

SB

99

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FILE

FISCAL NOTE

STATE OF ALASKA
2001 LEGISLATIVE SESSION

Fiscal Note Number: 2
Bill Version: SB 99
(S) Publish Date: 3/1/01

Revision Date/Time (Note if correction): _____ Dept. Affected: Dept. of Public Safety
Title: An Act relating to the DNA identification registration system BRU: AST-Detachments
Sponsor: Senator Halford Component: AST-Detachments
Requester: Senate Judiciary Committee Component Number: 2325

Expenditures/Revenues (Thousands of Dollars)

Note: Amounts do not include inflation unless otherwise noted below.

OPERATING EXPENDITURES	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007
Personal Services						
Travel						
Contractual						
Supplies						
Equipment						
Land & Structures						
Grants & Claims						
Miscellaneous						
TOTAL OPERATING	0.0	0.0	0.0	0.0	0.0	0.0

CAPITAL EXPENDITURES						
CHANGE IN REVENUES ()	0.0	0.0	0.0	0.0	0.0	0.0

FUND SOURCE	(Thousands of Dollars)					
1002 Federal Receipts						
1003 GF Match						
1004 GF						
1005 GF/Program Receipts						
1037 GF/Mental Health						
Other (Specify Type)						
TOTAL	0.0	0.0	0.0	0.0	0.0	0.0

Estimate of any current year (FY2001) cost: 0.0

Check this box (X) if funding for this bill is included in the Governor's FY 2002 budget proposal:

POSITIONS

Full-time						
Part-time						
Temporary						

ANALYSIS: *(Attach a separate page if necessary)*

This bill is not expected to have a fiscal impact.

Prepared by: Lt. Steve Dunnagan Phone (907)269-4532
Division: Alaska State Troopers Date/Time 2/26/01 12:00 AM
Approved by: Commissioner Glenn G. Godfrey Date 2/26/01
Agency: Department of Public Safety

For distribution information, call the Governor's Legislative Office

FISCAL NOTE

**STATE OF ALASKA
2001 LEGISLATIVE SESSION**

Fiscal Note Number: 3
 Bill Version: SB 99
 (S) Publish Date: 3/14/01

Revision Date/Time (Note if correction): 3/9/01 Dept. Affected: Administration
 Title: "An Act relating to the DNA identification registration system." BRU: Legal and Advocacy
 Sponsor: Senator Halford Component: Public Defender
 Requester: (S) Judiciary Component Number: 1631

Expenditures/Revenues (Thousands of Dollars)

Note: Amounts do not include inflation unless otherwise noted below.

OPERATING EXPENDITURES	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007
Personal Services	**	**	**	**	**	**
Travel						
Contractual						
Supplies						
Equipment						
Land & Structures						
Grants & Claims						
Miscellaneous						
TOTAL OPERATING	**	**	**	**	**	**

CAPITAL EXPENDITURES	**	**	**	**	**	**
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CHANGE IN REVENUES ()	**	**	**	**	**	**
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FUND SOURCE (Thousands of Dollars)

1002 Federal Receipts	**	**	**	**	**	**
1003 GF Match						
1004 GF						
1005 GF/Program Receipts						
1037 GF/Mental Health						
Other (Specify Type)						
TOTAL	**	**	**	**	**	**

Estimate of any current year (FY2001) cost: 0.0

POSITIONS

Full-time						
Part-time						
Temporary						

ANALYSIS: *(Attach a separate page if necessary)*
 See attached sheet.

Prepared by: Barbara Brink, Director Phone (907) 334-4414
 Division: Public Defender Agency Date/Time 03/09/01
 Approved by: Jim Duncan, Commissioner Date 3/9/01
 Agency: Department of Administration

For distribution information, call the Governor's Legislative Office

This bill adds burglary or a felony attempt to commit burglary to the list of crimes for which, after conviction, a defendant can be required to give a DNA sample. This bill will most likely have fiscal impact on the Public Defender Agency. Failing to comply with a valid request to provide a DNA sample is already a Class A misdemeanor. See A.S. 11.56.760. The Agency is likely to be appointed to represent people accused of this crime.

Currently the Public Defender Agency has few of these cases. If the sampling program becomes more widespread with the inclusion of additional crimes and more samples being requested, more refusals will undoubtedly be prosecuted. In that case there could be a significant fiscal impact on the Public Defender Agency. Over 680 people were arrested for burglary in Alaska in 1999 (Crime Reported in Alaska, 1999, Department of Public Safety).



ALASKA STATE LEGISLATURE

Senator Rick Halford

President of the Senate

While in Session:
State Capitol
Juneau, AK 99801-1182
907-465-4958

While in Interim:
P.O. Box 670192
Chugiak, AK 99567
907-694-4958

Sponsor Statement Senate Bill 99

"An Act relating to the DNA identification registration system."

In 1995, Alaska passed House Bill 27, establishing a DNA database as a tool to help the law enforcement community identify perpetrators of violent crimes, especially sexual offenders. Senate Bill 99 will expand the database to include samples from convicted burglars.

DNA evidence has proven to be very effective for identifying, capturing and convicting repeat criminals. All 50 states have laws requiring DNA testing of convicted sex offenders, and sharing information with other states has helped Alaska make convictions on cases that have not been solved for years.

Alaska's current statute requires testing of anyone convicted of a felony against a person. During debate on the original legislation, there was discussion of including burglary. At the time, there were no definitive studies showing a connection between burglary and consequent violent offenses, so House Bill 27 did not require testing for burglars.

As the databases expanded, statistics have shown there is a relationship between burglary and violent crimes. A recent Florida study shows that 52% of murderers and sex offenders had a previous burglary conviction. In Virginia, the first state to establish a DNA database, their experience has shown that more than half of the DNA matches from crime scenes of rapes and murders are from samples of convicted burglars. At this time, 25 states include convicted burglars in their DNA registries.

By testing convicted burglars, we will allow law enforcement officials to stop a violent criminal the first time, before other innocent people are victimized. I appreciate your support of this legislation.

