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Kled

July 27, 2010

The Honorable Kim G. Dunning, Presiding Judge
Orange County Superior Court
700 Civic Center Drive West
Santa Ana, California 92701

Re: Response to Orange County Grand Jury Report

Dear Judge Dunning:

Enclosed please find the Office of the Orange County District Attorney's responses to Findings 1 through 4 and Recommendations 1 through 5 of the 2009-2010 report entitled "DNA: *Whose is it, Orange County Crime Lab's or the District Attorney's?*"

My office recognizes the effort made by the Grand Jury to examine the County's forensic science services.

Sincerely,

Tony Rackauckas
Tony Rackauckas
District Attorney

Attachment

TR:ru

OCDA Responses to Grand Jury Findings:

F1: The Orange County Crime Lab and the Orange County District Attorney's DNA unit perform DNA collection services, which are similar yet different: OCCL collects forensic DNA from crime scenes and obtains felony suspect DNA samples, which can be uploaded into the national database (CODIS) and the state database (SDIS); the OCDA collects voluntary samples from low-level drug possession felony suspects and nonviolent misdemeanor suspects; those samples are not eligible for uploading into state or national databases.

The OCDA disagrees partially with this Grand Jury finding.

The OCDA performs different DNA collection functions than the OCCL.

A “suspect” DNA sample from an individual is defined as a non-database DNA sample collected from a person during the course of a criminal investigation. Forensic scientists in a casework lab, such as OCCL, can directly compare a suspect DNA profile from an individual to DNA profiles obtained from crime scene evidence. A suspect DNA sample from an individual may be collected in conjunction with either a misdemeanor or felony crime investigation. From time to time, “suspect” DNA samples from individuals are submitted to crime lab personnel. Orange County Crime Lab (“OCCL”) personnel, however, do not regularly “collect” felony suspect DNA samples from individuals. The majority of “suspect” DNA samples from individuals are primarily collected by law enforcement officers and police agency crime scene investigators.

A police agency may submit a “suspect” DNA sample from an individual to the Orange County Crime Lab for DNA analysis. When DNA analysis is complete, Orange County Crime Lab forensic scientists can directly compare the suspect’s DNA profile to DNA profiles obtained from the evidence gathered at a crime scene and/or from a victim. A “suspect” DNA profile obtained from an individual during the course of a law enforcement investigation can be uploaded into the state database (SDIS) for a two year period but cannot be uploaded into the national database (CODIS).

Crime scene evidence samples that may contain probative forensic biological material are regularly “collected” by both police agency personnel and by OCCL forensic specialists and scientists. Crime scene casework DNA analysis is conducted by the OCCL. A crime scene evidence sample that yields a putative perpetrator DNA profile may be eligible for search or upload into both the CODIS and local OCDA DNA database systems.

The OCDA “collects” “non-suspect” DNA samples from individuals for inclusion in the County’s local DNA Database. However, if the individual providing a local DNA sample is also required to provide a state sample pursuant to Penal Code section 296, the OCDA will collect both samples and forward the Penal Code section 296 sample to the state DNA database laboratory.

All persons who provide non-suspect DNA samples to the local OCDA database do so voluntarily. An individual who agrees to provide a DNA sample to the local OCDA DNA Database consents to do so in writing. The collection of DNA samples for inclusion in the local OCDA DNA Database can result from a negotiated plea or case dismissal and is an integral component of several OCDA public safety and deterrence programs.

F2: The OCCL and the OCDA each serves a different crime/criminal classification and the OCCL could not analyze the OCDA's samples for the same contracted price OCDA pays to Bode Technology Group, Inc. Possible duplication of operating expenses cannot be determined at this time because cost analysis information has not been provided by the OCDA's office.

The OCDA disagrees partially with this Grand Jury finding.

The OCDA agrees with the statement that “the OCCL could not analyze the OCDA's samples for the same contracted price OCDA pays to Bode Technology Group, Inc.” This portion of the finding appears to state that the OCCL cannot analyze local DNA database samples at a cost equal to or lower than Bode. Further, since it is clear that OCCL cannot “analyze the OCDA's samples for the same contracted price OCDA pays to Bode Technology Group,” the recommendation that “the County Internal Auditor should conduct an annual cost analysis as to what it would cost for

the Orange County Crime Lab to analyze the DNA samples collected by the Orange County District Attorney that are now being sent to Bode Technology Group, Inc. of Virginia appears to be unnecessary (See Recommendation 2).

The OCDA disagrees as to the portion of the finding that states that “possible duplication of operating expenses cannot be determined at this time because cost analysis information has not been provided by the OCDA's office.” Presumably, this statement relates to the issue of outsourcing local DNA database samples to Bode Technology. Since the OCCL has not been accredited to perform DNA database sample analysis and does not have a DNA database lab or processing line, it should be clear that no “possible duplication of operating expenses” can even exist.

Further, the OCDA did provide to the Grand Jury, in November 2009, cost information regarding the analysis of local DNA database samples that included a copy of the Bode contract, the Bode analysis cost per sample and up to date information regarding the number of samples collected.

Any other cost analysis information related to the feasibility of the OCCL setting up and performing DNA databank analysis should be requested from the OCCL, not the OCDA. The OCCL, not the OCDA, would need to develop a proposal and strategy to obtain accreditation for a DNA database processing line. The OCDA is not in a position to determine the capital investment for equipment, supplies and personnel; and day to day operating and maintenance costs necessary for the OCCL to implement a DNA database processing line.

F3: After nearly a decade (starting with the Innocent Review Panel), the OCDA's low-level, non-violent crimes DNA database is just beginning to realize its potential. Since November 2009, the database has had three independent hits and confirmed two previously identified suspects.

