DEPARTMENT OF FORENSIC BIOLOGY

LABORATORY REPORT

VICITM: Jason Mercado

SUSPECT(S): Gregory Martin, Angel Cordero
Ramon Rivas

PRECIINCT: 041

LAB NO: FB00-1140

COMPLAINT NO: 3489

SUMMARY OF RESULTS:

Human blood was found on the jeans from "Ramon Rivas" and on the underwear from "Gregory Martin".

PCR DNA testing was done on the underwear. The DNA alleles seen in underwear are the same as the DNA alleles of the victim. Therefore, he could be the source of this blood. This combination of DNA alleles would be expected to be found in approximately:

1 in greater than 1 trillion Blacks**
1 in greater than 1 trillion Caucasians
1 in greater than 1 trillion Hispanics
1 in greater than 1 trillion Asians

PCR DNA testing was also done on the jeans. The DNA alleles seen in jeans are not the same as the DNA alleles of the victim. Therefore, he could not be the source of this blood. Blood from two male individuals is present on the jeans. This combination of DNA alleles would be expected to be found in approximately:

Further analysis could be done upon submittal of a blood sample from the suspects. Further analysis will require approximately 60 days.

The DNA results in this case do not match any previous PCR (STR) DNA cases to date.

The DNA results in this case have been entered into the OCME local DNA databank. The DNA results will be entered into the National Combined-DNA Indexing System (CODIS).
EXAMINATIONS:

Blood and other physiological fluids and tissues contain polymorphic ("many forms") genetic markers which can differ from person to person. These genetic markers are inherited, that is, pass from generation to generation and can be used to compare biological samples from different sources. Genetic markers occur because of changes (mutations) that occur in a person's hereditary material, DNA (Deoxyribonucleic Acid).

Alternative forms of DNA are called alleles: they are found at the same location of the DNA (locus, plural loci) on homologous (matching) chromosomes. An individual can have a maximum of two different alleles at a particular locus, one on each homologous chromosome. A group of two alleles from the same locus constitutes a type.

Several different loci may be analyzed simultaneously using a technique known as the polymerase chain reaction (PCR). This technique allows small amounts of DNA to be amplified; after amplification, the alleles present in the sample are identified.

The loci tested may include the short tandem repeat (STR) loci [VWA, THO1, F13A1, FES/FPS, D3S1358, FGA, D8S1179, D21S11, D18S51, D5S818, D13S317, D7S820, TPX, CSF1PO, D16S539]. The STR loci exhibit length polymorphisms which are variations in the number of core repeats, which are 4 base pairs in length. STR alleles are named according to the number of core repeats present at the locus. Each locus has between 8 and 32 identifiable alleles.

The loci tested may also include the Amelogenin locus, which is located on the chromosomes X and Y, and can be used to determine the sex origin of an unknown sample.