**ALASKA NETWORK ON
DOMESTIC VIOLENCE AND SEXUAL ASSAULT**

130 Seward, Rm 209
Juneau, Alaska 99801

(907) 586-3650 ph
(907) 463-4493 fx

To: Senator Halford
From: Lauree Hugonin *LH*
Date: 3/20/01
Re: Support for SB99

The Alaska Network on Domestic Violence and Sexual Assault (Network) is the statewide coalition of community domestic violence and sexual assault intervention programs for Alaska. Twenty full member and five supporting member programs provide shelter, advocacy, crisis intervention, and, information and referral services to victims seeking assistance in ending the violence being perpetrated against them. The Network works to promote institutional and systemic change necessary to end violence against women.

The Network supports the passage of SB99. SB99 will allow the department of public safety to collect for inclusion into the DNA registration system a blood sample, oral sample, or both from a person convicted of burglary or a felony attempt to commit burglary. Studies conducted in the lower 48 have shown that a high percentage of people who commit burglaries also commit sexual assault.

On a per capita basis, Alaska continually ranks in the top three of the nation with the highest rate of sexual assault. Entering DNA into the database from people who are *convicted* of burglaries when the correlation to sexual assault is strong makes sense. The database affords law enforcement the opportunity to quickly identify a suspect as well as to quickly drop someone from the list of suspects if the dna does not match samples in the database. This tool will hopefully assist in the successful resolution of many of the sexual assault cases in the state.

STATE OF ALASKA

DEPARTMENT OF PUBLIC SAFETY

OFFICE OF THE COMMISSIONER

TONY KNOWLES, GOVERNOR

P.O. BOX 111200
JUNEAU, ALASKA 99811-1200
PHONE: (907) 465-4322
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March 19, 2001

The Honorable Rick Halford
President, Alaska State Senate
State Capitol, Room 111
Juneau, AK 99801-1182

Dear President Halford:

This letter is in response to questions I received from your office concerning the state's DNA registration system and the national Combined DNA Index System (CODIS).

Question #1: How are samples collected

Current law (AS 44.41.035) directs the Department of Public Safety to establish a DNA identification registration system consisting of blood or oral samples drawn from individuals convicted of certain specified crimes. For the past several years the Department of Public Safety has been exclusively collecting oral samples. These samples are being collected by correctional, probation, parole or peace officers and submitted to the State Crime Laboratory. The Laboratory assigns a unique identifying number to the sample and records sample information. The identity of the person from whom the sample was collected is also verified by comparing the thumbprint included in the collection kit to fingerprint records maintained by the State.

DNA profiles are generated and entered into the Combined DNA Index System (CODIS) and the National DNA Index (NDIS) for law enforcement purposes established by the FBI under the authority of the federal DNA Identification Act of 1994. This National DNA Index System became operational in 1998.

Question #2: Describe how samples are "typed" and placed into the computer; note the 13 point match

Information entered into CODIS is limited to the unique sample number assigned by the Laboratory and the DNA profile consisting of a series of numbers for the 13 DNA markers required for entry into CODIS. The name of the individual from whom the sample was collected is not entered into CODIS.

Markers are basically different locations (loci) on the DNA molecule, which have a high degree of variability among humans. There are many markers that could be used to identify a person. Law enforcement has standardized on the "13 markers." This way laboratories can compare information.

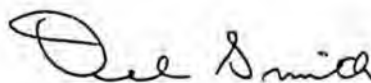
President Halford
March 19, 2001
Page 3

Question #4: How are samples stored

DNA samples from convicted offenders are stored in a secure laboratory freezer, sealed in envelopes with tamper-proof tape, under the control of the State Crime Laboratory's evidence section.

Please do not hesitate to call if you, or your staff, have any additional questions.

Sincerely,

A handwritten signature in cursive script, appearing to read "Glenn G. Godfrey".

Glenn G. Godfrey
Commissioner

**STATE DNA DATABASE LAWS
QUALIFYING OFFENSES**

<i>State</i>	<i>Sex Offenses</i>	<i>Offenses Against Children</i>	<i>Murder</i>	<i>Assault & Battery</i>	<i>Robbery</i>	<i>Kidnapping</i>	<i>Burglary</i>	<i>Attempts</i>	<i>Juveniles</i>	<i>All Felonies</i>
ALABAMA	✓	✓	✓	✓	✓	✓	✓	✓		✓
ALASKA	✓	✓	✓	✓	✓	✓		✓	✓	
ARIZONA	✓	✓	✓	✓	✓		✓	✓	✓	
ARKANSAS	✓	✓	✓	✓	✓	✓	✓		✓	
CALIFORNIA	✓	✓	✓	✓		✓		✓	✓	
COLORADO	✓	✓	✓	✓	✓	✓	✓		✓	
CONNECTICUT	✓	✓				✓				
DELAWARE	✓	✓						✓		
FLORIDA	✓		✓	✓	✓		✓	✓	✓	
GEORGIA	✓	✓	✓	✓	✓	✓	✓	✓		✓
HAWAII	✓	✓	✓							
IDAHO	✓	✓	✓	✓	✓			✓	✓	
ILLINOIS	✓	✓	✓		✓	✓	✓	✓	✓	
INDIANA	✓	✓	✓	✓	✓	✓	✓			
IOWA	✓		✓	✓		✓	✓			
KANSAS	✓	✓	✓					✓	✓	
KENTUCKY	✓									
LOUISIANA	✓	✓	✓	✓		✓		✓	✓	
MAINE	✓	✓	✓	✓	✓	✓	✓	✓	✓	
MARYLAND	✓		✓	✓	✓					
MASSACHUSETTS	✓	✓	✓	✓	✓	✓	✓			

