger databases and aggressive case work? How many crimes based on criminal histories can we assume could be prevented if larger databases and casework was being completed?

Finally these decision makers want to know what is the cost value? What is the cost-benefit analysis? If you have a hit rate of 50% and it costs you $3,000 or three DNA tests in a homicide weighed against a typical amount of investigative time to investigate that crime, what is the cost-benefit analysis? So those are kind of broad categories that we are looking at, and all of the questions that we have derived start with these four areas as a premise.

Again, we're focusing more on this beefy political data without getting into a lot of minutia about things that may not be interesting to a member of Congress, a state legislator, those folks.

Before I turn it over to Lisa, Lisa is going to discuss basically the process and the questions, but let me kind of fill you in on where we have been so far. We were funded in July. We spent most of July working with a university, Washington State University division of governmental studies. Dr. Nick Leverage is the director. We've identified them to help us. They're local to us in our

Washington state office. It made a lot of sense. They also have a history doing similar studies. For the U.S. Department of Justice they've done some, a lot of projects for the Washington State criminal justice entities, such as the Washington State Patrol, Washington State Criminal Training Commission. So they fit into what we were doing and have been very willing to work with us.

So we set that relationship up, and they will be doing all of the statistical review. They have consulted with us on the creation of the survey instruments that Lisa will describe. Then August, September, and October is when Lisa has been working with them in a working group which many of you are involved with to actually develop the assessment instruments.

So now before I turn it over to Lisa I wanted to mention while I can there is another issue that seems to be coming up that I would recommend that this group take a look at, although it may not be appropriate - it probably isn't - to blend into this assessment. It's the issue of collections. The collection issue, our guess is that the state legislatures have authorized just this year alone probably 300,000 samples to be collected, but our guess is less than half of them will actually be collected this year.

What has happened is the state has - typically the collection entity has been the state penitentiaries. They're set up to take the DNA blood or swab or whatever it is, but as the state legislatures move into crimes outside of homicide, rape, serious crimes, these felons are doing their time, their felon time in the local jails. The sheriffs in the states are not set up, nor do they know how to take the collection, and many of them are balking calling it unfunded mandates even though it could simply be blended into the intake process in the jail. As you know, the state budgets are all struggling, and they're using any activity placed upon them to complain it's an unfunded mandate.

So I suspect that while we believe through the passage of those laws that we're rapidly growing the database, we're probably operating at about half capacity because of this collection problem. I guess I'm telling you there seems to be a very real problem based on what we're hearing out there, and this could be another assessment that you take a look at in the future.

With that I will turn it over to Lisa, who will describe the process that's going on with the existing survey.

MS. HURST: As Tim just explained, we were awarded the assessment project back in early July working in partnership with Washington State University to answer the questions you just saw on the previous slide. The assessment form will be sent to three separate groups. It's actually three separate forms, each one kind of tailored to the entity that we're trying to reach. There is a state lab assessment, which asks a lot of questions about backlogs, of course, your offender index, that sort of thing. This is going again to all local labs that perform DNA testing. Local labs receive something slightly different. Of course, we don't ask the local labs too much information about offender backlogs. Then this is also going to local law enforcement agencies, not to all local law enforcement agencies; there simply isn't enough time or willpower to get that done.

We are assessing all agencies with 100 or more officers. That's approximately 1,000 agencies in the United States. Then we're also giving to another 2,000 agencies - this is going to be a statistically valid sampling. This is a number that we worked through with Washington State University that they assured us we could make some good data interpretations by including this other sampling, and then, of course, the Indian tribes, we don't want to leave anyone out. I'm not really sure what kind of data at all. I haven't heard too much information about what the tribes might be doing or where that type of evidence is even going, but we will be including them in the assessment.

The time line right now, the assessment tool is to be mailed on November 1, so we're actually right now in the process of getting this to the printers, to the mail house. It should be going out very shortly. It's going to be sent out in three waves. The first one goes out November 1 with a November 30 due date. We'll do another one December 1 with a December 30 due date. It's going to be the same assessment tool, and, of course, we will be filtering out those people who respond so they don't get the subsequent ones, but we're trying to keep a very narrow time frame so that we can get some accurate results very quickly.

We hope to have a preliminary report to NIJ by the end of January. This timing, of course, hopefully will be keyed to potentially bringing some of this information to the federal legislatures and state legislatures and even your local county officials who might be thinking about budgets, give them some preliminary indication of what kind of real numbers we're coming up with. We do also hope to continue to give reports on the updates of what we're finding until the report is finalized. We hope to have this finalized by June, July of this coming here.

The status right now, I think, as I mentioned, the survey is in final review. We have included several of the forensic and law enforcement community in the review process, several who are in this room right now. It has included obviously the National Institute of Justice, our colleagues at the Washington State University. The state laboratories have given us some input, local laboratories have given us some input, and some of the local agencies have also reviewed this and helped us to write an assessment tool that hopefully most people can answer.

Insuring results. In some cases this assessment - it is asking for a lot of information. As I mentioned, we will be sending it out with two subsequent followups. We're going to be focusing on personal calls to all of the forensic labs to identify - it is going to the crime lab director, but in most cases it likely will maybe be handed off to the person who oversees the DNA section of the lab. We will be following up with all of those people to make sure that we answer all of the questions and that there is not a lot of confusion on what we're looking for.

We're also making personal calls to all of those 1,000 agencies, the local law enforcement agencies that do not have labs. This is going to be a little bit more - this is going to be key because I'm concerned in a lot of these local law enforcement agencies the kind of questions we're asking is going to take some coordination between various units. We are asking for what kind of backlog they have not just on rapes, but also on homicides. So especially when you get into the larger jurisdictions, it may fall on us personally to try to coordinate some of that data

collection. Then as time permits and as the remaining local agencies that are smaller and the Indian tribes, we'll also try to contact them personally as we can.

Just a few things about what the project goal is not. We are not trying to obtain a statistical survey of all the labs. There again is not enough time. The kinds of information that we would have to ask you to come up with I'm sure you probably don't have the time to come it with it yourself. We're asking for educated guesses in a lot of these instances. We're also not trying to complete a complete census of all the untested DNA evidence that's out there in the local agencies. Again, there are just too many. They're too diverse. They have too many different systems. We would never be able to complete that in a timely manner.

The project goal is, though, to provide a general assessment, to give you an overview of how law enforcement is using DNA right now, what kind of crime scenes are they collecting it from. We want to come up with a base from which we can make some extrapolations about how it might be growing, what the use might be in the future. Again, we're not surveying everyone. Some of this information we're coming up with we're going to be making just projections from, but it should give us a good, solid statistical base from which we can come up with some of these projections.

The project goal is eventually to have a report that we can take to legislatures, to the policymakers, and that will include not just a big problem of how this backlog is so big and how we need so much money to get to where we want to be, but a very big portion of this assessment is going to include a review of the successes of CODIS and a little bit more in detail we hope than some of the general numbers that you see from the FBI's Web page, but maybe into a little bit more detail on what kind of offenders are these, what do their criminal histories look like in some cases, maybe some case studies of how people have been caught and the benefits that this has had in the communities.

So the first question that Tim mentioned, what does passing DNA database expansion legislation do to the possibilities of solving crimes? Again, an extensive review of CODIS is going to be included here. One of the things we're asking for is criminal history records of your offender hits. This we understand in some cases will be - in some states will be very easy to come by. In other states it's a very tightly guarded secret.

Again, I will be working with each of the state labs and local labs to hopefully find a way around some of the privacy issues if that is a concern. We have filed and do have on record a privacy certificate that we had to go through to get this federal grant, so that's also available.

As I said, case studies. Obviously Virginia and Florida have come up with some great numbers doing their own assessments. We want to use that information. New York recently - the first 75% of their first 500 hits was from their 1999 expansion. So we're going to be looking for any kind of anecdotal or other types of studies that we can tie in to create a document again that legislatures can use to see the value of this, the value of their investment.

The second question, if we give you the money, how many crimes are going to be solved? Again, this is the assessment of the backlog, not just rape kits. We want to see if we can get some kind

of handle around cold cases, some kind of handle around who is doing the property crimes, which labs are, and what does their backlog look like, how many cases do they handle on property crimes.

Report on the state of DNA casework, what types of crimes are coming in for analysis. That's a little bit of the same question, but from the local perspective is it on their radar to collect from property crimes? Again, comparisons of all felon states compared to successes in states that aren't doing all felons, probably a pretty good guess of what you will find there, but again we want to pull that out into the final report that we do with some case studies.

The third question, how many crimes, particularly rapes, homicides, your violent crimes - how many of these could be prevented if legislation was passed? Crime rates, this is going to the local law enforcement agencies, asking them what their crime rates are, asking them what their comparative is then for all of the homicides that you have in a year, how many do you collect DNA from. If they're rapes, how many do you collect DNA from. Of property crimes how many do you collect DNA from.

Then again case studies, we want to see if we can find a few issues to bring out with serial offenders who had criminal histories where had they been in another state, maybe they would have been on the database a lot sooner. We possibly could have prevented a few crimes that way, cases again perhaps like Debbie Smith's case that we can bring out where a backlog actually led to a delay in an arrest.

This is duplicative, but again comparing how is this working in states who have the all felons who have a mature database versus states where this just hasn't been going on as long, how do the law enforcement agencies differ?

Will expanded databases in casework funding create other efficiencies in the criminal justice system? This is something that I don't know that we really hope to get a firm answer to. This might be something that points to further studies down the road. We do want to look at what the cost is, what are the needs of labs. We have several questions in there that we'll ask. If you were given a pot of money, how would you choose to spend it? We will be asking that kind of question and trying to come up with some answers to that, to what labs really feel they need.

Historic levels of funding, where have you been getting your money from? Have you been getting it all from your state? I know there are some labs that have been getting all of their money from the feds, and local law enforcement agencies, where have they been getting their money?

Again, a few case studies. I know that a lot of you have some cases that you could probably tell us of today where you have been able to exclude and quickly exclude potential suspects, saving that person a lot of personal anxiety, possibly saving them their job, making sure that we get the right offender.

Prosecuting DNA cases, how is this shaking out in the courts? Are they more likely to plead guilty to some of these crimes? Are prosecutors in states where we do have a lot of DNA cold

hits - are we seeing more cases in courts? Are prosecutors getting overburdened? Again, this isn't a question that we really want - we are not interviewing prosecutors, but we do hope to have a few case studies where at least we can bring this issue up and maybe point to something that needs to be studied a little bit more in the future.

That's pretty much an overview. We would be happy to answer any questions.