The OCDA disagrees with this Grand Jury finding.

The OCDA began the planning of a local DNA database in August 2006. On January 23, 2007, the Orange County Board of Supervisors unanimously approved the purchase of the

OCDA DNA Database software system, called FSS-iD, from the Forensic Science Services (“FSS”) of the United Kingdom. The Orange County Sheriff voiced strong support for the local DNA database to the Board of Supervisors. The OCDA Database contains DNA samples from local individuals, some of whom are not eligible for inclusion in the State DNA database. The OCDA began collecting local DNA database samples from individuals in April 2007. Since that time, the OCDA has collected over 30,000 local DNA database individual samples and obtained twelve independent (non-CODIS duplicated) crime scene-to-individual DNA hits.

In 2000, the OCDA created the Innocence Review Panel. The Innocent Review Panel is not related in any way to the County’s local DNA database. The primary purpose of the Innocent Review Panel is to review the cases of incarcerated prisoners who believe that they have been wrongfully convicted to determine if any type of forensic testing, such as DNA or fingerprint analysis, would result probative evidence that would tend to exonerate the inmate. Panel participants, who together evaluate inmate requests and authorize forensic testing, include a public defender representative, private defense counsel, deputy district attorneys and District Attorney Tony Rackauckas.

F4: Because of political unrest in the Sheriff 's Department in 2007-08, the management structure of the Orange County Crime Lab changed from being solely the Sheriff 's responsibility to a temporary shared management structure, known as the Cooperating Department Head Structure, composed of the Sheriff, the District Attorney, and the County CEO. Despite the unsettled management structure and the recent loss of the OCCL lab director, resulting in lowered morale, the crime lab has been able to meet its overall goals of reducing backlogged DNA requests and turnaround times while remaining the leader in submitting the largest number of DNA profiles and having the largest number of DNA cold hits than any other California crime lab.

The OCDA disagrees partially with this Grand Jury finding.

On Oct. 27, 2008, after months of debate and study, the Orange County Board of Supervisors directed that several significant changes take place with regard to the structure and operation of the County's forensic science services. First, the Board of Supervisors adopted a Cooperating Department Head Structure to oversee the administrative management of the County's crime lab. County Executive Officer Tom Mauk, District Attorney Tony Rackauckas, and Orange County Sheriff-Coroner Sandra Hutchens were appointed to serve as the crime lab's Cooperating Department Heads.

The Orange County Board of Supervisors also ordered a renaming of the crime lab to the Orange County Crime Lab (OCCL); the hiring of a DNA Laboratory Director and the implementation of a high volume crime DNA analysis platform within the existing laboratory. Although the Board of Supervisors requested a future update regarding all these directives, none of the changes were designated as being "temporary" in nature.

As part of the high volume crime analysis DNA expansion, the Cooperating Department Heads encouraged the creation and implementation of the DNA case triage system by OCDA and OCCL staff members. The DNA analysis triage system maximizes communication between the County's law enforcement partners and wisely allocates the limited DNA resources of the forensic laboratory, law enforcement and the prosecution to effectively address and reduce the crime lab's DNA backlog. Along with the 2008 NIJ DNA Backlog Reduction grant, the DNA triage system has been one of the primary reasons for the substantial reduction of the backlog of DNA property crimes awaiting DNA analysis and lowered turn-around-times.

The OCCL has been the "leader in submitting the largest number of DNA profiles and having the largest number of DNA cold hits than any other California crime lab." This is due, in large part, to the outstanding work of the OCCL DNA forensic team. But, an equally important contributing factor to the number of DNA cold hits in Orange County is undoubtedly the cadre of well trained law enforcement personnel at our local police agencies who understand not only the value of DNA forensic evidence; but also the proper method of collecting and preserving such evidence.

OCDA Responses to Grand Jury Recommendations:

R1: Keep the Crime Lab's database and the District Attorney's database separate until an audit can be conducted of the District Attorney's DNA unit. At this time, there appears to be no duplication of equipment and/or expenses involved with having two DNA databases since they serve very different populations of the criminal justice system.

The OCDA believes that this recommendation is not warranted or reasonable.

First and foremost, the OCCL does not maintain an independent local DNA database exclusively containing samples collected from offenders or non-suspect individuals. The OCCL is a local CODIS (LDIS) casework lab that interfaces with the state CODIS (SDIS) lab and, through the state, with the national CODIS (NDIS) system. Local CODIS or LDIS casework labs such as the OCCL are entitled to upload DNA suspect profiles obtained from crime scene evidence into the state or SDIS DNA database. It is the state CODIS or SDIS lab, administered by the California Attorney General's Office that analyzes offender samples and maintains a DNA database index containing offender DNA profiles.

An audit of the OCDA DNA local database would not change the unanimous opinion of both the OCDA and OCCL that the local DNA database should be managed by the District Attorney's Office, not a casework laboratory.

The OCDA DNA Database is an integrated system comprised of many components. The database software system includes FSS-iD and advanced programs created by the OCDA Information Technology Unit such as "BILL" (a program that stores and transfers collection information).

The efficiency of the OCDA's DNA database program stems from the fact that the operation is streamlined. The process begins in the courtroom, where the decision is made to collect a sample. The process continues at the OCDA collection sites, where investigative assistants with specialized training collect a DNA sample, perform quality assurance and prepare the

sample to be shipped for processing. The process continues when the genetic data is returned by the database lab to the OCDA forensic scientist for quality assessment, data review and upload of genetic data.

