ROY COOPER
ATTORNEY GENERAL

State of North Carolina

Department of Justice
PO Box 629
Raleigh, North Carolina
27602

February 1, 2013

The Honorable Phil Berger
President Pro Tempore
North Carolina Senate
Legislative Building, Room 2007
Raleigh, NC 27601-2808

The Honorable Thom Tillis
Speaker of the House
North Carolina House of Representatives
Legislative Building, Room 2304
Raleigh, NC 27601-1096

Re: Targeting Violent Criminals by Investing in DNA

Dear Senator Berger, Speaker Tillis, and Members of the General Assembly:

Pursuant to applicable law, please find the attached report from the North Carolina Department of Justice on the State Bureau of Investigation's 2012 efforts to meet the growing demands from local law enforcement and prosecutors for DNA analysis.

Thank you for the opportunity to provide this information. We would be happy to respond to any questions you may have regarding this report.

Sincerely,

Kristi Hyman
Chief of Staff

cc: Kristine Leggett, NCGA Fiscal Research Division

North Carolina Department of Justice

Targeting Violent Criminals by Investing in DNA

February 1, 2013

Targeting Violent Criminals by Investing in DNA

While traditional investigations and detective work will always be integral to law enforcement, fighting crime has become increasingly reliant on technological and scientific advancement. DNA may be one of the most important crime fighting tools of modern times. Advances in technology have benefited the criminal justice system in many ways. In countless cases, DNA has identified suspects, convicted the guilty, cleared suspects, and brought closure to victims and victims' families. In other cases, DNA has exonerated the innocent.

Chewing gum, hair and even cigarette butts left at a crime scene can lead detectives to the right suspect thanks to DNA analysis. DNA, or deoxyribonucleic acid, is a unique genetic fingerprint found in every cell of the human body. Just a trace of the criminal's saliva or blood left behind at a crime scene can yield a DNA profile, which can be compared to DNA samples from known criminals, arrestees or other crime scene evidence for a match.

DNA technology is perhaps most promising when used to solve crimes without an apparent suspect. In a rape case, for example, the victim may not be able to identify her attacker. When investigators examine evidence collected from the victim, they are often able to obtain a DNA sample from her attacker. This evidence can then be compared to millions of DNA profiles included in the state and national DNA database, commonly called the CODIS system. If the comparison yields a match to an offender, the rapist can be identified and brought to justice.

Attorney General Roy Cooper has led the push in North Carolina to use DNA technology to solve crimes and bring justice to victims by: 1) expanding the DNA database to include DNA samples from all convicted felons and certain arrestees; 2) ensuring that no-suspect rape kits are quickly screened and analyzed, with any DNA evidence uncovered used to search the DNA database to pinpoint suspects; 3) speeding the review, audit and uploading of convicted offender and arrestee samples into the DNA database; and 4) helping local law enforcement respond to cold case DNA database hits.

The State Bureau of Investigation (SBI) is bringing advanced DNA technology to North Carolina's crime fighters with dramatic results. In 2012, the SBI had a total of 199 DNA database hits. Since criminals, and especially rapists, often strike again, a database "hit" can crack a cold case.

The SBI has made remarkable progress in screening, processing, analyzing and conducting subsequent DNA database comparisons to crime scene evidence. In no-suspect cases, a DNA analyst can compare a DNA profile developed from crime scene evidence to more than 232,000 DNA profiles in the SBI's DNA database to see if there is a match. If a profile match occurs, this is commonly referred to as a "CODIS" hit, meaning a match to the Combined DNA Index System. Once a CODIS hit is made, it must be confirmed according to FBI requirements. This is

accomplished by re-analyzing the original sample that was taken from the convicted offender or arrestee and which is stored at the State Crime Laboratory. The thumbprint taken at that time is also compared to the convicted offender's or arrestee's fingerprints on file in the SBI fingerprint database to confirm that the convicted offender or arrestee was the person giving the DNA sample. After this "in-house" confirmation is complete, a search warrant is written and served on the convicted offender or arrestee to obtain another sample of DNA. This sample is analyzed again to confirm definitively that was the person whose DNA was identified in the original forensic evidence (crime scene evidence).