MR. COFFMAN: Are you asking the members of law enforcement questions like do you utilize your database to help you in your investigation in other ways other than just making the hits and things like that? There is a metric that I don't think is being captured, and that is when we get a call from a law enforcement official and he says, look, I have these three really good suspects and I noticed on your criminal history web site that they're all in there, can you make sure that they're analyzed, and if they don't hit, it helps them get their investigation back on track, like maybe that's not the right offender or anything. Is there a question like that in there?

MS. HURST: There is not. I think that we were probably operating more from the premise that it's such an underutilized thing right now that most of them may not even know CODIS. Perhaps Florida and Virginia might be in particular some exceptions where law enforcement might know a little bit more. In fact, actually we do have a question in there that is a question of if you had a good expectation of quickly identifying a suspect through the DNA database, would you be more likely to use it? It's a leading question. We hope we'll get 100% yes. I think that's where our basis of where we kind of felt maybe some of this misunderstanding was, but I would be happy to talk with you a little bit about that. I could certainly look into - I could add that one right after that, maybe something to that extent.

MR. COFFMAN: Because I know before we got rid of our backlog in our offender database - thank you, NIJ - before we got rid of our backlog it was phenomenal how many times they called and said, hey, we've got a good suspect; can you work this guy out of order, get him in the database so we can search, and he never matched. It was very rare that the guy that they had matched at that level of the investigation.

We kind of put our database on the Criminal Justice Network in our state, so anybody in criminal justice, defense, prosecution, anybody, can access it and see if we have someone in the database and if he's worked or not. So we're not getting those calls as much anymore, but we have been told that they have been utilizing that service. So I just think that's something that we haven't really captured that we're helping the investigation very early on when we know they're in the database and they've been worked.

MS. HURST: I think that's something we could certainly look into adding and at the very least that might be something I would like to bring out in the final report. If we don't find any good data that people are using it that way, maybe we can talk to a few officers in your jurisdiction who have used that it way and bring that out as something that could be done if only.

MR. KRESBACH: Similar to what Dave was getting at, our system is a little bit different clearly, as most states are different from one another, but we've experienced where, one example, we have a serial rapist that a crime scene profile has been characterized, it's in the database, it's

searched against all of our offenders, and we have a couple of very good detectives that have latched onto the idea as they generate additional suspects in their investigation of this case, the first thing they do is call me and say is Joe Blow already in the database, and I can say yes. Of course, if he is, he has been searched against the case. They can drop that angle of the investigation and not even contact this individual, whereas if he's not, then they can pursue it, ask for a standard to be compared or do the dumpster diving thing where they pick up his trash and such, which I wholeheartedly disagree with; it's a real mess, but that's one of the things.

It's similar, but maybe not quite exactly the same as what Dave has, but it characterizes in a sense a way of aiding an investigation without necessarily having to do additional work. It's already there. We can direct the detectives down a better path sometimes.

I had one other thing, though. I was curious. The report that you're going generate for NIJ, will it be split or categorized, if you will, so that you can get the data not only on a national level, but also state by state by state so the data that you get say from New Mexico, I can utilize that for my needs, you know, that I need to approach this law enforcement agency or whatnot versus a broad national report?

MS. HURST: That's something I hadn't quite tackled fully in my mind yet. My only concern is I would have to take a little bit of a closer look. We've tried to be careful to tell agencies that we're not going to publicly point to them, and if there is a case where I want to point to someone, I'm going to call them in advance and talk about it and get their permission probably in writing before I do that.

Again, it does get back to our privacy certificate, and we want to make sure that people are answering us truthfully without having to feel like they need to say the politically correct answer. There might be maybe some broad answers we can give you for jurisdictions in your state as long as we're maybe not pointing at somebody.

MS. HART: I think the answer to this is we're going to if we can. We're going to try and make sure you have the information you need unless there is some really compelling reason that we can't do it, and then we would let you know.

MR. SCHELLBERG: As long as it's in compliance with whatever we signed when we signed that 100-page contract.

MS. HART: I wanted Tim to follow up a little bit. I didn't know if you were planning to talk a little bit more about the project that was going on in Great Britain or you just wanted to touch on it since that is very new.

MR. SCHELLBERG: Quite frankly, it's very new. As you know, we just got your letter last week, and we signed it and sent it in the end of last week. So we are prepared to start. Our employee in Great Britain is setting up his meetings, getting it all organized, and we believe we can deliver it to you by the deadline, which is in July.

MS. HART: Since this is something that Tim is at a bit of disadvantage because he wasn't there when we were all talking about the need for this, I thought it would be helpful if I just described a little bit about what we're looking at here.

We've actually spent a fair amount of time dealing with Great Britain and getting results from them. They've done a very extensive evaluation on the cost-benefits of using DNA evidence, and they have made a very substantial investment in the use of forensics and timely testing there and are showing not only significant public safety benefit, but significant cost effectiveness, financial benefits from investing in this technology.

One of the things that we really don't have a good handle on is the front end of this. They have also made a substantial investment in the evidence collection and training officers who arrive at the scene to collect evidence in burglary cases, in car theft cases, and stuff that's so low down because you've got these backlogs that you really can't focus your time on that.

So what we want to try and capture here is the whole question of - also on the collection end of this, what kind of training do they have for their officers? Do they have specialized collection teams? How often are they able to generate usable DNA evidence in these cases and what are the costs and benefits of investing in the collection end of this?

So because they've already started it, we want to try and capture some of the information from them so we can make some informed decisions and recommendations on the evidence collection end and the timely analysis of it and to help state and local law enforcement make informed decisions about where to invest their limited tax dollars in this. So I'm really looking forward to this report.

MR. SCHELLBERG: It should be consistent with our report here in that we plan to get preliminarydata, although it will not be in the form of a final report, sometime towards the end of February. So if that matches with the data you may want to present to Congress as they prepare their '04 budget, that's one of our goals is to get you preliminary data by February, and I'll do what we can to make sure the U.K. is on track with that as well.

MS. HART: Great.

MR. SCHMITT: Tim and Lisa, thank you very much for your participation here today. It's fascinating as always. I have 12:45 on my clock. Let's take ten minutes just to clear your plates and get refills, and truly in ten minutes we will reconvene with the next area of discussion.

## DNA DATABASES

MR. SCHMITT: We'll begin the afternoon portion of our substantive discussion. We're going to begin with a discussion about DNA databases. This is one where we should go to the horse's mouth for where we stand, so I'm going to ask Joe DiZinno from the FBI to update us all on where CODIS 6.0 stands.

MR. DIZINNO: First of all, as the FBI representative here, I just want to make sure that everybody understands that we are highly concerned about the user's needs, and the users of CODIS are the state and local laboratory personnel. In the redesign of CODIS we are relying heavily, if not totally, on input from those users to design an architecture that will improve the CODIS system to make it a more effective and efficient system for the users. We are in the midst of gathering that information that will create a better system for the users.

To address a couple of the questions that are in the document that we were provided for this meeting, a couple of examples of concerns that came up, the first one being the lack of authority or ability for the users to conduct keyboard database searches and victim database searches, well, as the architecture now stands, those searches are conducted by SAIC; however, the new architecture will allow keyboard searches to be done by the states, and this would include any database search of a legally searchable database in that state, and that could be done as a keyboard search.

The second concern that came up was the concern of the state administrators that the new architecture may inhibit their ability to know and regulate what the local labs contribute to the database system. Actually the new architecture will enhance the ability of the state administrators to control and regulate what the local labs contribute to the database system.

Currently there are three groups providing this input for the CODIS redesign to us. The first group is the CODIS state administrators, which meets twice a year. There is a CODIS subcommittee of SWG DAM, which meets twice a year, and finally there is a CODIS redesign committee, which I think has met three times so far, and that CODIS redesign committee consists of two FBI personnel and 24 personnel from state, local, and the city crime labs. That's where we're trying to gather the information from those users to create a more effective and efficient database system.

We currently feel that we have the appropriate personnel assembled. Some would say we have too many people giving us input into the redesign, but we feel that we certainly have the state and local laboratories' interest covered to provide us the information to create a better CODIS system.

MR. SCHMITT: Thank you, Joe. I'm going to provide a very gentile and controlled forum on which all of you can beat up on Joe or at least comment on the CODIS upgrade and ask questions to clarify that. So let's open it up, and not just ask questions, but also express what things you think future CODIS redesigns ought to do that aren't being contemplated.

MR. COFFMAN: Well, Joe was very diplomatic, but I'm one of those that thinks we almost have too many people at this point inputting on the redesign of CODIS. The CODIS team I'm lucky enough to be part of, and with 26 people you can imagine how we get bogged down on issues and getting anything accomplished.

I will say that it has answered a lot of my questions, I think having the people who are writing the bid specs for it. I think one of my biggest concerns when they were going to go to the Web-based system was will the wording in our legislation allow us to continue to be part of NDIS because now we're not technically maintaining the data. It's being maintained somewhere else on a computer; we're just adding to it.

The FBI responded - I don't know if you know Dawn Herchenham. She's just a wonderful asset to the whole community. She wrote model legislation for us to put into our laws and to help with that issue.

Then the other concern I had was because we've had CODIS in our lab for the last ten years, I guess, playing around with it and using it, it has become an integral part of the way we do business. All our LIMS systems and all our information systems actually hit CODIS and gather information from it and they talk to each other. That was another concern. And the people who are writing the specifics for the redesign are going to include the file format for anybody so they can still connect to their data long distance. So they kind of alleviated some of fears as far as this redesign process.

MR. SCHMITT: Do you contemplate that you're going to have your own mirror version of uploaded data?

MR. COFFMAN: We will have our own data locally because CODIS - you're not allowed to put name information and that sort of stuff, so we still marry those up now even with CODIS at our site, but I'm not going to - at one point we were thinking we would have to, but I'm not going to recreate another searching algorithm or system on our own because we have found that that's not as easy as it sounds to develop that's accurate.

MR. FERRARA: Joe, wouldn't it be easier, preferable, and make things a little simpler for CODIS if the federal law was changed to allow at national those samples allowed by the states - doesn't that make the architecture simpler?

MR. DIZINNO: It would certainly make it cleaner because let's say Dave in Florida wanted to search something in Virginia. Dave wasn't legally authorized in his state to search that, but in your state, in Virginia, you're legally authorized to search arrestees. The architecture has to be configured so that those sorts of concerns are addressed. So, yes, it would make it a cleaner system in that regard.