The local DNA database has five stationary County DNA Collection Sites. In addition, the OCDA is in the process of designing and obtaining a mobile DNA collection vehicle using federal funds received by the OCDA in September 2009. There is a DNA Collection Site at each of the County's four main criminal courthouses and at the Central Jail. Each DNA Collection Site is staffed with several Sample Collection Investigative Assistants who collect local and state DNA database samples.

Over the past several years, the OCDA has taken the necessary steps to develop the highly intricate infrastructure that comprises the OCDA DNA database system. This arduous process has included the research, development, design, and implementation of the local DNA database as well as the creation of protocols and procedures for the ongoing operation and expansion of both the DNA database sample collection program and the DNA database itself.

One of the key components of the development process and ongoing database operation is the physical and technical security required for both the DNA samples and all genetic data. To meet these requirements, the OCDA developed and tested IT security procedures and regulations to protect the database. The OCDA also established and provided for specialized training and oversight of the personnel responsible for database operation. These elements are critical to the database's secure and efficient operation.

The OCDA has the legal responsibility to protect the integrity and privacy of DNA samples that are collected and the DNA profiles that ultimately result. The OCDA is also responsible for the protection of the related personal information attached to these DNA samples. The OCDA DNA Database system has been carefully developed so that oversight, audit and security features are built into each step of database operations. This includes different levels of access and oversight of the various database components by OCDA personnel assigned to a specialized DNA Unit.

The protocols that dictate the operation of the database include a highly detailed network of security restrictions designed to ensure the integrity of the database and the information it contains. Strict adherence to these regulations and supporting DNA data banking policies and legislation is critical to the legal and secure operation of the database and to protecting the private genetic information contained within the database.

The structure and organization of our local DNA database system is designed to mirror that of the state DNA (SDIS) database system. The state DNA (SDIS) database system is under the care and control of California's Attorney General. The Attorney General oversees the state forensic laboratory system that includes numerous casework forensic laboratories and the lab administrators responsible for the day-to-day operation of the state database. In addition to database forensic scientists, the Attorney General maintains a staff of prosecuting attorneys and state police investigators who assist and guide state DNA database administrators.

Every aspect of database operation must be carefully and constantly monitored and reviewed. Like the Attorney General, the District Attorney must maintain an integrated staff of forensic scientists, investigators, investigative assistants and attorneys to securely maintain and operate our local DNA database. The OCDA must also ensure that the forensic lab that analyzes individual DNA samples for the local DNA database is properly accredited and can correctly perform individual or offender DNA analysis following accepted scientific procedures.

Like the Attorney General, the District Attorney must oversee all aspects of individual sample collection. The state provides offender sample collection kits, collection rules and regulations to all police agencies, probation departments and parole offices in the state. The Attorney General must ensure that every person who provides a DNA sample for inclusion into the state DNA database system has been properly identified by local law enforcement agency personnel. Further, the Attorney General must verify that all offender samples collected by local law enforcement agencies qualify for inclusion in the state DNA database system.

The responsibility to securely maintain both physical DNA samples collected from offenders and the genetic profile information that is generated from these samples is of paramount importance for both agencies. Samples that are lost, erroneously collected, mistakenly analyzed or compromised in any manner may impact an individual's civil liberties and thus jeopardize database security. Although an enormous undertaking, each system must include not only forensic scientists to perform the basic DNA testing, but also investigators to ensure that DNA samples and genetic information are securely maintained and attorneys to legally monitor database operations.

As the District Attorney's Office, it is our legal responsibility to protect the integrity and privacy of the samples we collect and the genetic profiles that ultimately result. We are uniquely qualified to do so because of our existing staff of essential database personnel that includes forensic scientists, attorneys, investigators, investigative assistants and IT engineers.

All OCDA DNA database personnel are thoroughly trained and familiar with the quality assurance guidelines and protocols of the database system. Trained DNA database personnel are a key component of the streamlined process that must operate under one management system to ensure the timely, appropriate, consistent, and efficient resolution of any issues that arises during the process. Operating within one specialized DNA unit under the oversight of one authorizing agency provides for more efficient and effective communication throughout the entire process. Ultimately this results in the most efficient operation, enforces strict adherence to policies and protocols and establishes accountability of all of the personnel involved.

If the OCDA did not have the ability to oversee the entirety of local database operations or individual functions of the database system were to operate outside of OCDA oversight, serious risks to the security of the database would result. Physically moving all or a portion of the database system or allowing for database oversight to be placed wholly or partially in the hands of another agency such as the OCCL would create both inefficiencies in database operations and present insurmountable risks to the security of the database and the privacy of the genetic data it contains. Oversight of the DNA database system by the one agency that is

ultimately accountable for all aspects of database operation is critical.

It is neither appropriate nor feasible for the OCDA to hand over sensitive personal and genetic information from individuals to another agency that is unable operate all facets of a local DNA database system and is outside the protected environs of our rigorously tested security system that exists to protect the integrity of the database. Placing the any portion of the database system outside of the physical security designed to house it and outside of the intricate IT security network designed to protect it, would potentially jeopardize the integrity of the information contained within the database.

R2: The County Internal Auditor should conduct an annual cost analysis as to what it would cost for the Orange County Crime Lab to analyze the DNA samples collected by the Orange County District Attorney that are now being sent to Bode Technology Group, Inc. of Virginia.

The OCDA believes that this recommendation is not warranted or reasonable particularly in light of the Grand Jury Finding 2 that states that “the OCCL could not analyze the OCDA's samples for the same contracted price OCDA pays to Bode Technology Group, Inc.”

