Testimony of

Ms. Susan Johns

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Mr. Chairman and Members of the Committee:

Thank you very much for the honor and privilege of inviting me to testify before this committee today. I would like to introduce myself to you. I am a Bureau Chief for the Illinois State Police, Division of Forensic Services. I have been employed with the Illinois State Police for more than twenty-five years and have served in a number of capacities. I have analyzed evidence and presented my findings in court. I have also served as a laboratory director, managing resources to include personnel, equipment and facilities. Currently, as a Bureau Chief, I work in our Forensic Sciences Command Office and am responsible for laboratories located in Chicago and Westchester.

I am also the President of the American Society of Crime Laboratory Directors (ASCLD). The ASCLD is a professional organization, incorporated in 1976, and its membership includes more than 500 crime laboratory directors and administrators, primarily from state and local laboratories. (ASCLD has existed for more than twenty-five years to provide leadership in the

forensic science community, providing training and information to its members and promoting quality in the practice of the forensic sciences.)

I am also the vice chair of the Consortium of Forensic Science Organizations. (The consortium includes four member organizations: ASCLD, the American Academy of Forensic Sciences (of which I am a former member of the Board of Directors), the National Association of Medical Examiners, and the International Association of Identification.)

I am here today to speak as the ASCLD President, a laboratory director and a member of the forensic community in support of providing funding for all forensic disciplines in the crime laboratory.

Why is Federal Funding Needed to
Support the Nation's Crime Laboratories?

Our crime laboratories analyze evidence, both for investigative purposes and for providing evidence in court. They are an integral part of the criminal justice system. In the past 35 years crime laboratories have evolved from a collection of fewer than 100 state and local agencies scattered in various jurisdictions around the country, to today's array of over 400 sophisticated scientific operations serving the nations police and courts. Reliance on scientific evidence has grown, stimulated by rapid growth in laboratory technology and the demand for the use of evidence by the courts. (Studies dating from 1972 [1] document the utilization of physical evidence in the administration of criminal justice and its use in the courts.) Most recently, in Daubert vs. Merrill Dow (1993) [2] and Kumho Tire (1999) [3], the Supreme Court drafted new standards to govern the admissibility of scientific and technical evidence.

The vast majority of the evidence analyzed in criminal cases in this country is analyzed in a state or local crime laboratory. In most jurisdictions, the demand for testing has increased for crime laboratory analyses but funding has not kept pace with this increasing demand. For example, between 1990 and 2000, the average U.S crime laboratory experienced an increase in caseload of 23%. During that same period, budgets grew by only 10% and staff size by only 9%.

I once heard forensic laboratories referred to as the B team of the criminal justice system. While more visible front liners are seen as essential to the criminal justice system, the crime laboratory is relegated to a support position, expendable when times get rough. And we are in rough times when it comes to state and local funding for forensic resources. These rough times can result in laboratory closings and layoffs. In February 2003, the Oregon State Police lost 85 positions. In March, 40 positions were restored, but not without disruption to the services offered. This disruption was clearly evident in the firearms section where six of the seven state firearms examiners were included in the lay off. Even with the restoration of personnel in the Oregon laboratory system, there are still shortages in equipment, training and commodities. In another

example, in May of this year, the state of Tennessee consolidated its five laboratories into three. Budget issues were a primary factor in that consolidation.

Mr. Chairman, resources have an impact on quality. The ASCLD has established a formal mentoring program for our members to assist one another in seeking accreditation from the American Society of Crime Laboratory Directors Laboratory Accreditation Board (ASCLD/LAB). The problems reported by many laboratories which are not yet accredited are related to resources; both the personnel needed to work on the accreditation standards and the cost of the program itself. And while we do not see accreditation as a guarantee against errors, it is a program which requires laboratories to look for problems and address them. In fact, at least three states have mandated the accreditation of their crime laboratories: New York, Texas, and Oklahoma. However, resources are needed to assist laboratories in obtaining and maintaining accreditation. I believe the cost of not being accredited exceeds the cost of accreditation.