<table>
<thead>
<tr>
<th>Locus</th>
<th>Chromosome</th>
<th>Alleles</th>
<th>Types</th>
</tr>
</thead>
<tbody>
<tr>
<td>D3S1358</td>
<td>3</td>
<td>9, 10, 11, 12, 13, 14, 15, 15.2, 16, 17, 18, 19, 20</td>
<td>91</td>
</tr>
<tr>
<td>VWA</td>
<td>12</td>
<td>10, 11, 12, 13, 14, 15, 15.2, 16, 17, 18, 19, 20, 21, 22</td>
<td>105</td>
</tr>
<tr>
<td>D8S1179</td>
<td>8</td>
<td>8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19</td>
<td>78</td>
</tr>
<tr>
<td>D18S51</td>
<td>18</td>
<td>9, 10, 10.2, 11, 12, 13, 13.2, 14, 14.2, 15, 16, 17, 18, 19, 20</td>
<td>231</td>
</tr>
<tr>
<td>D5S818</td>
<td>5</td>
<td>7, 8, 9, 10, 11, 12, 13, 14, 15, 16</td>
<td>55</td>
</tr>
<tr>
<td>D13S317</td>
<td>13</td>
<td>5, 8, 9, 10, 11, 12, 13, 14, 15</td>
<td>45</td>
</tr>
<tr>
<td>D7S820</td>
<td>7</td>
<td>6, 6.3, 7, 8, 9, 10, 11, 12, 13, 14, 15</td>
<td>66</td>
</tr>
<tr>
<td>D16S539</td>
<td>16</td>
<td>5, 8, 9, 10, 11, 12, 13, 14, 15</td>
<td>45</td>
</tr>
<tr>
<td>THO1</td>
<td>11</td>
<td>4, 5, 6, 7, 8, 8.3, 9, 9.3, 10, 11</td>
<td>55</td>
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<tr>
<td>TPX</td>
<td>2</td>
<td>6, 7, 8, 9, 10, 11, 12, 13</td>
<td>36</td>
</tr>
<tr>
<td>CSF1PO</td>
<td>5</td>
<td>6, 7, 8, 9, 10, 11, 12, 13, 14, 15</td>
<td>55</td>
</tr>
<tr>
<td>F13A1</td>
<td>6</td>
<td>3.2, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17</td>
<td>120</td>
</tr>
<tr>
<td>FES/FPS</td>
<td>15</td>
<td>7, 8, 9, 10, 11, 12, 13, 14, 15</td>
<td>45</td>
</tr>
</tbody>
</table>
Allele typing was done with the following results:

<table>
<thead>
<tr>
<th>ITEM</th>
<th>VWA</th>
<th>FGA</th>
<th>THO</th>
<th>FFS</th>
<th>D3S1358</th>
<th>D16S539</th>
<th>Amel</th>
<th>TPOX</th>
<th>CSF1PO</th>
<th>D7S820</th>
<th>FGA</th>
</tr>
</thead>
<tbody>
<tr>
<td>victim, Jason Mercado</td>
<td>14</td>
<td>17</td>
<td>6,7</td>
<td>8,9</td>
<td>9,11</td>
<td>15,16</td>
<td>14,14</td>
<td>X, Y</td>
<td>11,12</td>
<td>11,12</td>
<td>7,11</td>
</tr>
<tr>
<td>underwear.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>stain 1A left thigh</td>
<td>14</td>
<td>17</td>
<td>6,7</td>
<td>8,9</td>
<td>9,11</td>
<td>15,16</td>
<td>13,14</td>
<td>X, Y</td>
<td>11,12</td>
<td>11,12</td>
<td>7,10</td>
</tr>
<tr>
<td>jeans,</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>stain 1A left knee</td>
<td>14</td>
<td>18</td>
<td>5,6</td>
<td>7,8</td>
<td>10,11</td>
<td>17,18</td>
<td>12,13</td>
<td>X, Y</td>
<td>8,11</td>
<td>11</td>
<td>12,24</td>
</tr>
<tr>
<td>stain 1B right shin</td>
<td>16</td>
<td>5,6</td>
<td>7,8</td>
<td>11,12</td>
<td>16,17</td>
<td>11,14</td>
<td>9,12</td>
<td>X, Y</td>
<td>11,12</td>
<td>11,12</td>
<td>24,26</td>
</tr>
</tbody>
</table>

* = Typing not attempted

The DNA alleles seen in underwear are the same as the DNA alleles of the victim. Therefore, he could be the source of this blood.

