

IN THE CIRCUIT COURT OF COLE COUNTY
STATE OF MISSOURI

STATE OF MISSOURI,
Plaintiff

v.

ALYSSA D BUSTAMANTE,
Defendant

Cause No. 09AC-CR03516-01F

Division No.

FILED

APR 13 2011

BRENDA A. UMSTATTD
CLERK CIRCUIT COURT
MISSOURI

DNA Short Tandem Repeat (STR) Discovery Request

Comes now defendant, by and through his attorneys, and requests the disclosure of scientific materials pertaining to automated STR testing and any other DNA testing performed in this case. This request applies to DNA tests which have been, are currently being, or will be performed in the instant case. The request is ongoing. In the event that new materials responsive to this request are produced, discovered, or otherwise come into the possession of the prosecution or its agents, said materials should be provided to the defendant without delay.

If more than one laboratory handled, or had custody of samples tested in this case this request should, by the State, be addressed to each such laboratory. The State should also address this request to any laboratory that handled or had custody of samples before or after DNA testing. Relevant laboratories include, but are not limited to crime labs, commercial DNA testing facilities, and government DNA testing facilities.

It is requested that copies of the following materials be provided to the defendant. The defendant also requests that the original materials be made available for inspection in order to compare the copies with the original materials that are in the possession of the prosecution or its agents.

In order to preserve the integrity of data files, if possible please provide electronic copies of computerized data files (see request #6) in a 'read-only' format, such as CD-ROM. In the event that a program requiring retrieval of data files is used to produce the electronic copy (such as Retrospect), please identify program used (name of software program, manufacturer and version number) and provide detailed instructions necessary for retrieval of data files.

1. Case file:

Please provide a legible copy of the complete case file including all records of DNA testing in the instant case. For materials that are represented in any format other than black and white paper copies please provide copies which are equivalent in content and quality to the originals (that is, X-ray film copies of X-ray films, photographic quality copies of photographs and Polaroids, electronic copies of computerized data files, copies of GeneScan printouts, including tabular data and copies of Genotyper printouts). If electronic copies of the ABI Prism 310 Collection files requested in #6.1 below (sample sheets, injection lists, and log files), are not to be provided, please provide copies of these files as print-outs. In the event that any of these items cannot be provided due to loss, destruction or inability to locate the files or documents in question, please provide an

explanation for the non-production of the item in question (see request #11 below).

2. Documents relied upon in performing testing:

Please provide legible copies of all documents which were, or are claimed to have been, followed or relied upon in executing, interpreting and/or reporting the DNA tests performed in the instant case, including:

- (2.1) Standard operating protocols (SOPs) of the DNA testing laboratory.
- (2.2) Quality Assurance/Quality Control Manuals.
- (2.3) Instructions provided by manufacturers of commercial test kits ('package inserts' and 'user's guides').
- (2.4) Protocols and manuals relating to instruments (including user's manual and machine run specifications) and/or software.

3. Guidelines for interpretation of analytical results:

Please provide copies of all written guidelines for interpretation of analytical results pursuant to SWGDAM "Short Tandem Repeat (STR) Interpretation Guidelines" (Forensic Science Communications, July 2000, Volume 2, Number 3), to include:

- (3.1) Guidelines for preliminary evaluation of data.
- (3.2) Guidelines for criteria to assign allele designations to appropriate peaks.
- (3.3) Guidelines for interpretation of results with regard to (i) numbers of contributors, (ii) partial profiles, and (iii) profiles exhibiting potential stochastic effects.
- (3.4) Guidelines for formulating conclusions resulting from the

comparison of single source samples and mixtures with known reference samples.

(3.5) Guidelines for statistical interpretation.

4. **Frequency tables:**

Please provide copies of any DNA frequency tables relied upon in performing the statistical test in this case.

5. **Chain of custody and current disposition of evidence:**

Please provide copies of all chain of custody documents for each item of evidence subjected to DNA testing starting with the first description or 'log entry' for each item through to the current disposition of that item of evidence. This information should include documentation which indicates where and how the materials were stored (temperature and type of container), the amount of evidence material which was consumed in testing, the amount of material which remains, and where and how the remaining evidence is stored (temperature and type of container).

6. **Data files:**

Please provide copies of all data files used and created in the course of performing the testing and analyzing the data in this case. These files should include all data necessary to, (i) independently reanalyze the raw data and (ii) reconstruct the analysis performed in this case. In the event that any of these items cannot be provided due to loss, destruction or inability to locate the file(s) in question, please provide an explanation for the non-production of the item in question (see request #11 below). These materials should include, but not be limited to:

(6.1) All ABI Prism 310 Collection files, including samples sheets, injection lists and log files.

(6.2) All GeneScan files, including sample files.

