

STATEMENT OF
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BEFORE THE
UNITED STATES CONGRESS
HOUSE OF REPRESENTATIVES
COMMITTEE ON THE JUDICIARY

SUBCOMMITTEE ON CRIME, TERRORISM
AND HOMELAND SECURITY

HEARING ON “RAPE KIT BACKLOGS: FAILING THE TEST
OF PROVIDING JUSTICE TO SEXUAL ASSAULT
SURVIVORS”

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INTRODUCTION

My name is Dr. Jeff Boschwitz. I am a Vice President and executive officer of Orchid Cellmark Inc., one of the largest worldwide providers of human DNA testing. On behalf of Orchid Cellmark, we would like to thank you for the opportunity to provide testimony on this important subject. Orchid Cellmark was one of the originators of the DNA technology used today for human identity testing and has a reputation for delivering the highest quality testing. In addition, we are the only private lab with a significant presence in both the US and the UK. As a result, we believe we are uniquely positioned to share insights on the rape kit backlog issue with the Committee.

Before we begin, we want to first commend the Committee for its leadership in issues involving the use of DNA testing on crime scene evidence as a means of aiding in establishing the guilt or innocence of the accused. It is particularly to be commended for scheduling this hearing on “Rape Kit Backlogs: Failing the Test of Providing Justice to Sexual Assault Survivors”.

The DNA testing backlog continues to grow despite the hundreds of millions of dollars invested to eliminate it. The most recent data shows that the backlog of cases submitted to a crime lab for testing reached over 70,000 cases in 2008, up from 24,000 in 2005 <http://dna.gov/backlog-reduction/>. This does not count the estimated hundreds of thousands of rape kits that have never been submitted to the crime lab for testing. One of the concerns raised about testing these rape kits sitting in police storage as well as the cases submitted to the crime lab is that there are not

sufficient financial resources to meet this incremental testing demand and that these resources are not likely to be available in the current economic climate. While incremental funding would certainly be of benefit, we would like to focus our testimony on specific regulatory changes that can be made to increase the available resources without incremental spending.

OBSTACLES TO MORE EFFECTIVE PUBLIC-PRIVATE PARTNERSHIPS FOR DNA TESTING

Although public-private partnerships for DNA testing exist today and have been successful in addressing many of the nation's backlogs (including the backlog in Los Angeles), there are current guidelines (the FBI Quality Assurance Standards for Forensic DNA Testing Laboratories: Effective July 1, 2009) that create significant obstacles to these partnerships and, at best, make them very inefficient for the public lab and the taxpayer. The FBI, recognizing the concerns of law enforcement on these guidelines, announced on March 23 that it is currently re-evaluating these policies. We would like to discuss these policies and the potential impact of changes to these policies.

Under the current regulations developed by the FBI (Quality Assurance Standards for Forensic DNA Testing Laboratories: Effective July 1, 2009), public labs and private labs must meet the exact same accreditation and quality assurance standards for the data they generate from forensic DNA testing to be eligible for upload into the Combined DNA Index System, or "CODIS". As part of these standards, both public labs and private labs must perform two technical reviews of the data. When the public lab has completed that second review, the data is uploaded into CODIS. However, when the private lab has completed that second review, the data is sent to a public lab which is then required to complete a third review of each case before the results can be uploaded into CODIS. No such independent third review of public lab data is required before data they generate is uploaded into CODIS. In addition, public labs must perform at least one site visit to each private lab it utilizes even though these labs are visited annually by the accrediting agency for its audit.

To date, we are not aware of any study performed by an independent body of a representative sample of public and private lab case files to determine if there is a significant difference in error rates between the two lab types. At Orchid Cellmark, we reviewed the last several thousand case files checked by a public lab and found just four reports that had any technical changes made to it, none of which were significant enough to change the result interpretation. Other agencies such as LAPD, which is perhaps the largest public lab user of private labs, have already come to Washington to let legislators know that they do not find meaningful errors upon performing these reviews (LAPD officials want FBI requirement removed to cut backlog of rape kits, Contra Costa Times, April 26, 2010).