MR. FERRARA: In the way of comment, under those circumstances a lot of my problems with CODIS 6.0 sort of go away simply because within a given state there are certain samples - let's say wemaintain a suspect database or an arrestee database and such that would not be allowed at a national level. Then it almost forces me into having a stand-alone system to carry all of those.

MS. HART: One of the things, just to follow up on this, the position that the Department has now taken on this is that it supports legislation that would allow - if a state lawfully collects a DNA sample, that that would be allowed to go in and be searched. So, for example, let's suppose you had a state that permitted juveniles, you know, a juvenile adjudicated delinquent for rape who was 17 years old, and your state allowed you to collect that and put it in there. Why shouldn't, for example, Massachusetts, who might want to use that to solve a case - why shouldn't they have the benefit of that? The rape victim is still a rape victim regardless of whether the perpetrator was 17 or 21.

The idea behind it was also that it would allow flexibility because you can't predict how all of the states are going to be changing their laws and allow ultimately the state to decide what collections it wants and what samples it will allow to be submitted to the database. So that's a new development since the last time we met in terms of the Department's position and I think a very positive one.

MR. COFFMAN: Paul, I was going to tell that you one of the questions you brought up and that was made clear to me in the CODIS redesign is that they are going to have this huge computer with all of those nodes and each state has it own node. You're still going to be able to manipulate and search your data - manipulate is not the right word, but you know what I mean - change your search parameters or do whatever you would normally do at the state. It's going to seem like a seamless thing. You just won't have the computer there. It's the ability to search other states that could possibly become easier with this new format if the federal law was changed.

MR. SCHMITT: Do your statutes that authorize you to take the data and upload them, do they also specify what files you may search or do they speak to your searching? I was under the impression that they just spoke to your ability to collect and have a database of convicted offenders in the case of Florida, convicted offenders and arrestees in the case of Virginia. So I listened to the part of the discussion where it was a concern that perhaps David couldn't search the arrestees. For example, if the statute were changed such that Paul could upload all of his arrestees, I think, David, you would need no further authority to search in this database and find a Virginia arrestee if that's where the hit came.

MR. COFFMAN: Absolutely.

MR. SCHMITT: Joe, you agree?

MR. DIZINNO: Yes.

MR. FERRARA: My one concern - I mean this would really work well to everybody's advantage - one of my concerns is if Congress is ready to pass such legislation that would allow, for example, arrestees to be included. I mean that's a political issue. Hopefully with time we can demonstrate its advocacy.

MR. SCHMITT: We're going to get to some of those political issues - we're going to call them policy issues instead - in a little bit in our next block of discussions.

MS. NARVESON: One concern that had been expressed to me was with all of the data residing at one central location, in the event that there should be some kind of catastrophic hit maintained by the communication network, you know, what kind of redundancy do you have?

MR. DIZINNO: That data will be regularly updated, and I'm not certain as to how often it will be updated, but there will be a redundant system located at another site with all of the data to plan for an event of that nature.

MR. COFFMANN: Actually it's not going to be another site in the same city. I mean it's going to be elsewhere.

MR. SCHMITT: Joe, how will expungements work? Who will have actually expunged the record when there is one that is required?

MR. DIZINNO: The states would have to do that in the same manner that they would do it now.

MR. SCHMITT: So on the next upload then it gets taken out by having not been in the file that got uploaded?

MR. DIZINNO: In the new upload, yes. Hopefully that would be seamless to the states. They would address that the same way that they're addressing it now.

MR. SCHMITT: And for federal convictions then there is still the procedure that's in law where the offender will transmit the information as to his acquittal or - I don't recall if pardons are covered - to the FBI directly, and then they expunge it. If it's one that was a military, federal, or I guess D.C. offense.

MR. DIZINNO: The federal convicted offenders would be handled the same way.

MR. SCHMITT: Do I take it then that this is the consensus, that the initial concerns about the CODIS upgrade have been for the most part satisfied by further discussions with the FBI and the inclusion of folks such as David Coffman on the FBI's advisory groups?

MR. KRESBACH: I think you're still going to find in a number of states concerns of the big brother scenario where the state has relinquished its control, if you will, of its population in its database to the Federal Government. I have yet to absolutely confirm that my legislation is consistent with being able to participate in a fashion that 6.0 is intended to work, and I'm having difficulty getting appropriate interpretations of our statute from our Attorney General.

So I would imagine in particularly smaller, more western geographic states there is a little more independent streak out there that would be potentially hesitant to want to go towards this system. In some of the states it may actually require changes in state rules or changes in the statutes. I'm hoping that's not the case for most people, but I'm in support of the program regardless.

MR. SCHMITT: John, do you know if your state statute requires you to keep the records at a specific place or does it merely authorize you to keep a set of records consisting of DNA profiles of convicted offenders?

MR. KRESBACH: It authorizes us to establish the pool of offenders and their subsequent DNA profiles, and what we call our administrative center is responsible for maintaining that. Now, the definition of "maintaining" could be that I maintain it, but it just happens to be physically located on a hard drive in West Virginia versus physically located on a hard drive in New Mexico. It's that sort of subtlety that is giving some of our attorneys difficulty.

MR. SCHMITT: Joe, if I'm correctly understanding what you have described today and what I've talked to you about before, the states still - using the active verb maintain - the states still maintain their portion of their database through their uploads.

MR. DIZINNO: The data would be retained in the main computer at the FBI. They have the option whether to maintain a mirror image of that data in their state.

MR. SCHMITT: I guess my point is that it gets to you because they sent it to you affirmatively. If they're going to expunge a record, that occurs because they've taken some affirmative act in the state to have that file not be there at the next regular upload of the data to you.

MR. DIZINNO: That's correct. Once again let me offer the services if you are having legislative issues of Dawn Herchenham, who has a great deal of experience with DNA database legislation and would be glad to help you with any problems that may arise in that regard.

MR. SCHMITT: Joe, let me ask you on the advisory groups that you discussed are there representatives from the civil liberties community or is there some other means by which the FBI gets their advice?

MR. DIZINNO: Dave could probably answer that better than I can. I know that there are states and local lab representatives. I don't know that there is anybody from the civil liberties community.

MR. COFFMAN: No. Basically I think the original thought was we're designing functionality on an existing program; we're not trying to make policy decisions. So they weren't purposefully excluded. They have just never been part of the design process in the past, so there is no representation.

MR. CLARKE: Just in that same vein, I know with various forms of legislation and proposals obviously one of the swords we use is the criminal behavior that we make out of misuse of that information in many contexts, and I know at least as of some time ago there still has not been to my knowledge a documented instance of misuse of that particular information. I'm wondering if that is I assume still the case.

MR. COFFMAN: Yes, it is.

MR. DIZINNO: As far as I know, yes.

MR. CLARKE: Because I think that's very important as additional states seek to expand databases that we be able to continue to use that.

MR. FERRARA: It might be also worth just pointing out that in terms of maintaining the data, the Bureau CODIS has a profile and a bar code. All the personal information associated with those profiles would still be maintained at that state level. I think that might help alleviate some of the big brother is watching you concerns, I think.

MR. SCHMITT: I want to turn our attention now to Item No. 2 under the DNA databases category, the other discussion items, and specifically let's begin with the notion of owed offender samples. David, I was intrigued and delighted to hear you say that you have cleared your backlog of offender samples, and I'm certain that means the ones that are sitting on the shelves waiting to be processed, but does that also include all owed offender samples?

MR. COFFMAN: No, it doesn't. For the last eight years we've actually had one member of the section who was hired specifically to help keep compliance up on collections mainly for people who received probation or community service or who go to county jails like Mark was talking about or Tim.

Basically we are at the point now - we get from the court system the people who have entered or who are eligible for our database each quarter. At the end of the quarter we get who entered the system or who was convicted the past quarter, and then our computer program compares who we've received to who we should have received, and then we issue reports to the state attorneys, judicial circuits, and also all the crime directors in the state to try to get them to keep compliance up.

We're very pleased that we've reached - and this is a long road that we've gotten this far - we've actually broken the 50% barrier. We're actually receiving 50% of the people who do not go to state prison, but that still means there is 48 or 45 percent of people who receive probation or community supervision we're not getting.

I've called around because when we started doing this, I called other states as recently as a few months ago to find out what they were doing, and I was surprised that not many are working to get the probationers. So I think that's a pretty good number for our community now.

MS. HART: What do you perceive to be the impediments for getting that?

MR. COFFMAN: Well, the standard thing is it's always unfunded mandate, and even before the states took a hit with their budgets we've heard everything from well, we're going to have to pay for the mailing of the kit, and so we've offered to pay for the mailing, and then there was another excuse. I just think it's something else they have to do. In all honesty, sometimes the people involved in collection aren't the ones that receive the benefit of a database hit. They're somebody else. One county jail in the state actually told me when we went to go speak to them why do we

care if you're going to catch more criminals? We don't have room for the ones we have now. I won't tell you which county that was, but that is kind of the feeling.

MR. SCHMITT: David, is it the case in Florida to the extent you know that every offender who is incarcerated and who then comes out and is required to give a sample gives that sample before they come out?

MR. COFFMAN: Well, actually the answer is yes, that even when we have an expansion to the law, like we're going to all felon states and we're in our third year of that, and this year was robbery, we only have about 1,800 robbery convictions a year, but we've also received 12,000 robbery individuals because they go by the time of release from jail because our law is retroactive.

So we are definitely getting everybody who is in the prison system. In fact, we're probably getting a few people in addition to what we should get because sometimes the prison system doesn't keep up with a past conviction being overturned, and so we have had to make some expungements because we collected too many, but it's really the people who don't go to the state prison that we're missing because the state prison is a large organization, they have computerized systems in place, and when we add a new statute, they have a new program now where they type in the new statute and it flags someone to be collected. So it's really hard for someone to miss someone in prison.

MS. HART: One of the things that we have been talking about at NIJ is the whole issue of trying to encourage collections that are cheaper, easier to use, you know, disseminating best practice information just to make it easier for people to do it as well as I think the education piece of this.

So I throw that out if anybody has any suggestions or things that they think we ought to be considering on this. Whether they think it's a good idea, bad idea, generally I would like to hear your thoughts.

MR. COFFMAN: I'll get my spiel out first. We went to oral swabs in July of 2001, and our collection compliance went up about 1,000 samples a month for people who go on probation in community supervision, so that helped a lot. But really the big issue, and we're hoping our live scan initiative in the courtrooms that we hope to get implemented in the next few years will solve this, but a lot of it is just filling in the information that we require to have good information on the sample being submitted to us.