<i>State</i>	<i>Sex Offenses</i>	<i>Offenses Against Children</i>	<i>Murder</i>	<i>Assault & Battery</i>	<i>Robbery</i>	<i>Kidnapping</i>	<i>Burglary</i>	<i>Attempts</i>	<i>Juveniles</i>	<i>All Felonies</i>
MICHIGAN	✓		✓			✓				
MINNESOTA	✓		✓	✓	✓	✓	✓	✓	✓	
MISSISSIPPI	✓	✓								
MISSOURI	✓	✓	✓	✓		✓				
MONTANA	✓	✓	✓	✓	✓	✓		✓	✓	
NEBRASKA	✓	✓	✓							
NEVADA	✓	✓	✓	✓			✓	✓		
NEW HAMPSHIRE	✓								✓	
NEW JERSEY	✓	✓	✓	✓		✓		✓	✓	
NEW MEXICO	✓	✓	✓	✓	✓	✓	✓		✓	✓
NEW YORK	✓		✓	✓	✓	✓	✓			
NORTH CAROLINA	✓		✓	✓	✓	✓				
NORTH DAKOTA	✓	✓						✓		
OHIO	✓	✓	✓			✓		✓	✓	
OKLAHOMA	✓	✓	✓	✓						
OREGON	✓	✓	✓				✓	✓	✓	
PENNSYLVANIA	✓	✓	✓					✓	✓	
RHODE ISLAND	✓	✓	✓							
SOUTH CAROLINA	✓	✓	✓	✓	✓	✓	✓		✓	
SOUTH DAKOTA	✓	✓	✓	✓	✓	✓	✓	✓		
TENNESSEE	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
TEXAS	✓	✓	✓	✓			✓		✓	
UTAH	✓	✓	✓	✓		✓				

<i>State</i>	<i>Sex Offenses</i>	<i>Offenses Against Children</i>	<i>Murder</i>	<i>Assault & Battery</i>	<i>Robbery</i>	<i>Kidnapping</i>	<i>Burglary</i>	<i>Attempts</i>	<i>Juveniles</i>	<i>All Felonies</i>
VERMONT	✓	✓	✓	✓	✓	✓	✓	✓		
VIRGINIA	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
WASHINGTON	✓	✓	✓	✓	✓	✓		✓	✓	
WEST VIRGINIA	✓	✓	✓	✓	✓	✓	✓			
WISCONSIN	✓	✓	✓	✓	✓	✓	✓			✓
WYOMING	✓	✓	✓	✓	✓	✓	✓	✓		✓
TOTALS	50	41	44	35	27	32	25	26	24	7

Va. Man Receives Life Sentence for '92 Slaying

Va. DNA Database Led Police to Suspect Eight Years After Shopkeeper's Death

By Tom Jackman
Washington Post Staff Writer
Tuesday, April 3, 2001; Page B02

A Leesburg man who repeatedly stabbed a popular Old Town Alexandria shopkeeper to death in 1992, but wasn't arrested until eight years later, was sentenced in Fairfax County Circuit Court yesterday to life in prison.

Mack Reaves III, 31, apologized to the family of Marilyn M. Bandera, who was killed in her Belle Haven home March 18, 1992. Reaves wept as he spoke, much as he did last summer in his taped confession to Fairfax detectives. Reaves's attorneys played the tape for Circuit Court Judge Jane Marum Roush yesterday to show that their client was remorseful.

Prosecutors charged Reaves with capital murder and planned to seek the death penalty. But Bandera's family told Commonwealth's Attorney Robert F. Horan Jr. that they did not support capital punishment; so when Reaves offered in February to plead guilty to capital murder in exchange for an agreement by Horan not to seek death, Horan consented.

All that was left yesterday, then, was for defense attorneys to try to persuade Roush to suspend some time from the life sentence required by law. Several of Reaves's relatives and friends testified on his behalf, saying that his parents were alcoholics who fought violently and abandoned Reaves and his brother, Vance, when both were younger than 10.

The brothers slept in the bed of a pickup truck for more than two years because going inside their empty Southeast Washington apartment was spooky, Vance Reaves said yesterday.

Bandera, a mother of three, owned Canvas Cutters, two canvas goods stores in Old Town Alexandria. Friends described her as vivacious and outgoing, devoted to her children, and a frequent volunteer for the Salvation Army and the elderly. Horan called her "a warm human being who was the light of many lives."

On the day of the murder, Bandera apparently went home for lunch. Her husband, John, found her body in the foyer about 1:30 p.m., when he stopped at home on his way to the dentist. Court records indicate that Bandera, 45, was stabbed more than 150 times.

For years, detectives had no leads. But they did have traces of someone's blood, apparently from a fierce struggle between Bandera and her killer.

In 1996, Reaves pleaded guilty to robbing a gas station. His blood was taken for entry into the state DNA databank but, because of a backlog, probably wasn't entered immediately.

Fairfax homicide detectives periodically resubmitted their unknown blood sample, and last summer got a match with Reaves's DNA.

By then, Reaves was out of prison. Detectives picked him up, and he confessed. He said he had been walking through Belle Haven that day in 1992, knocking on doors looking for work. When he reached Bandera's house, he said, he forced his way in, intending to rob her. "I just lost it," he said.

At yesterday's sentencing, Horan criticized "the usual litany of sociological excuses for violent behavior. It's what I call the 'Blame It on the Bad Upbringing School.' . . . He made the choices that got him here."

In a letter to the judge, John Bandera wrote: "Anyone capable of doing what he has done should never be free to prey on innocent people." Bandera declined to comment after the hearing.

Roush did not suspend any of Reaves's sentence, and he imposed 10 years for attempted robbery. Reaves will be eligible for parole in 25 years, Horan said, because the crime occurred before Virginia abolished parole.

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BOB EDWARDS, host:

This is MORNING EDITION from NPR News. I'm Bob Edwards.

DNA is best known for proving the innocence of people who have been wrongly convicted and getting them out of prison. A quieter, more profound revolution is happening at the crime scene, where investigators are gathering evidence in developing their suspects. Virginia leads the nation with 140,000 criminal profiles in its DNA data bank. NPR's Barbara Bradley reports.

BARBARA BRADLEY reporting:

It was her first night back in Charlottesville. The senior at the University of Virginia, who asked not to be identified, fell asleep, but was awakened by someone moving around in her room. She reached out and felt the barrel of a gun. 'Where is your wallet?' the man said.