The impact of the requirements for 100% technical review and site visit in terms of addressing the rape kit testing backlog are significant. Because public labs do not have extra resources to perform these reviews, they are most often performed using overtime, which makes the cost of doing them significantly more expensive. In addition, because analysts must manage performing these reviews on top of their existing caseload, it can take weeks to months for the reviews to be completed and the data to be uploaded into CODIS. The time it takes to clear this "second

backlog” results in an even greater period of time for a serial criminal to remain free and commit additional crimes. Finally, because public labs often do not have the extra resources to perform these reviews, they do not consider public-private partnerships to be a viable option at all and do the best they can to address their backlogs with the resources available even though it may take longer and ultimately cost more money to do so. As an example, the recent 489 case stranger rape backlog in Oakland, CA will not be completed for at least two years (Rape Kit Data, By the Numbers, CBS News, November 9, 2009), even though working with a private lab could lead to backlog completion in less than six months.

In terms of the substance of potential changes to Standard 17, we believe there are four critical elements:

- 1) The requirements for public labs to perform 100% technical review of private lab work and a site visit/audit of each private lab hired should be eliminated.
- 2) If private labs are to be held to a higher standard than public labs, these standards should not place any incremental burden on the public labs. There are many ways to accomplish this, including more stringent proficiency testing, minimum lab experience requirements, and minimum accreditation audit scores.
- 3) Private lab data should be entered into CODIS as it is today (i.e., by the public lab) or through a data clearinghouse managed by the FBI. There is no benefit to the victims or law enforcement to give private labs access to CODIS.
- 4) The requirement for public labs to be responsible for private lab quality and “own the private lab data” should be changed. Private labs should be held accountable for meeting quality standards and suffer appropriate penalties if they fail to meet them.

In discussing potential changes to Standard 17 with over twenty different public labs, we have identified several important concerns (and misperceptions) about modifying Standard 17 that we believe can be mitigated, addressed, or clarified and have included them as an addendum to this testimony.

USE OF PRIVATE LABS CAN STRETCH EXISTING RESOURCES FARTHER

As with most other industries where private industry is capable of delivering the service, private industry is a less expensive option for forensic DNA testing.

One study that supports this assertion is the recently completed NIJ study on property crime (NCJ 222318, April 2008). In that study, the variable costs (direct labor and materials only) were measured and estimated to be \$460 per sample (assuming 50% of analyst time was on production-related activities). Orchid Cellmark’s published pricing for property crime testing (since the NIJ study) has dropped to as low as \$245 per sample, almost half the cost of public lab variable costs. When considering that the cost of overhead typically adds up to 50% to the cost per sample, this cost difference is exacerbated further.

Orchid Cellmark believes these lower costs will be realized for rape kit testing as well and, for example, can deliver rape kit testing services up to 40% lower than the rape kit testing services charged to the Dallas Police Department by the public lab that services its forensics's needs (which in this unusual instance, charges the Dallas Police Department for the testing services). Other public labs such as LAPD have had third parties perform internal cost audits and shown that private labs are a less expensive alternative.

The cost savings in public-private partnerships are even greater when the cost of overtime is included. Federal funding through the Debbie Smith Act can only be used by the public sector for overtime (if it is not used for equipment or private labs). Use of federal money for overtime pay is perhaps an option for public labs in these challenging financial times, but it ultimately may not be an optimal utilization of the money for backlog reduction purposes.

In addition, private labs can be significantly less expensive in comparison to public labs that are highly automated. For example, the Texas Department of Public Safety ("DPS") DPS has implemented complete automation of its DNA databasing laboratory (to put convicted offender DNA profiles into CODIS) and reduced their costs to \$34 per sample (Texas SB00727). However, recent contracts awarded to private labs for the same testing service have been 15% to 35% lower (depending on contract requirements and factoring in the cost of collection kits). These differences exist because private labs can leverage greater economies of scale and because of private lab R&D efforts to decrease cost in order to remain competitive.

Finally, it is important to point out the extent to which existing federal spending could impact the backlog were it used more for public-private partnerships. For example, if 100% of the FY09 Debbie Smith Act casework backlog reduction money allocation of \$62MM was applied towards private labs, 60,000-70,000 cases could be completed, effectively eliminating the backlog of cases submitted to public labs.