With the oral swabs that we collect on FTA paper it's no longer the collection is oppressive. It's we don't know his Department of Corrections number and we don't want to go look it up or they put down an alias rather than his real name, just all of those kind of bookkeeping-type things.

50% of the samples we receive have missing information on our form, and we only ask for about eight items of information. So that's kind of what we're getting into. I think they're always going to complain whether it's easy or not just because there is information we must have.

MR. FERRARA: With the advent of the arrestee log coming up in January, that law also goes on to say that the person who is arrested must be tested before he or she is released from custody. We had been intending in the course for some time to get away from blood samples in Virginia, and this particular aspect precipitated us finally implementing a testing method that is based on an oral swab. We have just actually awarded a contract to a private vendor to provide us a new sample collecting device not only for arrestee samples, but we're going to take the same collection device - I have an example of one here - and use it for the collection of convicted felons as well as incorporating it in our physical evidence recovery kit and for known samples from, for example, victims instead of an intravenous blood sample, a buccal swab can be taken.

We're going to go with a kit - we've designed this - it's an oral swab fundamentally, but it's also designed in such a way to work with an automated punch system in the laboratory, so that when the sample comes in, rather than dealing with swabs or something where it would be difficult getting a uniform sample, this particular device allows us to knock out a three millimeter punch and have a sample ready to go.

We tested 50 of these devices. The other side of this thing is if you're going to do it on arrest, you've got to have something really idiot proof, so to speak. You want something very simple, something that can't go wrong. As an experiment what we did is, of course, we developed instructions. When we got the first 50 of the prototype kits, we gave them to police officers who had never seen them before, asked them to open the kit, and to sample 50 people in my laboratory, and all 50 of those samples came out with a single profile and we got beautiful recovery. We've got 50,000 of these on their way. It's called a buccal DNA collector. This particular one is manufactured by Body Technology Group.

MS. HART: How much is that costing per kit?

MR. FERRARA: The entire kit is $4.25. Of course, as Dave mentioned, by statute you have to collect a certain amount of information, and the main balking on the part of law enforcement agencies and booking stations is not the sample because they love the sample device because they no longer need aphlebotomist; they're not paying somebody 25, 50 bucks just to draw an intravenous blood sample, to say nothing of all the logistical hazards and problems associated with the transfer of blood samples, their biggest gripe was that there was so much duplicate information on the form that they have to fill out adding to the cost of this kit, but only 80 out of some 300 law enforcement agencies in Virginia have access to live scan, which can be modified to provide and fill out all that information for us.

The collector itself, if you look at just the collector, we're looking at about a buck and a quarter for just the collection device. That's what we'll put in our rape kits to use so you don't have to subject the victim or consensual sex partners to intravenous blood samples. The storage of the device and everything is very straightforward and simple.

All of these steps go to obviating at least in Virginia a problem with owed samples. Our biggest problem is duplicate and triplicate and quadruplicate sampling. But that's the way to go, I think.

MR. SCHMITT: Let me ask if anyone else is from a state where they do not have the retroactive sample collection statute where people who are incarcerated for crimes that would be qualified offenses at the time of enactment do not have to give a sample. Is that a problem for anyone who is here today?

MS. HART: Did everybody understand that, meaning you have a state and if you were convicted prior to the effective date of the DNA statute.

MR. SCHMITT: I thought it was clear.

MR. CLARKE: Just to follow up on what Paul mentioned about sample collection during the life of the commission, and Paul was chair of our laboratory funding working group, we struggled with that problem of continuity. We have 50 states. We have I don't know how many tens of thousands of different jurisdictions. It's very difficult to provide any consistency. The one location in the process that we identified there is consistency is the fingerprinting process, which is basically for all custody crimes or even lower than that.

We had discussions of things like I think there was a laser lancet machine automatically deposit blood on a card and so on. We know in the fingerprinting process the Bureau I believe still dictates how that process occurs in terms of the cards and their ultimate deposit with the Bureau, I think.

So we know it can be done. Of course, that also relies on the legality of taking samples at arrest as opposed to a later time period. I think it was certainly I think our unanimous view that that was the only time in the criminal justice process that law enforcement is used to doing an act of that nature. Otherwise we run into the difficulties of trying to create a new procedure and again thousands, if not tens of thousands, of different jurisdictions. But we never came ultimately to a conclusion because it relies on state law.

MR. SCHMITT: Does anyone have a success story for us of working with the probation and parole people to get them to be willing to do this?

MR. KRESBACH: Our original statute did not indicate who was responsible for doing the collections. Luckily we had a secretary of corrections of which our probation and parole division falls under inclusive of the prisons who is a former prosecutor from Florida and had known well of Dave's system.

He basically ordered that his probation and parole division and the corrections division would be responsible. They would take the ball, if you will, in this to be responsible for doing those collections. Of course, at first there was a large amount of resistance. It was one more thing they had to do and this and that. We have always had an all felons law. We have always used the mouth swabs, and after a very short catch-up period for all practical purposes we had no backlog in the collection of people that were on probation/parole.

Also at the same time to minimize the number of people coming out of prison, because that was also a huge collection curve, if you will, to try to catch up on those individuals, those that went

on to probation or parole subsequently the probation and parole division learned that one of the requirements to go on parole was that you have to be in compliance with all state law. If you refuse that specimen, you're not in compliance with state law and you can't go on parole, so we had suddenly a rash of people wanting to give their specimens all of a sudden so they could go out on parole.

So we've actually had very good luck now with our Department of Corrections, and we're very interactive with them to try to minimize the number of duplicate and triplicate and quadruplicate collections. We've generally got a person five days a week at a phone so that if any of these probation/parole officers or corrections officers have any question or issue as to whether the person has been collected from before, we can in a matter of just a minute or two tell them yes, the person has been collected, you can indicate that in their file, and you need not do an additional collection.

So that is our success story, that we have for all practical purposes about a 99% complete collection to date of all felons in New Mexico.

MR. SCHMITT: But it took that leadership at the high level to make that happen.

MR. KRESBACH: Absolutely. Luckily our program is covered by a nine-member oversight committee. We don't answer to the state Department of Public Safety. We don't answer to the City of Albuquerque. We answer to the oversight committee. One of those nine representatives is from the Department of Corrections, so they have had their input from Day One. Before this statute was ever passed and the implementation of any rules, the drafting of those rules they have had fair input. Of course, it was the people lower down the rung that were less than enthusiastic about doing it, but once they realized our training that we provided, that it was a relatively simple matter, that it was a noninvasive, basically a nonmedical test, and was no less health conscious, if you will, for them to collect than someone who was chewing gum or tobacco or spitting sunflower seeds in a trash can, a lot of the worries were gone, and we really have no problems whatsoever with the day-to-day activities that have to go on part of dealing with those individuals. We've been lucky.

MR. SCHMITT: Any other comments on that point? Joe, let me ask you if you know to tell us how things are going with the Bureau of Prisons on collecting federal offenders and with the military on collecting military offenders now two years after the statute was enacted that requires those two groups of people to start giving samples.

MR. DIZINNO: I can't update you on the Bureau of Prisons. I'm not aware of how the military is doing with their collections. I can tell you that to date we have approximately 15,000 samples collected from federally convicted offenders for input into the CODIS system. We do have the same problems with probationers and parolees as far as collection of those samples.

MR. SCHMITT: You said 15,000?

MR. DIZINNO: Yes.

MR. SCHMITT: What is the estimate as to how many offenders are owed samples?

MR. DIZINNO: That's a very good question. With the passage of the Patriot Act the number of offenders that would qualify for a collection is greatly expanded, so at this point it's a very difficult question to answer.

MR. SCHMITT: What about military offenders?

MR. DIZINNO: I honestly don't know.

MS. HART: Lisa mentioned that before the Patriot Act she thought it was about 26,000.

MR. DIZINNO: I think that's about correct.

MS. HART: We just touched on the issue of retroactive collections. This was actually the subject of some discussion last time where, frankly, after the meeting Sue Narveson and I had a discussion about it, so I thought I would try and just raise this and see if I can get some clarification.

One of the things that had been of great concern to me back when I was in Pennsylvania was the fact that we had a DNA statute that did not cover sex offenders who were convicted prior to the effective date of the act, so we would be, for example, taking DNA samples the minute a convicted murderer was coming in the door and was going to be facing a life sentence or multiple life sentences, and it may even be someone that had a DNA sample for solving the crime, but we were taking that and with federal funds getting that tested right away, and at the same time we were having 3 to 4 hundred convicted sex offenders who were so bad that they weren't even getting paroled coming out the back door of the prison when their maximum sentence expired who were not going in the database and their samples were not being taken because Pennsylvania law did not permit it.

I will tell you that since then Pennsylvania has passed a law that now allows that to be taken, and I'm greatly pleased since I live in Pennsylvania that that happens, but one of the things that we had talked about the last time we had some discussion and then, as I said, we had a followup discussion - one of the things that when we talk about kind of long-term issues and short-term issues is that long term we can look at where we want the system to be down the road, but in the meantime we have some very limited resources and limited lab abilities, and sometimes some very tough choices have to be made about who we test and why we're testing them.

One of the issues that we talked about last time is that there are some competing interests here. We have, for example, for that convicted murderer who is going to be doing a life sentence, he may have rapes that could be solved and the victims would know that those cases were solved if we tested him right now, but at the same time if we've got convicted sex offenders going out in the community, we have people who are potentially going to be committing future crimes and creating future victims, and this is also an issue, too.

I'm not quite sure how to balance those difficult questions or whether we should even attempt to balance those difficult questions because they are very, very difficult ones.

Susan, do you remember this conversation that we talked about the last time? I think originally people - when you read the transcript, it looks as though people - that this group was saying that the most important thing was to solve the past crimes as opposed to preventing future crimes, and based on later discussions I didn't think that was quite what people meant. I don't know if you want to follow up with that at all.

MS. NARVESON: I think Arizona is probably a good example of why it's so important to test these people as they're coming back out, actually before they hit the streets again, but I think it's an issue of trying to make a decision between public safety and victims' rights. Obviously the victims have rights to have their cases looked at, and those who have been convicted have those profiles in the system so you can hopefully solve the crimes, but I think when you have to prioritize, I do think that public safety probably takes a slightly higher level of importance in my mind at least in the short term. The optimum is to be able to do both.

MS. HART: I think we all agree that that's what we would be wanting to be shooting for as soon as possible is a system that can accommodate all of those concerns. I have this conversation with Dwight Adams. Every once in a while a case comes up that we see where you look at it and you say if we had had the system in place the way we wanted it to be, this crime or this murder would not have happened, this rape would not have happened, and I really look forward to the day that I don't have those discussions with Dwight and don't see those articles and think that.