There are several factors the County may wish to consider prior a decision to expend resources to comply with the recommendation to “conduct an annual cost analysis as to what it would cost for the Orange County Crime Lab to analyze the DNA samples collected by the Orange County District Attorney that are now being sent to Bode Technology Group, Inc. of Virginia.”

Initially, the DNA analyses of local OCDA DNA Database individual samples were conducted by the FSS’ nationally and internationally accredited forensic laboratory. Last year, the Orange County Board of Supervisors approved the selection of Bode Technology, also a nationally and internationally accredited forensic lab in Virginia, to conduct the DNA testing on the local OCDA DNA Database samples. Bode Technology can complete its testing and analysis within 30 days at an extremely cost effective price, \$24 per sample. Bode

Technology is a well respected forensic laboratory that has processed over 1 million offender DNA profiles for 26 of our nation's state database systems.

Currently, the OCCL DNA lab is designed and accredited to only perform casework DNA analysis. In other words, the OCCL primarily conducts DNA analysis on samples collected from or related to crime scenes. The OCCL does not currently have a DNA database analysis line and is not accredited to perform DNA database testing.

If the OCCL were to pursue high volume DNA processing of database samples, the forensic scientists would need to set up completely separate DNA processing operation, hire and train additional staff from those performing casework and then seek accreditation of that new portion of the laboratory prior to processing any database samples. For quality assurance and contamination reasons, the processing of database samples should ideally be performed in a separate physical location from the processing of crime scene samples.

Additionally, the processing of DNA databank samples in an efficient and cost effective manner requires a different and separate type of high volume processing operation than the processing of crime scene DNA samples. This typically includes a physically separate processing space, scientific equipment, instrumentation, robotics, reagents and consumables. It also requires different protocols, interpretation guidelines and specialized training of separate personnel performing the DNA data banking process.

Significant initial capital investment and set up costs would be required for the additional equipment and staff that would be needed for such an operation. Also, a substantial period of time would be needed for the OCCL to become fully operational with a DNA data banking line that could process DNA database individual samples within 30 days.

The ability of a new OCCL DNA database processing line to compete with the relatively low cost per sample of outsourcing to a private laboratory would need to be evaluated. SDIS DNA labs outsource high volume DNA databank samples to private laboratories simply because they cannot handle the sheer volume of samples and the growing backlogs of samples waiting

to be tested. The efficiency of private laboratories allows for them to process samples at a much lower cost per sample which ultimately results in lower cost per sample for their customers.

Of concern as well is the need to confirm every DNA database hit before providing a DNA match investigative lead to a police detective. CODIS offender samples are analyzed by the state in a forensic laboratory that is separate from the state system of casework crime labs. When a CODIS DNA cold hit occurs, the hit must be compared and confirmed by two separate labs (OCCL and State lab). This procedure is an integral component of the checks and balances built into the CODIS database hit confirmation process. Both the state DNA database lab and the local forensic casework lab must ensure that mistakes or errors were not made at either laboratory. Although differences exist between state and local DNA database hit confirmation process, protocols would still need to be developed in recognition of the OCCL's dual function as both a casework lab and a DNA database lab.

Nevertheless, if it were determined that the OCCL DNA lab could establish a DNA data banking operation capable of processing local DNA database samples in a cost efficient manner with comparable turnaround times, the OCDA would certainly consider the OCCL for DNA processing instead of outsourcing.

R3: Annually review the costs associated with collection, analysis, and uploading DNA profiles in the Orange County District Attorney's database with a view toward instituting or raising fees from individuals, cities, or any others who request access to the database.

The OCDA believes that this recommendation is not warranted or reasonable.

Individuals who volunteer to provide DNA samples for inclusion in the local DNA database pay a \$75 administrative fee to offset the cost of collecting, analyzing and uploading DNA profiles into the local DNA database.

The OCDA has no plans to charge police agencies or the OCCL to upload crime scene profiles or

request a local DNA database search. The OCDA DNA database exists to solve crime, exonerate the innocent, bring closure to victims and their families, prevent future crimes and protect the public. Denying access to the OCDA DNA database to law enforcement partners such as police agencies and the OCCL based on an inability to pay would violate the mission of the OCDA “to enhance public safety and welfare and create a sense of security in the community through the vigorous enforcement of criminal and civil laws in a just, honest, efficient and ethical manner.” Requiring payment from law enforcement agencies to access the OCDA DNA database would create separate systems of justice that would distinguish between citizens that reside in economically challenged areas and those that reside in wealthier jurisdictions.

R4: The County of Orange Internal Audit Department should review the District Attorney's DNA unit to determine the actual costs associated with this specialized unit, including the collection and processing of the DNA samples, and the operation and maintenance of the database, including updating of the software.

The OCDA believes this recommendation has been asserted without basis or justification and is therefore not warranted or reasonable.

The OCDA is not opposed to a review of the DNA unit “to determine the actual costs associated with this specialized unit, including the collection and processing of the DNA samples, and the operation and maintenance of the database, including updating of the software” if such action will serve a legitimate purpose. Since no rationale has been provided for this recommendation, the OCDA can only assume that the basis for this recommendation is to conduct a cost-benefit assessment of the local DNA database system.

Although a review of the DNA unit with particular focus on the local DNA database system can determine the costs associated with the operation of the local DNA database, such an audit cannot easily or accurately reflect the resources the local DNA database saves the County. Any attempt to conduct a cost-benefit analysis of the local DNA database is difficult at best. Of course, deliverables such as kits, analyses and salaries can be calculated over a given time period. The bulk of expenses, up until this point, primarily include startup costs

for local DNA database set-up rather than day-to-day operational costs. Considering start-up, maintenance and DNA sample collection costs alone does not, however, paint a complete picture of the local DNA database. Not only does the local DNA database allow the OCDA to effectively solve crime, it also allows the district attorney, public defender, courts, jail system and police agencies to save valuable time and resources.