The DNA alleles seen in jeans are not the same as the DNA alleles of the victim. Therefore, he could not be the source of this blood. Blood from two male individuals is present on the jeans.
FB00-1140

EVIDENCE RECEIVED:

<table>
<thead>
<tr>
<th>ITEM</th>
<th>VOUCHER</th>
<th>DATE REC'D</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>K302506</td>
<td>6/3/00</td>
<td>blood sample from the victim</td>
</tr>
<tr>
<td>1</td>
<td>H851481</td>
<td>5/30/00</td>
<td>jeans from &quot;Ramon Rivas&quot;</td>
</tr>
<tr>
<td>1</td>
<td>H851480</td>
<td>5/30/00</td>
<td>underwear from &quot;Gregory Martin&quot;</td>
</tr>
</tbody>
</table>

DISPOSITION:

The following items will be retained in the laboratory:

- a dried stain prepared from the victim's blood
- stains and controls taken from the jeans and the underwear
- DNA extracts for all samples and controls tested

The remainder of the evidence has been returned to the OCME Evidence Unit.

Analyst: Amrita Lal
Criminalist IV

Supervisor: Marie Samples
Assistant Director
DEPARTMENT OF FORENSIC BIOLOGY FAX SHEET

TO: Rebecca Jacobstein
FAX # 212 744 0236

DATE: Dec 5, 2002

CASE NO: FB00-1140

Total number of pages: 3
including cover page)

If there are any questions, please contact this person:

Marie Samples

Direct Questions to the analyst and/or supervisor who signed the report.

Department of Forensic Biology telephone: 212 447 2618
fax: 212 447 2630
212 447 8797

COMMENTS:

DCJS match report for FB00-1140
New York State Police
Forensic Investigation Center
DNA Databank Unit
1220 Washington Avenue
Albany, New York 12226-3000
Phone: (518) 457-1200
Fax: (518) 485-0970

New York State
Division of Criminal Justice Services
Office of Forensic Services
4 Tower Place
Albany, New York 12203-3702
Phone: (518) 457-1901
Fax: (518) 457-9984

April 2, 2001

Robert Shaler, Ph.D.
Director of Forensic Biology
Forensic Molecular & Biochemistry Laboratory
City of New York
Office of the Chief Medical Examiner
520 First Avenue, 6th Floor
New York, NY 10016

Dear Dr. Shaler:

A search of the State DNA Index System (SDIS) resulted in a match between the City of New York, Office of the Chief Medical Examiner specimen number 00-1140-481-JN1B-B and convicted offender specimen number 9908191A.

The purpose of this report is to inform you of a possible investigative lead related to specimen number 00-1140-481-JN1B-B. The case files have been re-examined and this match has been confirmed.

The convicted offender information is as follows:

Name: Julio Sanchez
Aliases: None
NYSID#: 9205705L
Date of Birth: 08/08/1981
Current Location: Clinton CF

The above information should be provided to your submitting agency so that they may be able to obtain an additional DNA sample from the subject. This known biological sample should be submitted to your laboratory so that it can be compared to the case evidence sample(s).

If you need any further assistance, please do not hesitate to contact the Office of Forensic Services at (518) 457-1901.

Sincerely,

Julie M. Pasquini
DNA Databank Coordinator

cc: Detective Frances Braddock
March 22, 2002

Dr. Robert C. Shaler
Director of Forensic Biology
Forensic Molecular & Biochemistry Laboratory
Office of Chief Medical Examiner
520 First Avenue, 6th Floor
New York, NY 10016

Dear Dr. Shaler:

A search of the State DNA Index System (SDIS) resulted in a match between the City of New York, Office of the Chief Medical Examiner specimen number 00-1140-481-DNA-A and convicted offender specimen number 9991876A.

The purpose of this report is to inform you of a possible investigative lead related to this specimen.

The convicted offender information is as follows:

Name: ANGEL CORDERO
Aliases: N/A
NYSID#: 8629528K
Current Location: NYS DEPARTMENT OF CORRECTIONAL SERVICES

A copy of this letter should be provided to the submitting agency for appropriate review in this investigative matter. If legal action is anticipated, based on this information, it is strongly recommended that a new DNA specimen be collected from the named individual. This new DNA specimen should then be submitted to your laboratory for appropriate confirmatory analysis.

If I can be of any further assistance, please do not hesitate to contact me at (518) 457-1901.

Sincerely,

Julie M. Pasquini
DNA Databank Coordinator