MR. SCHMITT: We are at the point in the discussion where we had scheduled a break, but we're way ahead on this, which is good. What is the consensus? Do you want to take a quick break or do you want to drive on to the next topic and take a break after that? Hearing no preference, we'll just continue on and we'll be able to get you out early today.

## LEGISLATIVE AND POLICY ISSUES

MR. SCHMITT: The next item on the discussion agenda is legislative and policy matters. I realize that in any discussion these issues, there are political overtones, and so we want people to only speak to the extent that they're comfortable, but we really would like to try to get a consensus on what you all would like to see us encourage on the federal level, whether that is encouraging states to go to all felons legislation, perhaps to go to arrestees legislation. Should we recommend that the Department encourage or support changes to the statutes so that all lawfully collected samples can be uploaded?

Sarah mentioned that the Department is on record as supporting that. How far should that go? Should that just be with respect to arrestees; i.e., adults or should it also include juveniles who are adjudicated delinquent for an act that requires them to give a sample?. So let's open it up, and we'll see how the debate progresses on that issue.

MR. COFFMAN: I think all felons is a good first stepping stone that could be encouraged. I think before you necessarily just jump on the bandwagon and say let's encourage all arrestees there is a huge infrastructure component that cannot be ignored, and what is going to happen is you're just going to create a backlog all over again and have people prioritizing and struggling with that. So I really think that the arrestees should come after you give every state a million and a half dollars to set up a South African automation system because they can handle it then and/or any kind of automation system and also even more money to help integrate criminal justice, the courts, the prisons, get everybody on sort of the same page within the state. I mean that's the key because most places are not going to be able to say - in my opinion if we went to all arrestees, I think we should be able to keep the sample even if they're found innocent because we keep fingerprints.

The thing is it's causing a huge burden on the criminal justice system that these people - I mean we did a study in Florida, and we have 20,000 to 25,000 people arrested each year that have 26 or more arrests in their criminal history. I've got some great numbers for you if you would like to see it. I really think that we should be allowed to keep it, but it's unrealistic to think that's going to happen because the people who are concerned with privacy issues are going to say he wasn't convicted; you shouldn't keep it.

So I don't know if I would jump right to arrestees. There is a lot of infrastructure building. I would also include in that all felons juveniles. We have about 14,000 juveniles that we've collected in Florida over the years. Just recently the collection has improved since we went to oral swabs because no one wants to take a blood sample from the darlings, but they don't mind swabbing their cheek.

But I will tell you just a good number in Florida as far the AFIS system is I would say 11% of our AFIS system, automated fingerprint system, is made up of fingerprints from juveniles. 46% of the hits to our AFIS system come from that 11%. So that is a valuable number to warrant the collection of juveniles, and we have made a lot of hits to juveniles within the state.

MR. SCHMITT: Is the fingerprint collection all juveniles?

MR. COFFMAN: It's, yes, juvenile offenders.

MR. SCHMITT: So your recommendation would be that the DNA collection be all juveniles as well, not just juveniles for certainly really bad acts.

MR. COFFMAN: No. I would say we're seeing the same trend as we saw with adults, that juvenile burglary offenders are committing - the problem is if you have a juvenile that's convicted of a rape, he's going to be incarcerated or in some sort of control until he's an adult so he can't commit the rape again, but if he's collected for burglary, he's not under control as much, so there is more opportunity for people with lesser crimes for these people to commit the crimes again. So I think whatever you say for adults should carry on down to juveniles as far as the felony convictions.

MR. SCHMITT: You all have to have lots of opinions on this topic. You're just reticent to share them.

MR. FERRARA: Well, if we simply said to include all lawfully collected samples in the database, then that would take into account if the state says we only want to take them from sex offenders on conviction, that's fine. If the state wants to take them on arrest for all felonies and burglaries, that's fine, too, and that leaves each state as it is now to make its own decisions and recommendations.

We studied the arrestee issue taking samples on arrest obviously at great length and with great thought, and there are a lot of logistical issues associated with it, but we determined that the benefits are going to far outweigh the costs and when done right, theoretically all you have to have is one sample from one individual, and if you can control that, then it keeps down the costs, the additional costs of it.

Most of our work is going to be in terms of, as I mentioned yesterday, the need for the integration of the information systems to allow us - I'm like Dave. I think it's a lot of cost and effort to expunge and re-add samples. I mean no sooner are we going to expunge somebody, they're going to be popped again and they're going to be resampled, and we're going to return.

We don't do that with fingerprints; however, the realities are that we weren't going to get that legislation passed in Virginia without that provision, and I suspect sadly the same will be true because people don't understand that our DNA profile is a biometric fingerprint and treated the same way as we do fingerprints.

MR. CLARKE: I think again back to that analysis that we were performing a few years ago, I think the number we worked with, just to put it in a little bit of perspective - and I can't remember what year it was from, but it's probably at least four to five years old - there are approximately 18 million felony arrests in the United States in a given year. Obviously that's a very large number, and no matter if states enacted an all felon arrestee database, that's not going to be presumably a reality for some time anyway.

So it helps demonstrate the scale we're talking about. I don't know what the numbers are to include misdemeanor arrestees or any fingerprintable type crime. Obviously it would be enormous. So there is a lot of practical import to what Dave has provided and Paul about the realities of what could happen if every legislature decided tomorrow they want to do this. It's going to take obviously significant funding resources, automation, and so on, but technologically we know that's possible.

MS. HART: One of the things at this point because I have to do recommendations, the Department is actually on the record in part because of all the discussions that we have already had of taking the view that we should at least encourage states to move to an all felons, at an absolute minimum they should be looking at all felons, but ultimately in terms of what should go into the database, the state should be the ones who are the ultimate arbiters of what should be lawfully collected in their states, and they can make those difficult choices about should it be juveniles, should it be arrestees, or whatever, and that's kind of different from the funding question.

I get from the sense of the discussion that that is pretty much a consensus view here, I think, or is it not? Is there something else that you recommend that I should be recommending or adding to this as we go forward?

MR. SELAVKA: It seems coming in Massachusetts was 48th to join the DNA databank party, and there will be states ahead of the curve on all felony collections and those that are far behind, and ultimately the leverage and the motivation came from the funding connection. Massachusetts joined the fray just in time to get their CODIS grant. So the legislators needed the impetus. So it may be another one of those situations the recommendation to go to all felons for collection may need to have this intact.

MS. HART: It's interesting. There are states who have passed legislation where they've expanded their collections, but it has been contingent upon federal funding being available, and that's what kicks it off. Different states are having different approaches.

MR. KRESBACH: I would think if you're able in your presentation or final report to the Attorney General, which I presume would eventually go to selected Congress persons to draft legislation and such, that one of the items that's listed is amending existing statutes of limitations. It's kind of like what Carl was leading to is to try to impress upon states the benefit of doing such things.

I know Congress in certain pieces of legislation impresses upon the readers of that legislation that their sense, intent, or desire is that states move in certain directions, not necessarily having any negative effect if they don't comply with that sense, but it certainly gives states and legislators a direction as to what is in the wind, if you will.

Something to that effect could greatly benefit me because we have struggled with trying to pursue a reduction or an amendment of some sort to our statute of limitations. They're somewhat resistant to doing that because it opens a big can of worms, if you will, but if there was something of a nonbinding nature or even a binding nature to some of the grants or the sense of

Congress, if you will, it might be of benefit to a number of different states to try to pursue that amendment of statutes of limitations.

MS. HART: Just one other thing. You mentioned about the report, ultimately what will happen with the recommendations. Keep in mind - I presume everybody understands this - we do have a court reporter here and these transcripts are publicly available. I don't want to inhibit any discussion here, but also the recommendations will be publicly available. So you should feel free to disseminate them and use them any way you want, and I'm certain that they will be forwarded over to Congress, the recommendations, not the transcripts. They can have the transcript if they want. I think they get enough paper from NIJ that they don't want these phone book transcripts.

MR. DIZINNO: I don't know if it would be possible, but it might be might be prudent to include in that recommendation if the recommendation is all felons, which seems to be the consensus here, but to include a possible price tag that goes along with that so we're not recommending creation of another yet unfunded mandate to create the infrastructure necessary so that the states can address that all felons whether it be personnel, equipment, or it also would apply to CODIS, and there is all sorts of infrastructure needs there, and a price tag I think would be an appropriate thing to associate with that recommendation.

MS. HART: It's clear given everything that we're talking about here that we're talking about comprehensive recommendations.

MR. SCHMITT: What I would like to do at this time is take a 15-minute break, let us look at our notes, see what else there is to discuss, open it for some additional discussion from you after you have a chance to look at the agenda and see what we might have missed, talk about what next steps there might be for this group, and then we are required by statute to open this for public comment, and I want to honor that requirement in a meaningful way. We'll still promise to have you out of here way before the scheduled adjourn time. So if you will come back at five minutes after 2:00, we'll continue on and wrap up.

## FEDERAL FUNDING FOR DNA ANALYSIS--ISSUES AND PRIORITIES

MR. SCHMITT: There are a few topics that I want you all to still discuss very briefly before we adjourn for the day, and the first area has to do with federal funding streams for DNA analysis. As you know, at the moment the federal funding is into two large categories, one for convicted offender backlogs and one for crime scene analysis or actually no suspect casework analysis.

I would like to know from you all whether you are comfortable with receiving kind of two streams of money or whether at some point you would like the streams to be merged into one pot that you would then use in the way that you see fit for DNA analysis.

MR. FERRARA: I understand the rationale for trying to push on the no suspect cases. I mean it's a shame that we should have to, but I would love to see federal money flow simply for the reduction of the backlog of DNA cases regardless of whether there is a suspect or not. And then, of course, if you collapse the convicted offender as well as casework, offhand I don't see any harm in that either and probably some advantages, but I would like to at least get us away from this focus on just no suspect cases. All of us in this room know that no suspect cases become suspect cases or suspect cases become no suspect cases. So that's my two cents.

MS. HART: If I could just say, in other words, if they made you the genie of the legislation, you would not have the designation of no suspect. It might be casework or it could just be DNA samples, both offender and casework.

MR. FERRARA: That's right. I would suspect, one, it would make the grant process simpler and the solicitations and the laboratories collecting or taking advantage of those grants less work in terms of bean counting, is this a suspect case, because at any point during the process it may have changed several times.