It is difficult to assign a dollar figure to the benefits and savings gained by creating and maintaining a local law enforcement DNA database. How does one assign a monetary value to finding the perpetrator of a murder or exonerating an individual who was wrongly convicted of a crime? Is it possible to determine how much investigative, prosecutorial, defense bar and court resources are saved when a criminal is identified quickly through a local DNA database hit? Is there really a way of assigning a monetary value to incarcerating a violent offender before he hurts or kills another innocent person? Can the number potential crime victims who were not harmed be determined because a criminal was deterred from committing additional offenses knowing that his DNA profile was in the local DNA database? Will law enforcement agencies such as police departments, crime labs and prosecution offices ever “break even” or “operate in the black” in their effort to protect the public?

The DNA Unit gathered and provided information regarding local DNA database operating costs to the Grand Jury in November 2009. In 2006, the DNA Unit purchased the necessary database software and license from Forensic Science Services (FSS) for \$500,000. This fee was a one-time start-up cost that granted a perpetual software license to the OCDA. For the first several years, the DNA Unit paid FSS \$100,000 annually for maintenance and support. Beginning in 2009, in the OCDA opted to pay for single-incident repairs rather than pay the all-inclusive maintenance fee.

Originally, the OCDA obtained the DNA collection kits from FSS for \$7 per kit. The FSS processed the first 550 kits for \$40 and all subsequent samples for \$52 each. To increase efficiency and save money, the OCDA engaged the services of Bode Technology on January 14, 2009. Bode provides DNA collection kits at a cost \$4.95 per kit and DNA STR analysis for \$24 per sample with a 30 day turn-around-time. OCDA collects a \$75 fee from each

individual who provides a DNA sample for inclusion in the local DNA database to help offset the costs associated with collecting and processing the DNA samples.

The OCDA DNA Unit researched studies and articles regarding similar local law enforcement DNA databases to better understand the cost-benefit factors relating to maintaining a local DNA database. Not unexpectedly, extensive literature does not appear to exist on this topic highlighting the fact that Orange County is a forerunner in effectively utilizing DNA technology to solve crime. The OCDA patterned the local DNA database after the United Kingdom's DNA database. The UK DNA database has proven to be an effective crime-solving tool. The probability that a new crime scene profile loaded onto the UK DNA database will match an individual's profile is 52%. In the UK, when crime scene investigators collect DNA samples at a crime scene, the detection rate dramatically increases. For example, for domestic burglary, the detection rate increases from 16 to 41% and, for vehicle theft, from 8 to 63%.¹"

To understand how an in-depth cost-benefit analysis might possibly be conducted of the local DNA database, the OCDA studied the methodology of NPC Research, an Oregon-based company that specializes in courtroom cost analysis. NPC Research primarily conducts single issue court studies such cost effectiveness of maintaining DUI or Drug Courts. The company outlines its standard methodology in the various studies it conducts for courts across the country.

Following NPC's methodology, the OCDA explored the feasibility of creating a study to specifically determine the cost saving associated with a single DNA collection sample. In order to find out how much time and resources are saved by collecting DNA samples, the County would need to identify the average time the District Attorney's Office dedicated to cases before and after the local DNA database was created. Additionally, similar data would be required for the Public Defender's Office, police agencies and the court system.

¹ Levitt, Mairi. 2007. Forensic databases: benefits and ethical and social costs. *British Medical Bulletin* 83: 235-248.

Unfortunately, Orange County does not publish data regarding the average length of courtroom proceedings nor does it have data specific to how much time judges, attorneys, paralegals, investigators and clerks spend on case investigation, preparation and court appearances, especially for the lesser offenses that result in DNA samples for the local DNA database. While this information would possible to collect, such a process will be extremely time-intensive and would most likely require months to years of meticulous data collection.

Even after gathering such data, the County would need to analyze average salaries for all parties involved and break down those annual salaries into smaller time units that correspond to the average case investigation, preparation and court appearance times. The County will only be able to determine how much time and resources the local DNA database saves if the cost savings due to truncated case investigation, preparation and court appearances is calculated.

Due to the overwhelming difficulty of collecting time related data, the OCDA DNA Unit worked with the OCDA Research Unit to provide a few “snapshots” or examples that demonstrate that cases have been resolved more efficiently after the implementation of the local DNA database (See Appendix A). Due to the amount of information available and time restraints, District Attorney’s Research Unit examined only defendants filed in the Central Justice Court between January 1, 2005 and December 31, 2009. Four areas of efficiency were scrutinized:

1. Number of hearings pre-disposition
2. Number of hearings post-disposition
3. Number of “formal” diversions
4. Number of felony bindovers

TABLE 1: Misdemeanor Defendants Completed in Central Justice Center by Year Completed

Defendants Completed	2005	2006	2007	2008	2009	Total
Plea/Trial	4252	5510	8494	8337	8409	35002
Dismissed	556	573	698	621	754	3202
Diversion	663	551	551	499	363	2627
DNA Programs			275	559	1124	1958

TABLE 2: Felony Defendants Completed in Central Justice Center by Year Completed

Defendants Completed	2005	2006	2007	2008	2009	Total
Plea/Trial	2336	2007	2398	2208	1808	10757
Dismissed	360	336	324	383	310	1713
Diversion	1369	1167	1030	787	530	4883
DNA Programs			1		193	194