The lack of resources in laboratories causes significant delays in evidence being analyzed, resulting in delays in the courts as well as in the investigation of crimes. Work is prioritized according to court dates. In some cases, it is not even brought into the laboratory. Many laboratories establish case acceptance policies to limit the number of cases coming into the laboratory. Sometimes the laboratory may return evidence if it cannot be analyzed in a timely manner. In New York, for example, over 2000 drug cases are annually returned to the submitting agencies without analysis.

Crime laboratories analyze all types of evidence. As of July 28, 2003, there were 237 laboratories accredited by ASCLD/LAB in a range of disciplines. These disciplines include controlled substances, toxicology, trace evidence, forensic biology/DNA, firearms/toolmarks, questioned documents, and latent prints. Eighty-three percent of the laboratories accredited have sections which analyze for controlled substances; 61 % have firearms/toolmarks sections, 59% have sections which analyze trace evidence, 58% have forensic biology/DNA sections, and 49% have latent print sections. The full list of accreditation by discipline is listed in Table 1 which is submitted to the record.

Table 1: Disciplines Accredited by ASCLD/LAB

Accredited Discipline	# Labs Accredited in Discipline	% of Labs Accredited in Discipline
Controlled Substances	197	83%
Toxicology	70	30%

Toxicology (Blood Alcohol only)
44
19%

Trace Evidence
139
59%

DNA
138
58%

Firearms/Toolmarks
144
61%

Questioned Documents
57
24%

Latent Prints
116
49%

Crime Scene
11
5%

The problems in the laboratories are not unique to evidence type. Backlogs in all sections are created when evidence in that section is submitted to the laboratory faster than it can be analyzed. That is not to say, however, that all evidence has the same personnel, training, equipment, and facility requirements.
? The drug chemist analyzes suspected substances for the presence of controlled substances such as cocaine, heroin and marijuana, as well as a wide range of prescription drugs. Products from clandestine laboratories, such as methamphetamine, are also analyzed by the controlled substances section. Many laboratories use sophisticated instrumentation for the analysis of drugs. These instruments are expensive to purchase and have an effective lifetime of approximately five years. Training for this position can take up to one year.

? The toxicology section analyzes biological tissues (primarily blood and urine) for the presence of alcohol and/or drugs in cases involving driving under the influence (DUI). Coroner's cases may also be analyzed in the laboratory to assist with the determination of cause of death. Much of the same type of instrumentation used in the controlled substances section is used in the toxicology section. Unfortunately, the analytical parameters for the analysis of drugs from body fluids are sufficiently different from the solid dosage forms analyzed in the controlled substances section to prevent the use of the same equipment for both types of analyses. Training for this section may also require one year.

? The trace evidence section is best described as all other stuff not elsewhere analyzed. It may include microscopic examinations of hairs and fibers or glass, or it may involve analyzing for accelerants from a suspected arson scene. This section also uses a wide range of expensive equipment. Training for individuals working in this section may be in excess of two years due to the wide range of materials encountered.

? Latent print evidence is called latent print evidence because in many cases, the print is not visible until some type of processing, often chemical, is performed. Lasers are also often used in this visualization process. Comparisons are performed by analysts trained for up to two years. An Automated Fingerprint System, known as AFIS, is used to conduct computer assisted searches against a known database.

? The forensic biology/DNA section includes the identification of body fluids and DNA analysis. Prior to the advent of DNA, if a suspect was not known, about all we could do with biological evidence was store it until a suspect was identified. Now, with DNA and the national DNA database (CODIS), we are able to identify a suspect much in the same way we do with latent fingerprints; i.e., by conducting a computer assisted database search. Additionally, DNA evidence is much more discriminating than traditional serological evidence. Training for the forensic biology/DNA section can require up to two years.