Unidentified Woman #1: I was so flustered at that point, I had no idea where I'd put my wallet. I was like, 'It's either on the floor of my bedroom or in my car.' And he said, 'Well, how much do you have in it?' and I said, 'I only have \$5.' And he said, 'Well, that's not enough. You're going to pay.'

BRADLEY: That was when he raped her. He made her take a shower and walked her down to the kitchen, where he drank a beer. All the time, she was blindfolded.

Unidentified Woman #1: I saw an outline of him. Like I could tell that he was about 5'10", fat, African-American, male, you know, mid-20s. That's about all I could tell. And so I could have never picked him out of a lineup, ever.

BRADLEY: Charlottesville police developed a list of about 40 suspects, but quickly ruled them out. A few weeks later, Lieutenant Chip Harding, who is the chief of investigations, got a phone call from the Virginia Department of Forensic Science. They were testing semen from the girl's sheets and saliva from the beer can. The DNA profile matched one in the state data bank.

Lieutenant CHIP HARDING (Charlottesville Police Department): And I can remember getting the call from forensic scientists in Richmond and--it's emotional now, even talking about. But dropping the phone and just jumping up and down and going, 'Oh, my God, I can't believe this. We know who did this to her.'

BRADLEY: It turned out that the man had a criminal record, not for sexual assault, but for gang-related violence. But since Virginia takes DNA samples from every convicted felon, his name and Social Security number popped up. The man was convicted. This kind of result has radically changed the way police work in Charlottesville, Virginia. Sergeant Ralph Barfield(ph), who heads up forensic investigations, is almost breathless with examples. The rapist who blew out a candle before attacking his victim. The candle had his saliva. The burglar who wore a pair of socks on his hands, left no fingerprints, but the discarded socks contained his skin cells. They found a bank robber who dropped his ski mask, and identified a murderer from the sweat in his baseball cap. Barfield says it's nothing like the old days.

Sergeant RALPH BARFIELD: You know, you had to have a half-dollar size amount of blood just to get a blood type. Now--oh, it's so nice now. Now I don't have to have blood at all. You know, you drink from your coffee cup. I know how to handle your coffee cup, I got your DNA. You and I shake hands, I know how to handle it. I've got your DNA. As long as I know how to do my part, collecting and the packaging and storing and transporting to prevent the cross-contamination, I got you. I got you.

BRADLEY: Barfield says another beauty of DNA is that it never grows old. In that sense, he says, it's a better witness than people, whose memories fade over time.

(Soundbite of alarm sounding; door opening)

Sgt. BARFIELD: This one is referred to as the archive room, and the only thing that goes into this room are cases on appeal, unsolved cases.

BRADLEY: The room is the size of a garage and stacked to the ceiling with evidence kits from unsolved murders and rapes, five, 10, 15 years old. Barfield points to a rape kit.

Sgt. BARFIELD: Sooner or later with the data bank, his blood's going to show up in that data bank, and we'll come back for him.

BRADLEY: Virginia has, by far, the largest data bank of all the states, and no it's paying off not just in solving crimes, but in preventing them. The reason is the link between property crimes and rape.

Unidentified Woman #2: Negative 131. I need you to start towards 810 Harris Street, southern State, for a phone-in alarm showing general burglar. I'll get you another unit as soon as one clears.

BRADLEY: It's only breaking and entering, but Barfield sends a forensic detective to the crime scene anyway.

(Soundbite of briefcase being opened)

BRADLEY: The trailer home door has been kicked in. The DVD is missing. There's no broken glass, no blood, no fingerprints, no DNA. But Barfield says they always send a forensic detective, because if the burglar had left his DNA, he could easily show up as a rapist.

Sgt. BARFIELD: Another thing we've learned is that guys that start out doing burglary, they're just a thief, they're just breaking into your house to steal your stereo, but lo and behold, your wife, your daughter, your girlfriend happens to be there and they stumble into them and it becomes a crime of opportunity and they go, 'Oh, well.' What we've found is so many of the burglars are going from burglary, they move up to rape.

BRADLEY: Paul Ferrara says that's borne out by statistics. Ferrara is the director of Virginia's Department of Forensic Science and the man credited with putting Virginia on a scientific fast track. Ferrara says more than half the rapists they have caught were already in the data bank, not for sexual assault, but for burglary. He says that's why Virginia takes the DNA of all felons. If you don't, he says, you give someone a free rape. But Ferrara says there's a problem. Most states are just beginning to create their own data bank, so all a felon has to do to elude detection is leave Virginia.

Mr. PAUL FERRARA (Director, Virginia Department of Forensic Science): Somebody who finds themselves in our DNA data bank may be well inclined to take his criminal activities to some other state, thinking that, 'Well, I've got to get out of Virginia because, you know, I'm forever in that data bank, and I move or do anything and I'm going to get nailed. So I'll go to a neighboring state or I'll go out on the West Coast.'

BRADLEY: Several states have no data bank at all; many are just getting going. Christopher Asplin, who heads a national commission on the future of DNA, says there are more than a million violent offenders who should be in a DNA data bank, but aren't because of cost.

Mr. CHRISTOPHER ASPLIN: One example is we know that we have in excess of 180,000 rape kits across the country which should be DNA tested, and those profiles should be put in the database but have not. Essentially what you have is a very powerful technology, a very powerful database that just doesn't have enough data in it.

BRADLEY: Congress passed a bill to give states \$170 million, but that money wasn't included in the budget, so Virginia is forging ahead on its own.

Ms. LISA SHERMYER (Virginia Department of Forensic Science): What you're seeing right now is you're seeing laboratory tables where the examiners are working. They're looking at evidence from criminal cases, looking for things like blood.

BRADLEY: Lisa Shermeyer(ph), at the Virginia Department of Forensic Science, shows off a roomy, new laboratory. She says just getting a useable sample can take a month. It's then mathematically translated into what looks like a bar code and entered into the data bank.

Ms. SHERMYER: When you find that needle in a haystack, it's a good day. It's an even better day when that needle hits on a convicted felon in the data bank. You're suddenly the one providing investigative information to the police, and that's a really good feeling.