The UK is the ultimate case example of how leveraging the private sector can decrease testing costs while maintaining or improving quality and service. The UK not only holds private and public labs to the exact same quality standards, but also has created a system where the public lab must compete for contracts (based on cost, quality, and service) against private labs. The result has been elimination of the testing backlog, a decrease in testing costs, and contract turn-around time requirements as little as three days for DNA testing of property crime testing and ten days for DNA testing of rape kits.

TESTIMONY COSTS DO NOT ADD SIGNIFICANTLY TO TOTAL PUBLIC-PRIVATE PARTNERSHIP COSTS

Private labs do charge for expert testimony which, in turn, does add to the cost of service. However, as it stands today, many defense attorneys see little benefit in putting DNA analysts on the stand and infrequently ask for DNA testing-related testimony. In fact, Orchid Cellmark estimates that it is asked to testify, on average, in 2% of the cases it analyzes (even in the months since the Melendez-Diaz ruling). When testimony costs are amortized over all cases analyzed, it only adds about 5% to the total cost of public-private partnerships.

PRIVATE LAB CAPACITY

Another concern about public-private partnerships is that private labs do not have the capacity to handle significant volume inflow. While it is true that private labs do not have large amounts of capacity that sits idle today, large private labs have a key structural advantage that enables them to more rapidly expand capacity than public labs. Private labs have the economies of scale and process engineers needed to break the testing process into its individual components such that less experienced people can be focused on areas of the testing process where extensive experience is not required to achieve high quality (e.g., accessioning, inventory) and thus be productive sooner. Orchid Cellmark estimates it could add the capacity to do several thousands more cases a year fairly quickly and that private industry in total could increase its annual capacity by tens of thousands of cases within 12 months. The rapid absorption by private labs of the over 10,000+ cases from the Los Angeles County rape kits backlog is evidence of these advantages.

PUBLIC-PRIVATE PARTNERSHIPS CAN PREVENT FUTURE RAPE KIT BACKLOGS FROM OCCURRING

Facilitating cost-effective public-private partnerships also will help ensure that future backlogs will not occur.

In order for a small public lab to prevent future backlogs from occurring (and most public labs are small, even in high population states, because of the presence of multiple state labs), it must staff to excess capacity to counter the inevitable productivity delays caused by employee turnover, equipment/contamination problems, the unexpected complex, high profile cases with hundreds of samples, and the inherent unevenness of forensic DNA testing demand. Otherwise, backlogs/delays in testing will inevitably occur as these issues arise. The cost to the taxpayer to maintain excess capacity to deal with the lumpiness in productivity and testing demand is often difficult to justify.

Alternatively, in an effective public-private partnership, the public lab can staff to ensure that all high-profile cases and other cases not amenable to high-throughput processes or remote processing can be done locally, and use private labs for cases amenable to high-throughput such as no-suspect rape cases and property crime. When high-profile crime is down, the public lab can take back some of the work it sends to the private lab to fill its capacity. Alternatively, when there are unexpected surges in crimes or turnover in the public lab or other local issues that cause productivity in the public lab to decline below optimal levels for a time (e.g., as reported by the Delaware State lab; Delaware Online, October 18, 2009), private labs can rapidly expand capacity on a temporary basis to deal with this demand without the need for the investment in costly incremental infrastructure

The importance of having this capacity flexibility is reinforced by the recent report showing that law enforcement does not submit a significant amount of evidence for DNA testing that might otherwise be submitted if capacity was there (NCJ 2228415, October 2009). In fact, in 2007 alone, it was estimated that 1.4 million property crimes had forensic evidence that was not submitted. This “holding back” of forensic testing is one reason why many public labs that start

to catch up on their backlog quickly get behind again as demand for testing unexpectedly increases as service levels improve. Maintaining a cost-effective public-private partnership for these high volume, no-suspect cases (even when the backlog is reduced), gives states the ability to more rapidly adjust to changing demand and prevent the violent crime backlog from building. It also can prevent rapes and homicides from occurring as many burglars progress to violent crimes.