DNA technology is a remarkable crime fighting tool that can pinpoint or eliminate suspects, help local law enforcement officers take violent criminals off the streets and strengthen public confidence in the criminal justice system. Our dramatic success fosters an increasing demand for DNA services from local law enforcement and prosecutors. We are meeting this challenge head on with conclusive results. On February 1, 2011, law enforcement began collecting DNA from certain arrestees pursuant to the DNA Database Act of 2010.

We must continue to invest in the SBI to meet the growing demands from law enforcement, prosecutors and the criminal justice system for forensic laboratory services.

Summary of the Operations of the DNA Database Unit for 2012

2012 CODIS/Database Statistics

CODIS Hits for 2012: 199

Forensic Samples Uploaded: 195

Convicted Offenders Uploaded: 9,031

Arrestee Samples Uploaded: 3,153

The number of DNA records from arrestee expunged: 582

The number of arrestee expungements completed: 1,152
*(major workload impact associated with this effort)

Of the **1,152** expungements completed in 2012, **582** requests were approved. The expunction process and notification process for all approved and denied expungements were completed within the statutorily required 30 days. Additionally, the database unit has received a number of requests that could not be processed because no sample had been received for the specific arrest.

Numerous DNA samples have been rejected because they do not meet the statutory standards for collection pursuant to N.C.G.S. 15A-266.3A. For example, the Laboratory has rejected samples submitted for accessory after the fact to homicide (G.S. 14-7), assault by strangulation (G.S. 14-32.4(B)), and common law robbery (G.S. 14-87.1- sentencing provision).

2012 DNA Database Expenses (Convicted Offender and Arrestee Samples)

Staff Costs to Process DNA CODIS Samples	**$ 374,888**
Private Laboratory expenses to process DNA CODIS Samples	**$ 751,218**
Other operating expenses (e.g. supplies)	**$ 214,855**
Total 2012 DNA Database Expenses	**$ 1,340,961**

Arrestee Collection Kits

The State Crime Laboratory continues to provide the standardized Arrestee/Offender DNA collection kit which was designed and initially distributed to all law enforcement in 2010. The Laboratory sends collection kits to law enforcement agencies upon request. This kit will continue to be used specifically for the collection of DNA from certain convicted offenders and arrestees.

Expungement Procedure

The State Crime Laboratory continues to follow an FBI approved expungement procedure and expunge qualifying Arrestee DNA profiles upon receipt of the AOC verification form. The expungement procedure outlines how expungements will be completed as directed by G.S. 15A-266.3 (A). If the arrestee qualifies for expungement, the DNA samples will be removed from the SBI DNA Databank and destroyed. Also, the DNA record will be removed from the SBI DNA Database and CODIS. The individual will be notified, by letter, of whether his/her sample qualified for expungement. All expungements completed in 2012 were completed within the statutorily required 30 day time period with notification being sent to the subject and subject's attorney of record (if known/available).

As directed by G.S. 15A-266.5 (d), the Department of Justice (DOJ) and the Administrative Office of the Courts (AOC) have studied options for automating the expunction process.

As of June 1, 2012, G.S. 15A-266.3A (j) directs that defendants will no longer have to request expunction. Instead, prosecutors are directed to initiate the process within thirty (30) days of the occurrence of one of the qualifying events enumerated in the statute. AOC has developed and implemented an automated reporting system to notify the District Attorney (DA) of cases potentially eligible for DNA expunction, from which the DA may verify the cases' eligibility.

Live-Scan

The changes to the state's fingerprinting system to support DNA collection, which are expected to save processing costs and time for the Crime Lab and law enforcement agencies, were completed in 2011.

Installation of DNA updates to live-scans statewide began in December of 2011 coinciding with the DNA Arrestee Training Sessions and the delivery of updated DNA training to law enforcement agencies. All live-scans in North Carolina Law Enforcement Agencies were updated to support DNA collection over the course of the year 2012.