BRADLEY: The computer searches two sets of data banks. One has the DNA of all convicted felons in Virginia. The other includes DNA from all unsolved crimes. Just before 4 PM, Shelly Smith(ph) positions herself in front of the computer.

Ms. SHELLY SMITH: When I received the case, the information that I received was that the victim had been drugged by an unknown individual and then raped.

BRADLEY: There's no suspect in the case, since the woman never saw the perpetrator, and so the data bank is, for now, their only hope.

(Soundbite of typing)

Ms. SMITH: What is going on?

BRADLEY: Smith enters the information. We wait for several long seconds. I ask how long this generally takes.

Ms. SMITH: It's going to take a while.

Unidentified Woman #3: Generally...

Ms. SMITH: Oh, my. I got a hit.

BRADLEY: The DNA matches the profile of a convicted felon. It will be double-checked before Smith calls up the detective who submitted the DNA. This is really only the beginning of the case. Police have to track down the man and build a case against him. But all in all, a one-in-a-billion match is a pretty good place to start. Barbara Bradley, NPR News, Charlottesville, Virginia.

EDWARDS: The time is 19 minutes past the hour.

In the next half-hour of MORNING EDITION, Ossie Davis and Ruby Dee on their partnership on and off stage.

Mr. OSSIE DAVIS: We were one of the lucky ones where the thing that brought us together kept us together--the profession, being actors.

BOB EDWARDS, host:

In Hawaii, cross-examination is under way in a Navy court of inquiry into last month's deadly submarine crash. Lawyers for the officers involved are trying to poke holes in the Navy's investigation. That investigation, which was completed in only a few days, led to the court of inquiry now under way in Pearl Harbor. The accident happened when the USS Greeneville struck a Japanese fishing boat while surfacing, killing nine people. NPR's Andy Bowers reports the sub's commander and his second in command are questioning the evidence against them.

DNA Typing in Action: Databasing in the Commonwealth of Virginia

Editor's Note: To highlight progress in implementation of STR typing and DNA databasing, Profiles in DNA introduces a new feature spotlighting work by various states in the U.S.A. and other countries to solve and prosecute crimes through DNA typing. In this issue, we focus on the tremendous success that the Commonwealth of Virginia has achieved not only in the size of their growing database but also in terms of solving several violent crimes and preventing others through "hits" in that state's DNA database.

In 1989 the Commonwealth of Virginia was the first state in the U.S. to pass a DNA databasing law, which required only certain sex and violent offenders to provide samples for inclusion in a DNA databank. In 1990, the law was expanded to include all felons. However, at that time, funding was granted only to type the samples that fell under the original 1989 statute. Six years later the law was expanded to include juveniles over the age of 14 who were found guilty of any crime that would constitute a felony if that crime were committed by an adult. DNA typing is performed by the Virginia Division of Forensic Science (DFS), which is a nationally accredited forensic laboratory system serving all state and local law enforcement agencies, medical examiners and Commonwealth's Attorneys in Virginia but is not part of any law enforcement agency. To get an inside perspective on the success of Virginia's program, we spoke to three key figures in this state's database implementation: Paul Ferrara, Director of the Virginia DFS; Jeffrey Ban, Forensic Biology Section Chief; and Kevin McElfresh, Vice President of Operations, The Bode Technology Group. Below are excerpts from our conversations with these men.

PAUL FERRARA, DIRECTOR, VIRGINIA DIVISION OF FORENSIC SCIENCE

Paul Ferrara joined the DFS 28 years ago and has been the Director since 1985. Under his leadership, the DNA typing and databasing program in the Commonwealth of Virginia has grown to become the largest database in the U.S.

Could you provide some history of DNA typing in Virginia?

Dr. Ferrara: The Commonwealth of Virginia was the first state to pass a



Figure 1. The new Central Laboratory of the Virginia Division of Forensic Science is located in downtown Richmond, Virginia.

The Commonwealth of Virginia was the first state to pass a DNA databasing law in 1989 because Virginia's General Assembly recognized that DNA databasing would be a powerful technology for prosecutors and a tremendous investigative tool.

DNA databasing law in 1989 because Virginia's General Assembly recognized that DNA databasing would be a powerful technology for prosecutors and a tremendous investigative tool. One year later (in 1990) they expanded the law, and sample collection began in earnest.

In a landmark case, DNA testing led to the conviction of Timothy Spencer for raping and murdering four women during a 10-week period in 1987. The Spencer case is notable for a number of reasons. Spencer was the first criminal convicted of capital murder on the basis of DNA evidence. Prior to committing these rapes and murders, Spencer had been convicted of an earlier burglary charge. Had he been in the database from his burglary charge, he would have been identified after the first rape and murder. Thus, his additional crimes would have been prevented. The case graphically demonstrated the efficacy of DNA typing technology. Further, the case established part of the rationale for the General Assembly to pass a resolution requesting that the Virginia State Crime Commission perform a study to determine whether expansion of the database to include other convicted felons (e.g., burglars) would be a worthwhile effort. Based on the report of the Commission, the statute was expanded to include all felons in the database.

In the early years of the database--from 1989 to July 1998--the database consisted of restriction fragment length polymorphism (RFLP) profiles. The first success of the database came in August 1993 with less than 1,000 profiles in the database. A "cold hit" (i.e., when there is no suspect for a crime, but DNA from biological material taken from the crime scene matches that of a convicted felon in the database) was identified as a known sex offender. This case was the first demonstration of the power of felon databases when there is no suspect known for a given crime.

While that early database topped out with less than 15,000 profiles and 31 cold hits made, more than 180,000 samples were collected over that 9-year period. In July 1998 funding was granted for using STR typing for all of the samples to be entered into the database. A contract was arranged with The Bode Technology Group to work on the large number of samples waiting to be included in the database. From July 1998 to the present, DNA typing using the *GenePrint*[®] PowerPlex[™] 1.1 System has been performed for all samples in the database.

How successful has Virginia's database been?