MS. HART: Would this allow you, if you have that greater flexibility, to make better decisions about public safety questions? In other words, you would be able to prioritize the testing in a way that you think would better protect the public than with the current designations?

MR. FERRARA: Well, to be honest, I think we're doing that right now. From our standpoint we want to do unsub. Cases and we have the capabilities of doing unsub. Cases. Now, I realize that there are a lot of states, a lot of laboratories, a lot of localities who aren't touching on unsub. Cases, and if they're not doing that, what is the point of having a database?

MS. HART: Hypothetically let's suppose that you had a bunch of samples that came in and you got funding to do convicted offender backlog, and let's suppose all of those convicted offenders were all people who were going to be in prison for the next 20 years. One might make the judgment that you could get better public safety benefit by focusing on, for example, people who might come out of prison or somebody who is a probationer or that you were going to try and solve some of your burglary cases. In other words, would having greater flexibility allow you to make better judgments about public safety benefits compared to how we prioritize between convicted offender and casework samples?

MR. FERRARA: I think I would have to answer that yes clearly.

MR. GIALAMAS: I wanted to give you some anecdotal information so you have some real life cases to put this on. In California what we experienced with the cold hit grant program is that because agencies were so backlogged, that investigators decided, well, the only way the crime lab is going to work on my case is if I make up a suspect. So even though the victim may have known someone that really wasn't a suspect in the case, it got written as a suspect case.

I have to be careful because I'm going on the record here, but the reality of what ended up happening is those cases now because there was an assigned suspect on them instantly became ineligible for a no suspect case.

In California that has been modified. We've reworked that so that we term the wording that all investigative leads have been exhausted as opposed to calling it a no suspect case.

MS. FORMAN: If you look at what the NIJ solicitation defined as a no suspect case, no suspect was a case in which there was insufficient probable cause to obtain a known sample from that person, so even though there might be a name in the box that says who the suspect is, if there wasn't sufficient probable cause to compel a sample, you still could count that as a no suspect case.

MR. GIALAMAS: I realize that. I don't want to imply that I was ignorant on NIJ's requirements, but sometimes when the term "no suspect" comes out, people just assume one version over the other.

MR. SCHMITT: Am I safe in assuming that you would not be comfortable with further specification of the funding stream, say that we would now have within the no suspect category a certain amount of that money set aside only for no suspect cases that were rape cases and a certain part of the money that were set aside for no suspect cases that were sexual assault cases, but not involving rape? I assume that you would prefer not to go in that direction. You actually want to go in the other. I see a general consensus that I'm correct in that assumption.

David, did you want to comment on this general topic?

MR. COFFMAN: I agree with Paul that some of us just need to get out from under the backlog, and that backlog does include cases with suspects, but on the other side I can see that some people handle their backlog by restricting what they accept from local law enforcement. So what you want to do is get cases that are unsolved because those victims have every bit a right to have their case looked at as a case that has a suspect.

I don't have the answer because it's going to be innovative and I don't have that, but maybe some sort of formula that you can allow 30 or 40 percent no suspect to 60% - you know, require a minimum number of no suspect cases in solicitation, but allow people to do cases with suspects as well.

MR. SCHMITT: Let me ask if you can predict or would care to guesstimate at the point at which federal funding to do offender backlogs would no longer be necessary, that you will have eliminated the backlog, you will have enough institutional capacity in place perhaps through federal money such that even with the changes in statutes, you will be able to do offender samples on your own without a federal shield of money.

MR. COFFMAN: Because we're caught up, I didn't apply for this year's, but does the convicted offender program allow a building of infrastructure like it did with casework now?

MR. SCHMITT: It does not.

MS. FORMAN: The convicted offender program allows states to do in-house analysis of their convicted offenders if they can do them to a certain degree of high throughput and within reasonable costs similar to that of the vendor. How you choose to spend that money is -

MR. SCHMITT: That's an analysis issue, whether you do it or somebody else does it, but the notion of using that pot of money to actually build capacity for the future you may do with the no suspect money; you may not do with the convicted offender money.

MR. COFFMAN: Then I would make a proposition to you that until a state can build its infrastructure on the convicted offender side - and I'm not talking all states. Some states, even if they went with all felon, they're a small enough state the crime issue is not like it is in Florida or other of the larger states, but I think there needs to be infrastructure building for the convicted offender program so they can take advantage of these wonderful automated procedures that not only help them work a lot of samples with no increase in personnel - and, by the way, I lowered my scientific staff two people since 1996 due to automation even though we've increased 500% in the number of samples we're receiving.

So automation needs to be plugged into the formula or the backlog is going to come right back unless the state gets money, and, frankly, with automation and with the salaries we offer in Florida we're cheaper than most private vendors for the whole process.

MR. SCHMITT: Do I take it, though, as it currently stands you are unable to predict the point at which you would be self-sustaining with respect to offender samples, whether that be five years, seven years? You just don't know yet.

MR. COFFMAN: We're self-sufficient now. I'm talking about the whole country. I think unless they get automation in place, I don't think anyone is going to be able to handle the all felon move or even possibly arrestee move. Right now with the automation we have in place we can perform 80,000 analyses a year. We're not getting that much, but we can perform 80,000 analyses a year, and we can bump that up by buying another robotic or another sequencer. So it's all modular at this point.

MR. SCHMITT: Do you have the ability to take samples from other states on a reimbursable basis pursuant to a memorandum of agreement to do that analysis since you have capacity that's

not being used? Let the record show that he indicated a response in a manner of shaking his head. I won't specify which direction.

MR. COFFMAN: We could do that, but I'm also worried that if we made that jump and said we would take samples from other states, which we could, then someone is just going to say why don't you just do all arrestees, and there is a space issue involved just by housing all of those samples that we're not prepared to undertake.

MR. SCHMITT: Other comments on this notion of when the federal trough dries up?

MR. GIALAMAS: I just was going to throw in remember that the backlog situation really depends on the statutes currently enacted in each state, so you may have a state situation where they're very comfortable in where they are, and just because new legislation is introduced, all of a sudden there are ready and willing applicants to NIJ for federal funding to help reduce their backlog when they didn't have one the year before.

MS. NARVESON: I think one of the things that we may not have thought of that I was discussing during the break, and that is states may be able to gear up for high throughput for all convicted felons, but I think we might see a shift of responsibility when we go to all arrestees. I can see the day when the State of Arizona says to Phoenix, you arrest more than two-thirds of all the arrestees in the state; you do the samples because the state doesn't have enough money to do those initial samples. So you may see this burden shifting, and then once again you're going to have to have the ability to develop some type of infrastructure for high throughput or outsourcing.

MR. SCHMITT: Sarah, I think you wanted to revisit a point from earlier.

MS. HART: One of the things that Glenn had mentioned was the question of what people's views were on having legislation that might recommend that, for example, only rape kits be tested or that there be funding for rape kits and whether that was a good idea to specify that specifically. What I was a little concerned about is that I know we have had a number of discussions and I have had discussions with people here about this that I'm not sure that the record here really kind of captures the fullness of those discussions, and so in the sake of moving ahead, how about if I kind of summarize what I've heard from a number of you outside of this, and correct me if I'm wrong here.

I think most people would agree that rape kits on sexual assaults are some of the most serious crimes that you face, and they certainly get high priorities in your labs; however, there are very serious crimes that may not involve a rape kit. If, for example, you talk about Chandra Levy, here you have what appears to be a sexual assault. It's a murder, but there would not be a rape kit in that case. So that if one had legislation that required you to do that, it would exclude a case like Chandra Levy.

So that there may be very, very serious cases that you would want the latitude to be able to test those, too, and not just be restricted to rape cases, but that everybody realizes that rapes usually

are the most serious ones that you face. Did I capture that correctly? Does anybody want to add to that?

MR. GIALAMAS: I would just add the comment that you could craft your language so that it addresses sexual assault crimes as opposed to sexual assault kits because, as you mentioned, there may be crime categories that perhaps even the sexual assault evidence isn't the important evidence in the case. It may be something else.

So it may not be the kit that we're going after, but some other kind of evidence. So when you look at your language, if you can consider the crime category as opposed to the evidence category, that might give that latitude and freedom for laboratories to pursue the appropriate evidence.

MS. HART: What about the situation, for example, where you know you have got a kidnapping and you think maybe it's going to be a sexual assault, but you don't know that? I presume there are kidnapping cases that everybody would also say are of equal significance, certainly homicides.

Is it best to say that you want to be able to prioritize with the most important cases, the ones that have the greatest impact on the public and the public safety, but not have to specify the exact kind of crime that that would be? I'm seeing lot of nodding. Does anybody else want to add to that?

MR. FERRARA: I think one of the most difficult problems our DNA laboratories face is the issue of prioritization of casework. Not having crystal balls, there are all kinds of difficulty. By nature any violent crime is higher on a priority list than lesser crimes such as auto theft, breaking and entering. I think the laboratories need to have that latitude to prioritize samples as dictated by their own management or their own experiences.

In Virginia the highest priority goes to those cases that are going to trial. That has to be first, and then, of course, the most violent, the most violent crimes, serial rapes and serial murders. Having said that, the reality is that while an examiner may be working a particular 100 item murder-rape case, that same examiner can knock off 20 breaking and entering cases real quickly, and so we'll have B & E cases that are done, as it turns out, in a shorter time frame than maybe a more serious crime, but it's an informed decision as to what is the best utilization of personnel and what types of crimes need the proper attention.

I feel like only recently did I have to draw a line, and I did so with the input of prosecutors, that they would agree with my decision, our recommendation that we would not accept misdemeanor cases that didn't involve some sexual offense.

The converse is the same. We do every kind of case. Our police are swabbing steering wheels on stolen cars all the time, and we are making hits on those cases. Of course, these are the same individuals who later are committing the more violent crimes.

At some point you have to draw the line, and I drew the line when they asked us to do DNA on a business end of a marijuana joint for a misdemeanor case. But the more types of cases you're doing of that nature, the more difficulties in prioritization.

My remarks and concerns about the no suspect, I would like to clarify that that is well intentioned because you're forcing laboratories who might otherwise only do cases that are going to trial and are cases where there are suspects and never do a no suspect case, but that can be addressed by an increase in the capacity of that laboratory, and I think that's where we all have to get to.

We need to get to the point where we can run samples on investigations of all different types of crimes even if they are misdemeanor cases, but they involve a sexual assault. So I don't even draw the line at misdemeanors.