TABLE 3: Number of Misdemeanor Hearings in Central Justice System by Year Completed

Events	2005	2006	2007	2008	2009	Total
Pre Disposition	25796	28221	31766	30607	34516	150906
Post Disposition	8055	15272	22160	26642	25504	97633

TABLE 4: Number of Felony Hearings in Central Justice System by Year Completed

Events	2005	2006	2007	2008	2009	Total
Pre Disposition	21276	17844	22243	20553	15889	97805
Post Disposition	10109	12901	14978	13657	12171	63816

Although it cannot be known if the local DNA database system implementation was the sole reason for the decrease in the number of hearings pre-disposition between 2005 and 2009 in the Central Justice Center, both misdemeanor and felony local DNA database participating defendants had almost a third fewer hearings pre-disposition than non-local DNA database defendants. Misdemeanor local DNA database participating defendants also had a third fewer post-disposition events than non-local DNA database defendants. Fewer hearings translates to significant time and resource savings for the district attorney, public defender, probation,

police, judges, and other court staff.

Prior to the implementation of the OCDA local DNA database, many defendants were sentenced to diversion programs. Diversion cases require the most follow-up from the criminal justice system than any other type of case. Proposition 36 and Drug Court defendants are scheduled for multiple follow-up and progress reviews. These diversion defendants log multiple probation violations during the lifetime of their cases. Since the implementation of the OCDA local DNA database, the number of misdemeanor diversions decreased in the Central Justice Center by 60% and the number of felony diversions decreased by 45% during the same time frame.

Empirical data gleaned from preliminary hearing statistics highlight another example of the cost benefits of maintaining a local DNA database. When an individual is charged with a felony in Orange County, one of the initial steps of the usual criminal justice process requires the prosecution to prove, to a magistrate during a preliminary hearing, that a crime has been committed and that there is reasonable cause to believe that the defendant is the person who committed the felony offense. As a result of local DNA database collection efforts and the close evaluation of felony cases by the OCDA "Strike Team," the number of preliminary hearings conducted last year was reduced by 1,000. In Central Justice Center alone, the number of defendants bound over for trial decreased from 748 in 2005 to 335 in 2009, a decrease of 55%.

R5. The management of the Orange County Crime Lab should revert to its prior status under the Orange County Sheriff-Coroner.

The OCDA believes that this recommendation has been asserted without any basis or justification and is therefore not warranted or reasonable. The Grand Jury report is devoid of facts that support this recommendation.

Under the administrative guidance of the Cooperating Department Heads, DNA Lab Director Elizabeth Thompson was hired in June 2009; the crime lab was renamed from the Orange

County Sheriff's Department (OCSD) Forensic Science Services division to the OCCL in August 2009; and the OCCL received a \$2 million grant award in September 2009 from the National Institute of Justice (NIJ) to be used for a high volume property crime DNA line.

Since the implementation of the Cooperating Head structure, the OCCL expanded testing and technology through the addition of robotics, DNA analysis software upgrades and improved DNA report writing software. Further, the Cooperating Department Heads encouraged and supported the joint efforts of OCDA and OCCL staff members to create and implement the DNA case triage system. The DNA triage system has been one of the primary reasons for the substantial reduction of the backlog of DNA property crimes awaiting DNA analysis and an important contributing factor to the lower turn-around-times.

The Cooperating Department Head Structure eliminates the appearance of a conflict of interest that could result if any one single entity is placed in control of the crime lab. The structure also fosters communication and cooperation among the County's criminal justice partners and increases transparency and accountability within our criminal justice system.

The Cooperating Department Head Structure has increased communication and cooperation among the County's law enforcement agencies. Orange County District Attorney (OCDA) and OCCL personnel meet monthly to discuss and resolve the County's forensic DNA issues and problems. Together, members of both organizations provide training to police agency personnel. To ensure that the Crime Lab's accreditation status is maintained, there has appropriately been no interference by the Cooperating Department Heads regarding laboratory scientific or technical matters. There has emerged, however, a much welcomed climate of openness and transparency that has helped to ensure fairness to all parties within the criminal justice system.

Appendix A

Orange County District Attorney DNA Efforts: An Efficiency Analysis

Katie J.B. Parsons, Ph.D.

*Research Manager
Orange County District Attorney*

Orange County District Attorney DNA Efforts: An Efficiency Analysis

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The Orange County District Attorney has been at the forefront of effectively utilizing DNA technology to solve crime for more than a decade. Although forensic DNA technology has proven to be an effective law enforcement tool for identifying or excluding suspects, it has not been specifically determined how DNA technology affects the efficiency of the prosecutorial process. Intuitively, it can be assumed that the increased use of DNA technology in the County has allowed cases to be prosecuted more efficiently. In June 2010, the Research Unit was asked to determine how inclusion of DNA efforts affects the Orange County District Attorneys prosecutorial process.

In 2007, the Orange County District Attorney implemented the DNA Dismissal Program. The DNA Dismissal Program allows defendants to voluntarily submit a local DNA sample in exchange for a case dismissal. Defendants eligible for the DNA Dismissal Program include misdemeanor and low level felony defendants who have not previously submitted a sample.

In 2008, the Office implemented the Deferred Entry of Judgment Program (DEJ). The First Time Offender Program is eligible to misdemeanor defendants who have never been convicted of a felony, are not on probation, did not inflict injury during the commission of the crime, and the charged offense includes one of the following: petty theft, disturbing the peace, defrauding inn keeper, trespassing, public intoxication, or hit and run. Other requirements include that the defendant not have a previous grant of probation terminated unsuccessfully, not been diverted under any program in the last 5 years, and did not exhibit criminal sophistication during the course of his/her crime. The program operation requires that the defendant enter a plea and a sentencing hearing is set 90 days out. During that time, if the defendant completes an educational program determined by the District Attorney, provides a DNA sample, and pays any fees or restitution, the case will be dismissed.