Dr. Ferrara: The DNA typing and databasing program in Virginia has been extremely successful. What is truly remarkable is how much was accomplished in the first six months that STR typing was performed. In the time from July 1998 to the end of the year, 30,000 profiles had been generated, and there are over 55,000 profiles at present. In the first four months of 1999, there have been 2 hits in January, 3 in February and 7 each in both March and April. The contractor, The Bode Technology Group, is adding to the database at a rate of approximately 8,000 per month. A best guess, based upon the current rate of expansion of the database and hits generated, is that there may be as many as 100 hits on the database in 1999. The implementation of the database provides tremendous savings in terms of police investigative time and prevention of future crimes. The savings in terms of lives and investigative time are inestimable.

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Have you been surprised by the results with Virginia's database?

Dr. Ferrara: In terms of the number of hits on the database, we are not surprised. The number of hits is strictly a function of the size of the database. What has been fascinating and somewhat remarkable is that greater than sixty percent of the hits from violent offender cases match database samples from convicted burglars--not violent offenders. This points to the fact that many violent offenders have been guilty of earlier nonviolent property crimes. Thus, a database that does not include property crime offenders limits its overall efficacy.

To what do you attribute the success of the database?

Dr. Ferrara: Clearly, the success of the database rests on two factors: first, the size of the convicted felon database, and second, concentration on DNA typing of crime scene material from cases where there is no suspect. Although there is a tendency to focus on cases where there are suspects going to trial, we must run biological samples from cold crime scenes. It's a problematic situation. The database has grown, but we must redouble our efforts to run crime scene samples soon after a crime has been committed.

There is a serious problem we must address. The demand for DNA testing is outstripping the ability of the laboratory to perform the tests. With approximately 200 cases received every month, the backlog increases. While the crime rate may be constant or decreasing, the number of samples to be analyzed is increasing.

What explains this increase in the number of samples?

Dr. Ferrara: Cases are much more complex today than ever before. Because the STR technology is so sensitive, we are able to perform testing on a much greater number of samples that the earlier technology could not handle. With STR analysis, a case examiner usually needs to process about ten, and sometimes as many as 20-50, samples per case.

How and when will the capabilities of laboratories in the U.S. meet the

demand for DNA testing?

Dr. Ferrara: There might be as many as 100,000 unworked crime scene cases in labs throughout the country, and at least that many more coming. We face some significant challenges. On a national level, I see 1) states expanding their statutes and 2) a lot of new construction of laboratories. We need to:

- Move forensic laboratories out of the basements of police departments and build laboratories designed for this work.
- Train people. Over the next five years, we need to triple the number of DNA examiners available and increase the size of the database ten-fold.
- Remain focused on the 13 core loci, but streamline the technology to increase throughput.

**JEFFREY BAN, FORENSIC BIOLOGY SECTION CHIEF,
VIRGINIA DIVISION OF FORENSIC SCIENCE**

Jeffrey Ban is the technical leader of the Forensic Biology Section for the Virginia Division of Forensic Science. He oversees all technical aspects of the section including research and development, implementation of new technologies, creating population databases, troubleshooting problems in the laboratory, implementing programs in casework and working with case examiners, the databank supervisor and The Bode Technology Group. In addition, he performs regular casework. Mr. Ban started at the Virginia DFS as the databank supervisor after working as a forensic scientist in Florida and a visiting scientist at the FBI.

How is the Virginia crime laboratory system organized?

Mr. Ban: The Virginia DFS DNA laboratory system has a Central laboratory in Richmond (shown in Figure 1), and three other regional laboratories: Northern (Northern Virginia), Tidewater (Southeastern Virginia) and Western (Western Virginia) (see Figure 2). The current forensic biology staff is 36 full-time employees. Eighteen of these full-time scientists, along with six part-time employees, work in the Central laboratory. Twelve of the full-time employees are casework examiners and testify in court to their findings in cases. The remaining three full-time and six part-time employees work on the databank. The part-time staff receives samples, categorizes them and prepares samples for testing. All data generated from each sample are entered into the national Combined DNA Index System (CODIS).

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Dogged detective work, DNA crack 5-year-old killing

By Sheila Toomey
Daily News Reporter

(Published October 31, 2000)

They found her body on a Sunday morning five years ago, wearing a purple tank top and silver necklace, dumped at the edge of Ship Creek where it runs through the warehouse district near Yakutat Street.

They identified her from her tattoos and her jail record: Doris Ann Hainta, 34, a longtime street hooker carrying a double load of drug and alcohol addiction. Everybody called her Sunny, but someone strangled her.

Homicide investigators worked the slim leads they had as hard as they could. A witness saw a blue van backing to the edge of the creek and a man dumping something there. Police took plaster casts of tire tracks and crawled around on their hands and knees taking paint scrapings from a post and trying to pick a bit of evidence from the muddy ground.

They spent weeks talking to prostitutes and their customers, checking alibis and stopping blue vans. After a while, the investigation lagged. She was probably killed by someone who bought her services, police figured, someone with no other connection to her, the toughest kind of homicide to solve.

But Anchorage police had an ace up their sleeve. Hainta had been raped or had consensual sex shortly before she died, so if the police ever identified a suspect, they had a DNA sample.

Last month, technicians at the state crime lab matched the DNA to a man in North Carolina. And on Monday the Anchorage district attorney charged Eugene Poirier, 33, with first-degree murder. An arrest warrant with bail set at \$1 million will be faxed south and served on Poirier at the Nash Correctional Facility, where he is doing 22 years for a murder he committed after leaving Alaska.

Assistant District Attorney Adrienne Bachman said Alaska will seek to extradite Poirier and will try him for Hainta's death. Charging documents filed Monday say he has confessed to strangling her in the back of a blue van he used in his carpet business.

If Poirier is convicted here, he will be returned to North Carolina to serve out his sentence there then returned to do his Alaska time, Bachman said.