MS. HART: I have to tell you that having had my car stolen in Philadelphia back in April, it broke my heart seeing this stripped Suburban and looking at it and thinking, man, they could get all of this stuff from it and knowing full well if I called anybody to say get a fingerprint, I would just be laughed at. We all look forward to the day when we use this to its full potential and recognize that there are going to be very hard choices as we get there. I think the people in this room have made some real good work and can help guide other people about some of the things they ought to be thinking about in prioritizing things until we get to where we need to be.

MR. FERRARA: That's why I think the more we try to point people or specify, it makes it more difficult for the laboratories because each laboratory's circumstances and situations are different, and the greater latitude that we have in how we use the money, I think the more effective that money will be used.

MS. HART: Would it be too much of a burden to with federal funding request that part of the grant application have a plan of prioritization that maximizes the public safety benefit? Is that an extremely burdensome thing or something that requires people to think about those questions?

Lisa was mentioning we do have this plan on the no suspect, but I'm talking generally if you have a broader flexibility still requiring that and requiring public safety emphasis and fair administration of justice, which I think covers trial of cases and also making sure that you're solving cases with rape victims.

MR. FERRARA: I don't see how it would be burdensome. I think it's something we're all dealing with right now day in and day out. So I just don't see where it would be that much more problematic. How you quantify that I don't know.

MS. HART: I wouldn't see asking people to do that, but just making clear that that kind of thought is going forward so that you don't have somebody just saying I can do two cases here and there are 20 marijuana joints, so my stats will look good because I did 20 cases. We really don't want to encourage that.

MR. FERRARA: That's right.

## USING DNA TO IDENTIFY UNIDENTIFIED DEAD BODIES

MR. SCHMITT: Another subject that I would like you to touch on briefly is one we discussed ever so briefly yesterday, and that was the notion or the idea of using DNA to identify unidentified dead bodies. We heard that there is some preliminary planning going on at the FBI and certain states to do this, but I wondered if we could have some idea of where you all see the constraints here on this. For example, do we need to have all of those samples be mitochondrial and nuclear, if you can get the nuclear, or is it okay to just start with nuclear and add mitochondrial later, point one.

Point two, what do we need to do to encourage medical examiners and coroners, the ones that actually handle these bodies, to take this information, and then are there barriers to getting it into CODIS, barriers of them getting it to you to have you put it into CODIS? Where are the disconnects in this system that we need to overcome?

MS. HART: If I could follow up on that, one of the things I'm particularly interested in is your thoughts on ways to encourage the actual collection of the samples before the remains are disposed of. I think it's a great sadness when somebody can't find out what has happened to their loved one, things like having evidence collection kits, education. What are some of the ideas that people might want to throw out here that would help encourage the collection of samples for the first end and then also dealing with how you test them and get them to CODIS?

MR. DIZINNO: We've wrestled with this question for a long time. It not only applies to say DNA, but the NCIC has an unidentified persons file, and we have a difficult time having the medical examiners or the local law enforcement agency putting into NCIC any sort of information about an unidentified remains. So that same difficulty I'm sure would be evident in trying to get the DNA samples into a CODIS system where you have the unidentified DNA profile of that person.

So it's a difficult question. We've wrestled with it for years and haven't come up with an answer as to how to encourage - and it really is local law enforcement and more so the medical examiners - to have them put that information into the appropriate system.

MR. SCHMITT: Marie, do you have an opinion on this since you work for the Office of the Chief Medical Examiner?

MS. SAMPLES: Our medical examiners routinely take samples from every person that has an autopsy whether they have been identified or not, and our laboratory receives the samples from all of those people, including the unidentified ones. We in the laboratory, though, do not have an active policy that we're typing them. We basically keep them until there is some request to compare to particular potential family members. I was sitting here thinking to myself why don't we have a subset team in our laboratory who does this? I don't know why we don't, but we don't.

MS. HART: You're at least collecting samples. At least you have the ability down the road when you address the rest of that, you've at least got that bank of samples, but what we're seeing day in and day out is the samples are not even being taken.

One of the things that occurs to me is the question if one should be encouraging the collection of samples as soon as possible and then addressing in the long term how you get the testing of the samples and the full use of the database information so we can try and resolve some of these cases.

MS. NARVESON: It started me to think, too, that we have crime scene response evidence technicians that actually go to the ME's office on John Does and we will take John Doe prints. That's a very opportune moment to provide them with the information on the availability of that kind of testing. Perhaps in opening up your DNA backlog reduction concept, even these samples as prescribed by the FBI could be samples that we might be able to have money for outsourcing to at least start compiling the data.

MR. SCHMITT: One of the things that I found on Joe's point when I worked on the Hill and for the committee that had oversight of the Bureau, we talked about the fact that NCIC had this database for some time for the unidentified persons, and we got a little briefing and they told us that it's teeth and gender and height, weight as best you could identify it. We asked why wasn't it used more because there was this huge missing persons database and this almost nonexistent unidentified missing persons database, and they said, well, it takes time and if the person is dead, they can't identify it. There are other more pressing cases they have, and they don't want to take the time to do all of these measurements.

It seems as though the lesson from that is you need to make this as easy and painless as you possibly can. Susan's point is an interesting one. If the people who come in to do the fingerprints also had a kit, ten seconds, you take a swab, you take something, and then the process were in place to put it in the database, that would be almost so painless to them that they would be willing to do it.

I think that's the key here is to make it as easy and as quick as possible, and then also perhaps put some funding behind it. There was a proposal three years ago in the House to create a small pot of money to go to MEs just to do this, to encourage them to do this, and it didn't go anywhere, but the idea was a good one.

The thought is for every new idea that turns out to be a great idea there is the time when it is first done, and before that everybody looks at each other and says, I don't know why we didn't do this before, but we just didn't. Well, fine. We may be at that point, and it may be that with a little funding making it easy, giving people an incentive to do it, then it catches on and you begin to hear these successes just like we saw with DNA and the successes of families getting closure because they find out what happened to their loved ones will prompt other people to do it, and they will see how easy it was that then it will be routine and people will think how could we have not done this in the past. That may be what we need to be thinking along those lines and doing.

MR. DIZINNO: If you're going to proceed that way, we have to remember that the other side of that issue is that we need the reference sample from the next of kin of the missing person that has to be probably voluntarily provided, and that also is an issue that needs to be addressed.

MR. SCHMITT: I know that there are lobbying groups for missing people, not just children, but for missing adults that's the other half of this. We're all familiar with the National Center for Missing and Exploited Children, but there is a group of people who get my sympathy because of their losses and are really lost in this equation because their missings are adults. It maybe the 20-year-old college student or the 25-year-old lost child. Those parents grieve just as much as the parents of the young people do, but they don't have an advocacy group except their little shoestring organization.

They in a moment would give you all of the reference samples you want to get that kind of identification, and I think if it were known to parents of kids or grown up children that this was a possibility, I think you would have them lined up to give that, especially if we give the assurance that it wouldn't be used for any other purpose other than that, which I think you probably have to do to get them to commit on this.

MS. HERD: I had a quick question for Joe. How is the FBI addressing that issue in terms of building its database of reference samples?

MR. DIZINNO: We have developed a form for next of kin of missing individuals to fill out voluntarily. Again, it states that that DNA sample will be taken solely for that purpose and included in the database for that purpose. So it's a voluntary consent form for next of kin.

MR. SCHMITT: Is there an issue here on mitochondrial or nuclear DNA? Does anyone know if the condition of these bodies is such usually that you need to use mitochondrial most of the time?

MS. SAMPLES: The reason our laboratory even moved at all towards developing our mitochondrial DNA capacity was because our chief medical examiner wanted us to have the capability to identify bodies in house because we do often get bodies that are well beyond the scope of nuclear DNA. So that's what had prompted us to go that route in the first place.

A lot of times if a body is unidentified and it's in good shape, within a week or two they figure out who it is and they cease to be unidentified. If I was to go back to my lab and start saying we should really just be typing these because it's a good thing to do, I would suggest that we wait until they're unidentified for probably at least a month before we even issue the address.

MR. SELAVKA: In case you weren't aware, and you probably are, there are a number of state programs I'm aware of, a couple in New England where the parents are provided with a day, usually aSaturday, a law enforcement day where they give fingerprints and they collect hair. They now are collecting blood drops from finger sticks or buccal swabs that the parent maintains for their child and will have those things available for reference material, which will be better than it is now with toothbrushes and hairbrushes and so forth. You could do mito work with these collected materials, and I'm wondering about a recommendation to if not sponsor, at least recommend to local law enforcement state agencies that might fund this or even insurance companies to help sponsor that kind of thing.

MR. SCHMITT: I think it's a good idea, and I've seen in this area fingerprint day at the mall and you hear about it on the radio, but it's limited just to that. They don't think about taking the hair.

They don't think about taking a blood sample. Even in the case of the fingerprints the parents retain the kits. So perhaps we should do just what you're saying, Carl, encourage them, whoever is doing this, that their kits have all the different types of reference material that you would want to have.

MR. DIZINNO: Obviously the best reference is a direct reference sample, but our experience has been with these missing person cases that - actually I don't think that we received a direct reference sample from a next of kin yet. They're usually next of kin samples. One of the reasons we chose mitochondrial was, first of all, many of the remains we're dealing with are skeletonized and we're only able to obtain mitochondrial DNA profiles from those remains. Number two is because of its maternal inheritance, it makes obtaining a next of kin reference sample much easier. You don't need both parents. You can go to any maternal relative for that reference sample. So it facilitates the collection of the reference samples.

## INTERNATIONAL DNA ANALYSIS

MR. SCHMITT: We have two more areas to cover, which will be brief. The first of those two has to do with laying the ground work or what ground work needs to be laid to encourage the use of DNA analysis on an international basis. I know the Bureau is loaning the CODIS software, making it available to law enforcement agencies in other states.

I had an interesting experience two years ago when I was on a trip to Columbia and I met with the head of the Columbian National Police Laboratory, and he was very excited about the possibility of getting CODIS in his country, and he said that he was going to recommend to the chief of the national police that they take a DNA analysis of every citizen of the nation of Columbia and have it in the database so they could solve lots of crimes.

I appreciated his enthusiasm, and they didn't have the Fourth Amendment problems that we have, but it was interesting how enthusiastic he was for this. I wondered if you might tell us, Joe, if you care to, where this is going and if other folks have an idea as to what we need to do, we the Federal Government, in terms of helping to insure that there is standardization across the board. Joe, this may already be done by the Bureau.

MR. DIZINNO: I don't have the numbers, but we have given the CODIS software to a number of international law enforcement agencies who are incorporating that as their DNA database in their country. Because of different legal issues we can't really recommend to them how they run that database. That database at least currently cannot be connected to the CODIS database in the United States. It's not to say that we can't perform searches of each other's database, which we're asked to do fairly often and we do do that, but because of the legal issues involved, it's very difficult to dictate as to what their standards and QA/QC must be in a different country.