(6.3) All Genotyper files, including stutter filter percentage assignments for each locus tested (if not otherwise provided in response to request #7 below).

7. Software and macros:

Please provide a list of all commercial software programs used in the DNA testing in this case, including name of software program, manufacturer and version number used in this case. In addition, please identify any commercial macros used to analyze data in this case. In the event that any programs and/or macros written by the testing laboratory were used in the analysis of data in this case, please provide copies of these materials.

For commercially available software which was used unmodified in this case, a sufficient response is to indicate the name of the software item being claimed as proprietary (program, macro or other item), the manufacturer and the version used in this case. In the event that any commercial software item was modified in any way in the testing undertaken in this case, please provide either, (i) a copy of the modified software item or, (ii) a detailed list of the changes or modifications which were made with regard to the software item as used in this case. In the event that non-commercial software items (program, macro or other item) were used in the testing in this case, please provide a copy of that software item, including all supporting documentation.

8. Capillary run history and matrix file date:

Please provide records indicating, (i) the number of runs on the capillary prior to the capillary electrophoresis run in this case, and (ii) the date of preparation of the matrix file used in this case.

9. Records of trouble-shooting or problems during testing:

Please provide copies of any laboratories records or other materials which document any trouble-shooting, repairs, modifications or changes which were made to the genetic analyzer instrument used in the instant case. These materials should include:

(9.1) Copies of any notes, or records of communications, relating to trouble-shooting which had to be done on the instrument, including calls to technical support lines and visits by field technicians to repair instrument.

(9.2) Records of any changes that were made to the instrument in the course of testing samples in this case, including replacement of parts such as a laser or CCD virtual camera.

(9.3) Records of all computer resets or reboots which had to be done during the testing in the instant case, including, soft reset, cold boot and or clear memory reset.

(9.4) Records of all incidents in which manual control was used to override genetic analyzer presets.

10. Instances of laboratory contamination:

Please provide copies of all documents pertaining to any outbreak(s) or incident(s) of contamination using PCR-based DNA tests at all laboratories performing testing in this

cause, and the corrective action(s) taken to rectify any such incident(s) (materials may be redacted to prevent compromising the confidentiality of other cases). An "outbreak or incident of sample contamination" (with regard to PCR-based technology) is defined as any instance in which a score-able type was obtained from a reagent blank or negative amplification control, or any instance in which a reference sample (a sample known to have originated from a single human individual) scored more than two alleles for a particular genetic system.

11. Items destroyed, lost or otherwise unavailable:

In the event that any item requested in this document cannot be provided due to any reason, including but not limited to, (i) destruction of the requested item, and/or, (ii) loss or inability to locate the requested item, please provide a written explanation as to why the item cannot be provided. In the event that any requested item has been destroyed, please provide copies of any internal memos or other documentation which authorizes the destruction of this type of item of evidence.

12. Developmental validation:

Please provide copies of any developmental validation studies pertaining to the specific DNA test(s) performed in this case (pursuant to TWGDAM Guidelines 4.1, 4.2 and 4.4 and DAB Standards 8.1.1 and 8.1.2), including developmental validation studies conducted by the testing laboratory and any additional developmental validation studies relied upon by the testing laboratory in claiming that the test has been adequately validated pursuant to TWGDAM and DAB. These materials should include copies of

laboratory notebooks, computer data files, unpublished scientific papers and citations to published scientific papers.

13. Internal validation:

Please provide copies of any internal validation studies pertaining to the specific DNA test(s) performed in this case (pursuant to TWGDAM Guideline 4.5 and DAB Standard 8.1.3), including internal validation studies conducted by the testing laboratory and any additional validation studies relied upon by the testing laboratory in claiming that the test has been adequately validated pursuant to TWGDAM and DAB (including “getting-to-know-the-system” studies). These materials should include copies of laboratory notebooks, computer data files, unpublished scientific papers and citations to published scientific papers.

14. Proficiency tests:

For each analyst who performed DNA testing in this case, please provide copies of all DNA proficiency tests using any of the DNA test(s) used in this case. These materials should include for each proficiency test, (i) the complete proficiency test case file, (ii) computer data files, (iii) evaluations and/or reports by the testing agency, and (iv) records maintained pursuant to TWGDAM Guideline 9.3 and DAB Standard 13.1.1.

15. Accreditation:

Please provide copies of all licenses or other certificates of accreditation held by the DNA testing laboratory.

16. Laboratory personnel:

Please provide a current resume and job description for each person involved in conducting or reviewing the DNA testing performed in this matter.


Respectfully submitted,


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Certificate of Service

I certify that a true copy of the above and foregoing was personally served on all parties this 13th day of April, 2011.


Donald Catlett