? The firearms/toolmarks section involves evidence associated with firearms. When a weapon is fired, marks are left on shell casings and projectiles by the weapon. The examination of these marks allows the examiner to associate weapons, casings and projectiles. There is also a firearms database, the National Integrated Ballistic Identification Network (NIBIN), which can be used to facilitate the association of casings, hopefully to a weapon and ultimately to a person. Training for firearms examiners is also lengthy, in excess of two years in many cases.

? The questioned documents section conducts hand writing analysis, and examines documents and its components (e.g., paper, ink). It also includes obliterated writing. Work in this section is labor intensive and training is lengthy, up to three years.

? Additional specialty areas including computer forensics and crime scene processing is also part of many crime laboratories.

Crime laboratories are an essential part of the criminal justice system but their backlogs cause a bottleneck in that system. It is difficult to estimate the extent of the backlog problems in crime laboratories. Backlogs and their causes are complex. Since the mid-1970s, the American Society of Crime Laboratory Directors has gathered resource information from its members, including information on backlogs. In 1997, the ASCLD/Aspen Systems survey, funded by the National Institute of Standards and Technology, identified laboratories and their operating characteristics. In March 2001, the ASCLD conducted an electronic staffing/workload poll of its members. Most recently, the ASCLD has been working collaboratively with the Center for Research in Law and Justice at the University of Illinois at Chicago to conduct the 2002 census of publicly funded forensic crime laboratories. This work is being funded by a grant from the Bureau of Justice Statistics. That census is in progress but information is not yet available. Recently, however, I polled ASCLD members concerning their backlogs. Here are examples of the information I received:

? In April, the Kentucky State Police reported a total backlog of 10,259 cases, 81% of which was drugs. This backlog was the subject of a recent newspaper article entitled Caseload Crunch [4]. This same article cited delays in DNA testing.
? The New York State Police are also experiencing severe shortages in the personnel necessary to analyze drug and toxicology cases. A November 2001, decision in the Albany Supreme Court ruled that the people cannot declare ready for trial without a scientific evaluation and formal laboratory report. A drug analysis is required within 45 days of receipt. There have been 5 drug cases recently dismissed in New York State due to the lack of a laboratory analysis and subsequent report.
? As of June 30, the Illinois State Police had a backlog of 8,179 cases. The largest single backlog, representing 31% of the total, was in latent prints. The average latent prints case on the backlog was 61 working days old; that is, it had been in the laboratory for approximately 3 months.
? In total, there were 145,849 cases which laboratories reported as being backlogged when polled. Of these, 45% of the cases in the laboratory were controlled substances, 23 % were latent prints, 9.5% were DNA, and 10 % were firearms.

Recommendation

Assistance has been provided to the crime laboratory community through a variety of programs, to include the Forensic Resource Network and grant programs from the National Institute of Justice. These programs have been invaluable in assisting the community as a whole to address issues ranging from quality systems, training models, accreditation and certification, but additional resources are needed.

The lack of resources is the common denominator for the crime laboratory, but there is no one size fits all approach that addresses the problem. There are different types of evidence used in the criminal justice system, each with different needs. Controlled substances, latent prints, firearms, toxicology, trace evidence and forensic biology/DNA are all part of the crime laboratory. We need assistance which is flexible and can be used to address the full range of issues we deal with in the laboratory. The ASCLD thanks you for your support.

Endnotes

[1] Parker, B. and Peterson, J.L. (1972) Physical Evidence Utilization in the Administration of Criminal Justice. LEAA Grant NI-032. Washington, DC: U.S. Government Printing Office.

[2] Daubert v. Merrel Dow Pharmaceuticals, Inc., 509 U.S. 579, 113 S. Ct. 2786 (1993).

[3] Kumho Tire Co., Ltd., v. Carmichael et al., 119 S. Ct. 1167 (1999).

[4] ACaseload Crunch@, Tom Loftus, The Courier-Journal, Louisville, Kentucky, (Monday, July 28, 2003).