SUMMARY

In summary, it is well understood that there is a lack of public lab resources to adequately address the rape kit testing backlog. While there are many avenues to address this issue, including more widespread implementation of automation and additional funding, Orchid Cellmark believes that private laboratories are an underutilized cost-effective resource and creating guidelines that facilitate public-private partnerships is an inexpensive solution to backlog reduction that can play a major role in this endeavor.

Very truly yours,

A handwritten signature in black ink that reads "Jeff Boschwitz". The signature is written in a cursive, slightly slanted style.

Jeffrey S. Boschwitz, Ph.D.
Vice President, North America Marketing and Sales

Addendum: Addressing Concerns with Changes to Standard 17

Concern 1) Preserving the integrity of CODIS is of primary concern and modifying Standard 17 puts the integrity of CODIS at risk.

Changing Standard 17 does **not** require that private labs have direct access to CODIS. DNA data can be uploaded into CODIS as it is today (by a public lab) or through a clearinghouse maintained by the FBI. Since there is no direct benefit to victims and law enforcement in giving private labs direct CODIS access, it is not necessary to consider options to achieve this end.

Concern 2) Private labs will directly profit from the modification of Standard 17.

The cost for private labs to perform DNA testing will be unchanged if Standard 17 is modified so private lab profit per case will also be unchanged. The only impact on cost will be to reduce the public lab costs to work with private labs.

Concern 3) Private labs, because of their profit motive, are motivated to cut corners and, as such, make mistakes. As a result, all of their work should be checked by a public lab.

Despite a lack of profit motive, public labs have made many mistakes and several have been shut down as a result (e.g. Houston, Detroit, San Francisco, and Baltimore). This is not to say that private labs have been perfect, but there is no objective third party study comparing public and private lab error rates and that lack of a profit motive means corners will not be cut and/or mistakes made.

In addition, the combination of profit motive and competition with other private labs encourages private labs to go the extra mile to ensure quality and maximize their testing success rates as quality is a key mechanism by which they can differentiate themselves from other private labs. Capitalism pushes the private lab to innovate (both in terms of cost reduction and quality improvement).

Also, there is nothing in the proposed modifications that would prohibit a public lab from checking some or all of a private lab's work if the public lab believed it necessary. The proposed modifications only eliminate the federal requirement to do so. The public lab would still have complete control and latitude to perform whatever quality checking it thought was necessary

Concern 4) Private labs will take over forensic DNA testing if Standard 17 is modified.

If Standard 17 is modified, public labs will still retain control over the testing process. Under the current guidelines, all private lab work must be pre-approved by a public lab before it can be entered into CODIS.

It is true that this change could have the impact of stimulating competition between public labs and private labs similar to what has occurred in the UK. However, as long as it is in the best interest of law enforcement, the victims, and the taxpayer to do the majority of the work in the public sector (i.e., public labs deliver testing at a lower cost, more quickly, and at a higher quality than private labs), then it is unlikely the workload distribution will change significantly.

Concern 5) The federal government should spend more money on expanding the capacity of public labs to solve the backlog problem.

There is nothing within the proposal to change Standard 17 that would prevent the Federal government from allocating more money to public labs. The request only serves to eliminate an unnecessary use of public lab resources to check private lab work and does not siphon any federal dollars away from public labs.

Concern 6) If the private laboratory goes out of business, it will be difficult to prosecute cases they have worked on.

As part of the pre-approval public-private lab relationship process, the public lab can require that the contract signed which governs the relationship with the private lab include a provision that requires the return of all evidence after a designated period of time and that a copy of all data generated be submitted to the approving public lab. This ensures that, if a private laboratory goes out of business, the law enforcement agency will have access to all of the data needed to prosecute a case.

In terms of testimony, former private laboratory employees still must respond to a subpoena to testify the same as former public laboratory employees. If, for some reason, the former private lab employees cannot be found, representatives from the public lab can still testify after reviewing the case file. In fact, in many instances today, the public lab testifies for work the private lab performs even though private lab personnel are available to testify.

Concern 7) By changing this rule, public labs will be required to work with private labs.

Nothing about the proposed rule change would inherently change a public lab's freedom of choice in using a private lab to help meet their law enforcement service goals. That decision should still be based on the same criteria used today to determine if this option makes sense (i.e., what testing option serves the best interest of victims and law enforcement).