MR. COFFMAN: I will say that right now because we get these requests quite a bit, it's far easier to have another country search a state's database or even the national database than it is the other way around. For instance, Canada. We search things for Canada all the time, but it is somewhat of an ordeal to send the profile up there for them to search, and they point you to - the Interpol has developed a whole area of their web site to search samples internationally and there is a PDF file with a 52-page handbook on what you have to do to search something through the international community.

So I really think it's not coming from us; it's more the other countries. The only thing I can say is I hope we can break those barriers down a little bit to where it's an easier exchange of data, but right now they're significant, and it doesn't seem to be coming from us.

MR. TILSTONE: Sort of a related issue is the issue - I think the issue isn't CODIS. The issue is the markers that are used because a database is a database is a database, and providing there is a commonality of the markers and appropriate QC in place, then you could have international exchange of data, but if you start that premise and just go one step further - and this might be an issue for AGID-LAB to think about - the success of that assumes that we've reached some degree of maturity and are going to stay there in regard to the current set of markers, and that's probably just as far from the truth as you could get.

So would it be worthwhile for this group to at some stage looking ahead to what is going to be after Idenofiler, what is going to be after STRs, and could we make some sort of recommendations now about the database implications?

MR. COFFMAN: Really, to be honest with you, it really is privacy concerns in other countries that are the barriers because really we share the same markers with Canada. If you're using the Idenofiler kit, you're sharing nine with the European community. If you're not, you're sharing seven or eight.

So the loci in common, I really don't think it's a problem. I think it's just the administrative, the privacy issues of their citizens, even though they're criminals, being searched against another country and releasing that information to this other country.

As far as the future markers, I'm like you. You can never say never. I mean things will change. I hope I'll have my house in Colorado in the mountains by then. I'm hoping the new technology changes we see are just better ways to get the same result that we're currently getting because I think we have a very discriminating system in this country, and I would hate to think that - to me it would have to be a significant benefit for it to warrant retesting several million offender samples in the country to make the database worthwhile. I'm not saying something couldn't come up.

MS. HART: I was just going to say with this I don't expect that given what the Attorney General's directive to me was about what I should report back to him about, that I would really get into this issue other than to say that whatever recommendations you make for like long-term capacity building and the long-term view should take into account that you have international issues that you may want to be addressing now and laying the ground work for future exchanges down the road. I don't think it's a particularly controversial thing to say. I don't think it has to be any more detailed than that. Does anybody have any thoughts on that?

## ELEVATING FORENSICS TOOLS OTHER THAN DNA

MR. SCHMITT: One last area before we move to our closing portion. I think all of us have marveled at the public awareness and appreciation for DNA analysis that has developed over the last five to ten years to the point now where people often tell us that there in some respects may be an overemphasis on DNA as the magic tool that solves all crime. At NIJ we're constantly reminded by our own professional staff as well as those visitors who come to see us that the vast majority of forensics in the United States are non-DNA forensics. So one of the things we wanted to ask you to kick around briefly is what needs to be done to elevate other aspects of forensic science to the level that DNA analysis has achieved.

One of the thoughts that had crossed our minds is to do for non-DNA forensics what NIJ helped to do for DNA forensics, and that is the establishment of a national commission to make recommendations as to the future use of those techniques and to elevate public awareness both in the general public and among policymakers as to this aspect of science. Would a national commission on forensic science be a helpful contribution to the art?

MR. COFFMAN: What would be the goals of it again or its mission?

MR. SCHMITT: To make recommendations as to where future federal funding needs to be applied to develop aspects of forensic science. It would help to identify those areas where the scientific basis is not either sufficiently developed to everyone's satisfaction or sufficiently made known to the practitioner community such that it is fully used and also it would serve as an element an awareness of these techniques in the minds of the people, thus engendering greater public acceptance of certain techniques among policymakers and judges I suppose so that people in official capacities have a greater appreciation and acceptance of other sorts of forensic science techniques.

MS. HART: If I could follow up on one other thing, it's a recognition that science changes and it evolves and what we think we know today we may not know tomorrow and keep public awareness of them and the law enforcement community aware of changes in developments, and what perhaps one ought to be looking at - I mean over the last two days as well as the last one I had tremendous benefit from hearing from all of you here about many things that I hadn't even thought about, so the question is whether we should be looking at this long term to make sure that we're figuring out a mechanism for maximizing the use of science, not just DNA, but science generally to aid in law enforcement solving crimes.

MR. SELAVKA: When I was in New York State, because we were missing a commissioner of justice for about a year and a half, I was the acting chair of the Commission on Forensic Science, which is the state model for this national thing, and what the commission did - it has some downsides, who gets to be on it and all the politics that go with that that are outside the control. Once it's set it works, but it serves as a clearing house for information exchange, and when stakeholders know they can go to one place to bring a problem to the greater community and have it get either resolved or put aside as less important than the person who brought it to you thinks it should be, but that's done in a consensus process. That's for the public, for the media, for

the criminal justice stakeholders, and those outside the system, so is serves an important role there.

There is a lot of low hanging fruit that gets picked early on and you have some initial very quick successes in bringing forth a platform of scientific improvement and infrastructure development that will be a logical outcome if you should do. Then there is higher hanging fruit, and that's the stuff where you really hope that the commission gets to.

In New York we've picked all the low hanging fruit, and I'm not sure they've really stretched the pole up to get the high hanging fruit that's really juicy and the worms didn't eat it yet. That's there to be done. You don't want to wait until it rots and falls off.

MS. HART: Any other thoughts on this?

MR. GIALAMAS: I would think it would be a good idea to raise the focus of forensic science in general. What we experience, and I'm just using my little bias of Los Angeles, is that when we look at the problems that face the crime lab, really DNA is an issue only because DNA is the flavor of the month, so to speak. It's a new technology. It has worked wonders and it's ever changing, so it demands a lot of attention and a lot of it and rightfully so, but when we look at our real backlogs in the crime lab at a local level, we have more serious problems in our firearms analysis unit and in our latent print chemical processing unit than we do in DNA.

So if you were really to look at a crime lab, DNA is not necessarily the only major problem that exists. It's just a problem that's getting attention right now. So I think it would be good to open up the doors and let everyone know that there are other useful forensic tools out there and that some of those other tools may actually be in more dire straits than we hear about DNA.

MR. SCHMITT: Anyone else on this topic?

MS. NARVESON: I think any kind of a national commission of this scope would only be successful if it were appropriately populated, and I hope that if this moves forward, that the forensic community is contacted and asked for suggestions for representation. We have an opportunity to mold our own future in a very proactive manner.

MR. SCHMITT: Let me tell you what we foresee as the next steps here, and then we will open this for public comment, and then Sarah will give us some closing thoughts.

We're not going to try to summarize all the recommendations here that you've come to over the last couple of days. What we are going to do is prepare a draft document for your review that sets out what we think the consensus is and the recommendations that you've either made to us or that flowed naturally from those consensuses.

We will submit that to you. We'll ask you to make comments to us by e-mail or in writing or on the phone if you prefer, but I don't foresee that we'll have to convene another session of the group to go over those recommendations, and then from that I hope that Sarah will have the information that she needs to fulfill her charge, which is to make recommendations to the

Attorney General. But that will be the next step, and if there is a follow-on step after that, we'll, of course, let you know about that.

At this point our agenda allows for public comment, and, of course, that's statutorily required, so if there are people here from the public that wish to make a comment, I ask that they come to the microphone that's behind me.

MS. HART: I should also mention that in order to comply with the act we have to make sure that there is public comment at the time that it was listed in the Federal Register, which is 4:15 to 4:45. So even though we expect that you all will be gone by then, there will be the reporter and staff here from NIJ who will be available to take public comment if anybody chooses to make it at that time, but in the interest of hearing from some of the people who are here today, I know we have a number of people behind us here who have listened today and have I think some perspective, too, and we would certainly invite public comment at this time, although anybody can stick around until 4:15 to comment then, too.

MR. SCHMITT: So we ask that you come to the microphone, state your name, if you care to give us your affiliation, and then make your comment or question, but not a speech.

Hearing no comment, I'll turn it over to Sarah Hart for her closing remarks.

## CLOSING REMARKS

MS. HART: Well, thank you all for this. I have to tell you this was really an enjoyable two days for me. I very much enjoyed hearing you talk about this. This is an issue that is very, very near and dear to my heart, I care greatly about it, and every time I'm with you people I'm always amazed how I walk away learning a lot of new stuff, and it reminds me of how much more I need to learn. So I look forward to an ongoing process where I continue to pick your brains for your great insights and wisdom.

Thank you very much for taking time from your schedules to come here. I know this was not easy, and we have greatly benefited from that, and I think you all have benefited from hearing from each other. A special thank you to the gentlemen from South Africa, who traveled so far and really gave us a lot to think about. It was well worth it. Plus we didn't have to travel as far, and it's very, very much appreciated and extremely helpful.

A couple of things just to follow up. I wanted to especially thank our staff here at NIJ, Lisa and Lois and Chris and we've got Nick here as well as Robin, who has brought her significant other is back there, too. Mr. Jones is back there, too. I very much appreciate all the work that they did to put this together, and I always benefit greatly from their work and their wisdom. They're a terrific bunch of people to work with, and I'm extremely lucky, and thanks, Glenn, for being the ringmaster.

A couple of other things I just wanted to mention. We do have for your enjoyment a new NIJ publication, "Using DNA to Solve Cold Cases." There are copies available here if you haven't picked this up. By the way, this is part of the ongoing new look to NIJ publications that you will see. We have been doing a lot of work especially to revamp publications so that they're concise and written in plain English, which most of the DNA ones, really technical ones were done that way anyway, but this is part of an ongoing effort by NIJ to make sure that our publications are much more user friendly to the practitioner community and my personal pet peeve about making sure that people write in plain English instead of using 20 dollar words.

So we're very pleased about this, and Lisa's people have done some good work. You will see it's from the National Commission on the Future of DNA Evidence, which we continue to benefit from the insights that were developed during that commission.

So everybody, thank you all. We will be getting in touch with you just to follow up on some of this. Have a very safe trip home, and we look forward to talking to you in the future. Thank you.

MS. JONES: It's 4:15. We are opening the floor for public comment in accordance with the Federal Advisory Committee Act. Hearing no comment, the meeting is officially adjourned.