Data Management System-SpecMan

The specimen manager system, SpecMan, was deployed on February 7, 2011 in time to support the receipt of arrestee DNA samples. The system allows the database unit to track all offender and arrestee samples that are received through upload and/or expungement. It contains only identifying information such as name, date of birth, submitting agency, qualifying offense, etc. There are no DNA profiles in this system. Each DNA sample is assigned a unique barcode number which is used by the system for tracking purposes. The system is integrated with Live Scan, AOC, and CCH.

The DNA expunction feature of SpecMan was implemented in May of 2012 to assist in processing and tracking expunction requests upon receipt from the District Attorney's offices. Additional means to increase efficiency and automation are being evaluated to handle the large number of expunction requests received.

In-House Analysis

The Database Unit uses the Qiagen Biorobotic platform on a weekly and monthly basis to analyze the quality control samples for each shipment of database samples outsourced to the vendor laboratory.

Conversion to ISO 17025

The unit spent much of 2012 converting all standard operating procedures to new documents in compliance with ISO 17025. This involved many man hours from both unit Management, Forensic Scientists and Information Processing Technicians with some impact on unit workload.

Personnel

Of the four DNA Forensic Scientist positions and three DNA Information Processing Technician positions allocated due to the enactment of the Arrestee Legislation in 2010, all positions have been filled. The unit is in the process of filling other vacancies. The Laboratory anticipates the need for additional DNA Information Processing Technician positions because of the increasing numbers of expunction requests and the amount of clerical work associated with determining the eligibility of each sample upon submission.

ATTACHMENT I

DNA COLLECTION: HOW IT WORKS

DNA Collection: How it works

DNA collection upon arrest will save lives, prevent violent crime by repeat offenders, save investigative resources, improve ID procedures, reduce misidentification, reduce convictions based on false confessions, and clear hundreds of cold cases.

Nearly half the states have enacted laws requiring collection of DNA upon arrest, as has the U.S. government.

How it works in North Carolina

- During a certain felony arrests, law enforcement will take a DNA sample just as they do fingerprints using a kit provided by the SBI.
- The cheek swab goes to the SBI, which logs the sample and verifies that it was taken properly, and then to a 3rd party laboratory for analysis.
- That analysis is 100% quality assurance reviewed by a qualified SBI forensic analyst prior to entry into the DNA database as per federal requirements.
- The DNA data is uploaded to state and national databases to search for "hits," or matches to cold cases.

Background on SBI lab responsibilities:

The SBI currently uses a 3rd party lab for the analysis of the convicted offender samples and will do so with arrestee samples. The Crime Lab experts expedite analysis of crime scene evidence that may contain DNA that is run against the database of convicted offenders and arrestees so they can identify the perpetrator. SBI currently has contracts with LabCorp, Bode and Orchid Cellmark for the analysis of the convicted offender samples.

SBI staff will receive every sample, enter the arrestee data, verify that the sample was taken from a suspect accused of a qualifying offense, and prepare the sample for shipment to the vendor lab.

Afterward, SBI staff will receive the analysis from vendor lab, conduct 100% quality assurance review of every DNA profile, upload profile into CODIS (DNA database) and respond to DNA database "hits" to cold cases.

The "hits" require working with local law enforcement agency to identify the suspect. Fingerprints sets will be included in the DNA collection kit as a secondary resource to confirm identity.

If a person is permitted by court officials to expunge their DNA profile from the database (due to dismissal or acquittal or other qualifying event), the SBI removes it.

FBI Director's Quality Assurance Standard No. 17 Requires:

8.1.3 - Prior to the upload or search of DNA data, a 100% quality assurance analysis review of a vendor laboratory's DNA data shall be performed by an SBI forensic analyst by the NDIS participating laboratory (SB1 Crime Lab) who is qualified in the technology, platform, and typing amplification test kit used to generate the data and participates in the laboratory's proficiency testing program.

NC Offender Hit to NC Case: How it Works Now

CODIS State Administrator at SBI notifies SBI Database Manager of hit as well as the SBI case analyst. SBI Database Manager starts the offender confirmation process.