Office wide in the past 3 years, over 8,000 defendants have given DNA samples through these 2 programs.

TABLE 1: Number of Defendants that Participated in DNA Programs by Year of Participation

Office Wide DNA Efforts	2007		2008		2009		Total
	Misd	Felony	Misd	Felony	Misd	Felony	
DNA Dismissals	270	1	356	7	1859	1182	3675
DEJ	<i>n/a</i>	<i>n/a</i>	695	2	3724	35	4456

**The DEJ Program was not operational in 2007.*

The Research Unit set out to determine how these programs affected efficiency. Five areas of efficiency were scrutinized:

1. Time to disposition
2. Number of hearings pre disposition
3. Number of felony bindovers
4. Number of “formal” diversions
5. Number of hearings post disposition

Information from the District Attorney’s Case Management System (CMS) and the Court’s VISION system were included in this analysis. Misdemeanor and felony cases were analyzed separately to determine if crime type affected the five areas of efficiency differently.

Defendants were broken down into four categories: plea/trial, dismissed, diversion, and DNA defendants. The plea/trial defendants included those who plead or defendants who had a jury or court trial (the outcome of trial was not pertinent to analysis). Dismissed defendants had cases that were dismissed due to insufficient evidence, interest of justice, legal motions, etc. Diversion defendants entered “formal” diversion including PC 1000, Proposition 36, and specialty courts (Drug Court, Whatever it Takes Program, Veteran’s Court, etc.). DNA defendants included defendants whose cases were dismissed in exchange for a DNA sample and those who participated in our DEJ Program. Defendants handled by our Vertical Units were excluded because these defendants were not eligible for the District Attorney DNA Programs. Defendants that could not be placed into one of the study’s categories were also

excluded. This included defendants who were terminated, charged with infractions, consolidated/refiled, received a 1203.4 dismissal (dismissed after conviction), received an indictment, or were found guilty due to reason of insanity.

The first efficiency measure would determine if DNA programs allowed cases to be completed sooner. Cases were considered completed on the date a disposition was entered with the court. Cases where a warrant was issued or where mental commitments were identified were excluded because these events dramatically increase the time between filing and disposition. The Research Unit was concerned that cases with warrant events may not be adequately identified and so it was decided to also look at the number of hearings as a backup measure.

The second efficiency measure focused on how many hearings took place in court before a defendant entered a disposition. It was believed that defendants would enter a disposition with fewer hearings and/or court time. Hearing events prior to disposition were collected. Only heard hearings were included. Scheduled or canceled hearings were removed from data set.

Because defendants had more options available to them through DNA Dismissal and DEJ, it was assumed defendants would enter a disposition prior to being boundover. This would result in fewer defendants being handled by our Felony Panel unit and requiring less time and resources.

Diversion cases require the most follow up from the criminal justice system than any other type of defendant. Proposition 36 and Drug Court defendants require multiple follow up and progress reviews. They also log multiple probation violations during the life time of the case. It was hoped that these defendants would be diverted to the DNA Dismissal and DEJ Programs and thus not requiring the additional follow up time after disposition; again translating into less criminal justice resources from the District Attorney, Public Defender, the courts, Probation, Health Care, and service providers.

In the last efficiency measure, the Research Unit set out to verify that inclusion of DNA programs would decrease the number of events after dispositions.

Due to the amount of information available and time restraints, only defendants filed in the Central Justice system between January 1, 2005 and December 31, 2009 were included in this analysis.

TABLE 2: Misdemeanor Defendant Comparisons between Office Wide Filings and Central Justice Center Filings by Year Filed

Defendant Filings	2005	2006	2007	2008	2009	Total
Office Wide Filings	50154	53874	53653	56304	50194	264179
Central Justice Center	11255	12078	12055	13168	10837	59393

TABLE 3: Felony Defendant Comparisons between Office Wide Filings and Central Justice Center Filings by Year Filed

Defendant Filings	2005	2006	2007	2008	2009	Total
Office Wide Filings	19015	18297	17688	16334	14977	86311
Central Justice Center	3951	3806	3888	3492	2727	17864

The data set created from CMS was defendant based and included filing, disposition, and bindover information. CMS is an excellent source of the number and type of cases filed. Disposition and diversion data were pulled from codes entered by District Attorney staff. The plea/trial defendant's disposition date was the date they plead or date trial was completed. Dismissed defendant's disposition date was the date case was dismissed. The diversion disposition date was the date the defendant entered diversion. The DNA defendant's disposition date was the date they agreed to give DNA. Whether or not the diversion or DNA defendants were dismissed for successful completion of program or sentenced for failure to comply was irrelevant to the study. Missing data points were added as part of this analysis and outcomes were cross checked with sentence and CMS event information. Cases filed prior to 2005, but completed in 2005 or later were also added to the data set for analysis.

Approximately 1,000 cases were updated and 5,447 were added. This process took over a

week and half to perform.