In Oklahoma, where Hainta was born, her sister Emma Hainta was surprised to hear that anyone in



Anchorage police detective Scott Jessen traveled to North Carolina to confront Eugene Poirier with evidence against him in the killing of Doris Ann Hainta. Poirier eventually admitted strangling Hainta. (Jim Lavrakas / Anchorage Daily News)

Anchorage still cared about solving her sister's slaying and was pleased someone's been charged in Sunny's death.

The family often tried to talk Sunny into coming home. She became a prostitute in her teens and seemed unable to get out of the life, Emma Hainta said. She came to Alaska in the mid-1980s to start a new life. But it didn't work.

"She had no confidence," Hainta said. "She didn't have the drive to do anything different."

The family, which includes an ex-police chief, didn't approve of her life but they loved and accepted her, Hainta said.

"I always thought it would be AIDS that would get her. I was prepared for that. I knew one day she would be knocking at my door."

The Hainta case, old and cold, was solved because police officers stationed at opposite sides of the continent made an extra effort and because in March the Alaska State Scientific Crime Detection Laboratory began using DNA technology capable of making positive identifications.

The first break was a 1998 computer message from Det. Sgt. Julie Gibson of the Iredell County sheriff's office, a blind query to police departments in cities where Poirier had lived before he showed up in North Carolina in 1997. A 16-year-old girl, Christy Rambo, a neighbor of Poirier and his wife, had been strangled in August of that year, her body dumped by the side of a country road about five miles from the trailer park where she and Poirier both lived. She'd been doused with gasoline and set on fire.

Poirier was one of several suspects. Could Anchorage police check him out? Gibson asked.

Poirier's name had not surfaced in the Hainta investigation, but when Sgt. Mike Grimes, then head of homicide, looked at him, bells rang. He owned a blue van. His uncle had a business close to where Hainta's body was found.

If Anchorage had no suspects in Hainta's death, Iredell County had too many in the Rambo case: her boyfriend, another man she told friend had made threats, and a man she said had raped her and was set to testify against the following week. Poirier and his wife were casual friends with Rambo, and he had been seen talking to her in his driveway before she disappeared. But he wasn't at the top of the list until he started acting "pretty odd," Gibson said. "He pushed himself into the investigation. We had to almost push him away from us. He just stayed in our face ... so we paid him a little more attention."

Then Poirier turned up on a convenience store security video buying gasoline about an hour after Rambo disappeared, less than an hour before someone spotted her still-burning body.

He eventually admitted the killing but refused to give any details, Gibson said. He was charged with first-degree murder, a death penalty case. But questions were raised about the admissibility of the confession, and last October the district attorney accepted a plea to second-degree murder. Because he had no prior record, Poirier got the minimum mandatory sentence, 22 years without parole.

While Poirier was still awaiting trial, Anchorage police detective Larry Arend, who was originally in charge of the Hainta case, asked Iredell sheriffs if they could send a sample of Poirier's blood north. They could.

At the time, Alaska's crime lab was certified only for six-point DNA matches. They got a six-point match on Poirier, Baclunan said. But legal identification in criminal cases requires 13 points of match. It cost from \$1,000 to \$2,000 to have the test done in a private lab. Anchorage police don't have the money to do them all, said Anchorage detective Scott Jessen, who took over the case when Arend retired.

Poirier was in prison, not a danger to other women and the test could wait, police reasoned.

By March, the crime lab staff was trained and the DNA operation accredited. And it had a one-year backlog of cases involving violent crimes. Each test takes six weeks, said lab director George Taft. Jessen pushed. In September, the Hainta results were certified: Poirier was a match.

With what looked like a solid case, Chief Duane Udland sent Jessen to North Carolina.

"Gene, howya doing?" Jessen said to Poirier. "I'm from Anchorage."

In an office at the prison, Poirier denied knowing Hainta or even where Yakutat Street was. Jessen laid the DNA report on a table in front of him. "This line is semen from Doris," he said. "This is your blood. They match."

It took awhile, but eventually Poirier said he killed Hainta. He picked her up on Fourth Avenue, near the old Hub Bar, according to the account of his confession in the charging document. After having sex, Hainta "spazzed out" on him, he told Jessen. She wanted more money and tried to hit him with a tack hammer. He took the hammer away from her, wrapped an electric cord around her neck and strangled her.

Jessen isn't finished. Poirier spent a lot of time driving around the country. With two murders known, he wonders, what are the chances of more unsolved cases out there? Both victims were strangled, both were Native American -- Hainta was Kiowa. That's the kind of detail the FBI puts in a computer. Jessen has asked them to check their files.

Reporter Sheila Foomey can be reached at stoomey@adn.com or 257-4341.

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February 19, 1998

**DNA Databanks Giving Police Powerful Weapon:
The Instant Hit****Related Article**

- [DNA Tests Free Two Men Convicted of Rape in '83
\(Dec. 4, 1997\)](#)



By CAREY GOLDBERG

BOSTON -- Of all the new thrills that DNA analysis offers forensic scientists, nothing seems to beat what they call a "cold hit": when a computer discovers the identity of a killer or rapist by matching DNA from blood, semen or saliva left at a crime scene with a DNA profile in a database. A criminal is fingered by his own genes.

Until now, cold hits have come sporadically, mainly in several states where DNA forensic work is most advanced, totaling about 200 nationwide. But federal and state experts say they will soon be cropping up much more often.

In the last several weeks, they say, two DNA logjams have been broken. The FBI and state laboratories have finally set new technical standards for testing DNA strands, allowing the development of a national system of quicker, cheaper testing to steam ahead. And the links of that system are starting to be hooked up: In December, eight states in the DNA vanguard began using FBI software that lets them pool their data on line for the first time, enabling them to identify criminals across their borders. Within minutes, they scored their first hit, linking a convicted sex offender in Illinois to a 1989 rape and attempted murder in Wisconsin, the bureau said.

"It's starting to grow geometrically," said David Coffman, the DNA database administrator for Florida, which has chalked up nearly half the country's hits. "For the first time, DNA labs are leading the investigators to the right person," as opposed to testing the DNA of known suspects.