- Requests SBI intelligence check — verifies that there is a qualifying offense, verifies that the offender was not incarcerated at the time of the offense, gives information on current location of offender.
- Requests SBI fingerprint verification— SBI Latent Evidence verifies that the fingerprints submitted with the offender sample match those on file for that individual.
- Requests confirmation of offender sample — DNA database analyst pulls the offender sample and re-runs the sample to ensure that the profile matches what was uploaded to the database, data is reviewed.

Once the confirmation process is done, the database analyst notifies the SBI case analyst of the offender's identity. This gives investigators probable cause to obtain a standard (confirmation sample) from the individual.

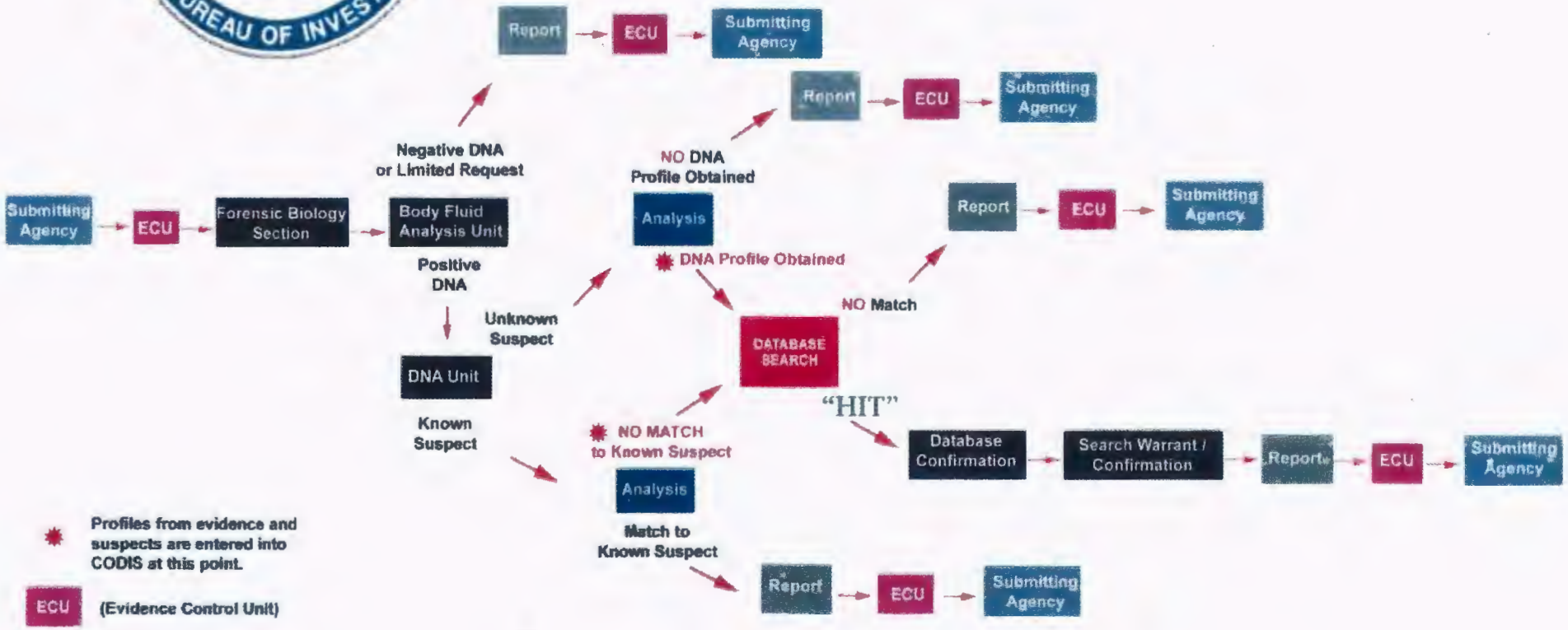
The investigating agency obtains a search warrant, often with SBI assistance, and obtains a DNA standard from the suspect which is then submitted to the SBI case analyst.

The SBI case analyst generates the profile for the DNA standard and compares this to the original crime scene evidence that was uploaded to CODIS. A SRI report is generated as to this match.

ATTACHMENT II

DNA FLOW CHART

SBI Crime Laboratory
Forensic Biology Flow Chart



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