TABLE 4: Misdemeanor Defendants Completed in Central Justice Center by Year Completed

Defendants Completed	2005	2006	2007	2008	2009	Total
Plea/Trial	4252	5510	8494	8337	8409	35002
Dismissed	556	573	698	621	754	3202
Diversion	663	551	551	499	363	2627
DNA Programs			275	559	1124	1958

TABLE 5: Felony Defendants Completed in Central Justice Center by Year Completed

Defendants Completed	2005	2006	2007	2008	2009	Total
Plea/Trial	2336	2007	2398	2208	1808	10757
Dismissed	360	336	324	383	310	1713
Diversion	1369	1167	1030	787	530	4883
DNA Programs			1		193	194

TABLE 6: Defendants Boundover in Central Justice Center By Year Boundover

Defendants	2005	2006	2007	2008	2009	Total
Boundover	748	638	688	705	335	3114

The data set created from VISION was also defendant based and information included date and type of hearings. Prior to 2009, hearing information was manually entered by District Attorney staff. After 2009, hearing information is updated through a data exchange with the Court's VISION system. Because analysis extended back to 2005, the Research Unit requested hearing information from the Court for cases heard in the Central Justice Center between January 1, 2005 and December 31, 2009. The Research Unit received over a million hearing events (1,217,488). The data arrived in 12 different files and had to be compiled into one data set and canceled hearings were removed.²

Events for defendants in the CMS data set that were filed prior to 2005, but completed in

² The Court maintains ownership and control of this data. Therefore, the Office of the District Attorney is unable to validate the data.

2005 or after had to be pulled out of CMS and added to the hearing data set created from VISION. These hearings were added with the knowledge that these hearings would not be complete and thus would under represent the actual number of hearings prior to 2005.

The hearing data set created from VISION (with the added events from CMS) had to be matched with the defendants in the CMS data set. Adding the hearing information to the CMS filing and disposition data took a couple of days to perform.

TABLE 7: Heard Hearings in Central Justice Center By Year of Event

Events	pre 2005	2005	2006	2007	2008	2009	Total
Heard Hearings	12183	64502	79836	94550	96926	89442	437439

Analysis was completed using statistical tests in the Statistical Package for the Social Sciences (SPSS). Analysis took about a week to perform. Average time frames and average number of events were found to be statically different at the .00 level using ANOVA statistics. Counts of defendants in our four categories were found to be statically different at the .00 level across 2005-2009 using Chi-Square statistics.

Although statistics confirmed that DNA defendants and diversion defendants dispositioned sooner than plea/trial and dismissed defendants, the time frame analysis proved to be problematic. Dismissal times were inflated due to the suspected missing warrant information and plea/trial and dismissal times may have been inflated due to cases being boundover to Felony Panel. The DNA programs are not available to these defendants and thus their time to disposition may not be comparable. In any subsequent analysis, the Research Unit might look at bindover times for these cases instead of disposition time. The Research Unit did not feel confident in this time frame analysis and thus it is not included in the results.

Felony DNA defendants are excluded from post disposition event analysis because they only had 4 post disposition events. Dismissed defendants are excluded from post disposition event analysis because they don't have any post disposition events. Any statistic calculated would be meaningless. However, the numbers of felony post disposition events by year are

statistically compelling.

Results include the following:

- Number of hearings pre disposition by year
 - the number of misdemeanor events pre disposition slightly decreased from 2005-2009 (signif = .00, n=44163)
 - the number of felony events pre disposition increased slightly from 2005-2009 (signif = .00, n=18243), but decreased from 2008-2009 (signif = .01, n=44163)
- Number of hearings pre disposition by type of defendant
 - the number of misdemeanor DNA events pre disposition were fewer than any other type of defendants (signif = .00, n=44163)
 - the number of felony DNA events pre disposition were fewer than any other type of defendants (signif = .00, n=18243) However there were only 194 felony DNA events; the small number of events affects the statistic.
- Number of bindovers
 - The number of bindovers decreased by 55% between 2005-2009
- Number of “formal” diversions
 - the number of misdemeanor diversions decreased by 60% between 2005-2009
 - the number of felony diversions decreased by 45% between 2005-2009
- Number of hearings post disposition by year
 - the number of misdemeanor events post disposition decreased by half from 2005-2009 (signif = .00, n=22208)
 - the number of felony events post disposition also decreased by half from 2005-2009 (signif = .00, n=10389)

- Number of hearings post disposition by type of defendant
 - the number of misdemeanor DNA events post disposition were fewer than diversion or plea/trial defendants (signif = .00, n=22708) However, there were only 523 felony DNA events.

The data is not without issues that must be kept in mind when reviewing results. The court began “packaging” cases together in 2008. This procedure allows defendants with multiple open cases to have all cases heard at once. Cases were packaged if they were active misdemeanor probation cases, open misdemeanor cases, misdemeanor terminal disposition cases with outstanding sentencing terms (diversion), and open infraction cases. This may or may not have an impact on our data. Any further research should attempt to control for these “packaged” cases. Also the Orange County District Attorney implemented a Felony Strike Team in 2009. This team could have had an impact on the number of bindover cases. Any further research should attempt to control for this issue as well.

Future studies on the DNA efforts of the Orange County District Attorney could include recidivism rates for DNA defendants compared to diversion defendants, the effects of DNA evidence on completion times and/or conviction rates for property offenses, or an extended analysis of type of hearings pre disposition.

The responses to this request are derived from a download from the Case Management System (CMS). In late 2003 data was transferred from the Case Tracking System (CTS) into CMS. The new system is under constant review and enhancements to track case activity from filing to disposition. CMS data is an excellent indicator of case filings, cases reviewed, and cases rejected. However, in some instances subsequent case activity may not be accurately reflected.

The Office the District Attorney of Orange County tracks dispositions by defendants not cases. Therefore, it is possible for different defendants in one case to have different dispositions. Data in this report is extracted from disposition reason codes entered into CMS. The data are subject to data entry and human errors. The Office makes every attempt to correct any identified data errors.