The largest hurdle to establishing an American DNA database like the pioneering one in Britain, which holds hundreds of thousands of samples and has scored thousands of hits, is money -- for adding equipment and personnel, gathering hundreds of thousands of samples, analyzing and entering them, plowing through current backlogs and converting existing databases to new technology.

"It comes down to a cost-benefit analysis," said Christopher Asplen, an

assistant U.S. attorney who is executive director of the National Commission on the Future of DNA Evidence, which Attorney General Janet Reno recently created. "How much money are we willing to put into the system to reduce the backlog so that we can use DNA more quickly and more effectively to solve and prevent crimes?"

The mounting momentum behind DNA databases, however, is also pushing forward objections to DNA evidence. Last week in Massachusetts, for example, a judge halted the gathering of blood samples for DNA profiling from thousands of prison inmates, probationers and parolees after several sued the state, arguing that it was an illegal search and seizure performed without proper safeguards.

Although similar challenges in other states have failed, civil liberties questions continue to come up as states move ahead, including issues of who, exactly, must submit to testing, and who can have access to the data.

In the aftermath of the DNA debacle at the O.J. Simpson murder trial, in which the defense accused the Los Angeles Police Department of contaminating DNA evidence, concerns also linger over whether the police and laboratory workers are being properly trained to handle such potentially damning evidence.

Still, financing is a burning question for DNA overseers like Dr. Paul Ferrara of Virginia's Division of Forensic Science, whose groundbreaking DNA program has been given a \$10 million budget for the next three years and who believes it will take \$500 million to establish a full-fledged national databank.

"We still have backlogs of six months or more before we can get to every case," Ferrara said. "How many crimes that we took a year to solve could have been solved in a week? And how many further offenses, rapes or murders, were committed by that individual in the meantime?"

In Florida, Coffman recalled, a convicted rapist was just eight days away from being paroled in 1995 when his DNA sample was finally entered into the databank. It was found to match evidence left at the horrific rape, mutilation and murder of another woman more than three years earlier.

That is the difference DNA databanks can make, said Walter Rowe, a professor of forensic sciences at George Washington University who has advised the federal government on dispensing some of the \$25 million that Congress allotted to DNA databases in 1994.

A national database, "God knows, may turn out to have an enormous impact," Rowe said, "if you reflect that rapists tend to be repeaters and studies have shown that most of the violent crime is committed by a very small number of criminals. If we're able to identify these guys and send them away, or if, instead of convicting the guy for one sexual assault we get him for 10 and he goes away for the rest of his life, think about the impact that will have on the safety of citizens."

Indeed, no one, not even those who have challenged DNA sample-gathering in court, deny that the databases can be heaven-sent crime-fighting tools. And DNA can work on prisoners' behalf as well. . . already, 53 convicts have been exonerated after DNA testing was applied to the evidence in their cases, said Barry C. Scheck, whose Innocence Project at Yeshiva University's Benjamin Cardozo School of Law helped many of them gain freedom.

Rather, the main lingering questions about DNA testing and databases concern who should have to give samples and how those samples are handled.

The very existence of a DNA database smacks more of a Big Brother-ish assault on privacy than the existence of the national computerized network of fingerprints, civil libertarians say. Taking blood is much more invasive than fingerprints, they point out, and DNA carries so much more information -- information subject to abuse by insurance companies or even geneticists seeking the gene for something like pedophilia.

Furthermore, said Benjamin Keehn, a Boston public defender representing some of the inmates who have challenged the DNA collection here, "It's a very dangerous slippery slope" to round up thousands of convicts, probationers and parolees, as Massachusetts was doing, on the argument that they are likelier to commit a crime.

"Why not round up poor people?" Keehn asked. "Poor people are more likely to commit a crime, so shouldn't we have their DNA on file? Of course, there are benefits every time you get a cold hit. There are going to be dramatic success stories. But where does it stop? Why not take DNA samples at birth?"

In South Dakota, DNA samples are taken upon arrest, like fingerprints. Virginia, which has the most comprehensive database nationwide, with 160,000 samples gathered though only 10,000 have been analyzed, now gathers samples from all convicted felons, and even some juveniles.

And that, Ferrara argued, is the way to go. More than half of his cold hits from the crime scenes of rapes and murders came from felons who had previously been convicted only of breaking and entering or burglary, he said.

Scheck, who helped defend O.J. Simpson, advocates that states write into their DNA database laws that the data can be used by law enforcement agencies "for identification purposes only" to avoid abuses. Many states, like Massachusetts, have left their language more vague.

Two states, in fact, have not even passed database laws. But the two, Vermont and Rhode Island, are expected to finally join the other 48 this legislative session. Many other states have simply not allocated much money to their DNA databases, so large backlogs of unanalyzed samples have developed.

Even those that have kept up, however, will now have to start converting their samples from the old technique, known as Restriction Fragment Length Polymorphism, to a new method, Short Tandem Repeat, or STR. That faster, less expensive method looks at areas of the DNA strand that are generally considered something like "junk" DNA and do not determine an individual's traits.

It is a giant conversion task, experts say, but promises a great payoff. Technology has so advanced from the days when testing each DNA sample took weeks and cost several hundred dollars, they say, that in the near future, sample analysis will be largely automated, take only hours and eventually cost as little as \$10.

The technology has also advanced in that it can analyze far tinier quantities of biological evidence -- even the saliva from a cigarette butt or envelope flap and the sweat from a hatband, said Terry Laber, supervisor of the DNA unit of the Minnesota Bureau of Criminal Apprehension.

In some ways, he said, DNA evidence has already surpassed fingerprints in usefulness, and Minnesota's state crime laboratory now does DNA testing at all crime scenes, including mere burglaries.

Whether or not it beats fingerprinting, DNA evidence is especially valuable because of the types of crime scenes where it is usually found, said Harlan Levy, a former New York City prosecutor who wrote "And the Blood Cried Out" (Avon 1997) about the power of DNA evidence.

"They're murder cases and sexual violence cases," he said. "The kinds of cases where people care very dramatically about identifying the people who committed them and getting them off the street. And DNA databanks make that possible."

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