

DATABASE NEWS

July 31, 2010

- The Database was updated to Release 2.3. An additional 249 Yfiler (17 loci) haplotypes were uploaded to the website: 119 African American, 70 Caucasian, 54 Hispanic and 6 Asian. NCFS typed 185 of these samples, the Santa Clara County Crime Laboratory donated 32 samples, and the California Department of Justice Sacramento Crime Laboratory donated 32 samples. Both mixture analysis tools have also been updated with the new samples. The Database Descriptive Statistics for all prior Releases can be downloaded from the Introduction link of the homepage.

July 14, 2010

- A contributor informed us that 58 samples donated and uploaded to the Database on January 24, 2010 had been transposed incorrectly at the locus DYS391. The issue was immediately rectified.

June 20, 2010

- Two Mixture Analysis Tools were added to the Database. The Mixture Analysis Tools are provided as a service to the forensic community. NCFS has not performed extensive validation of these tools and therefore the presence of a tool does not necessarily imply the endorsement of the method by NCFS. The software tools compute the possible haplotype contributors to a forensic casework Y-STR mixture and provide a count of how many times these haplotypes are found in the Database.

Prior to use in any criminal and/or civil case matter, users will need to conduct their own validation of the software and/or independently confirm the results on a case-by-case basis. Instructions for use are included in each program.

March 26, 2010

- As of this date, the Database now calculates exact confidence intervals according to Clopper, C.J. and E.S. Pearson, 'The use of confidence or fiducial intervals illustrated in the case of the binomial'. *Biometrika* (1934). 26: p. 64-69. Additional information, including the formula, can be found in the User Directions.

January 24, 2010

- The Database was updated to Release 2.2. An additional 335 Yfiler (17 loci) haplotypes were uploaded to the website: 212 Caucasian, 102 African American, 13 Hispanic and 8 Asian. NCFS typed 277 of these samples and the Santa Clara County Crime Laboratory donated 58 samples. The Database Descriptive Statistics for all prior Releases can be downloaded from the Introduction link of the homepage.

July 1, 2009

- The Database was updated to Release 2.1. An additional 649 haplotypes were uploaded to the website: 442 Caucasian, 200 African American, and 7 Asian. NCFS typed 619 of these samples using Yfiler (17 loci) and the Orange County California Coroner's Office donated 30 12-locus PowerPlex Y samples. The Database Descriptive Statistics for all prior Releases can be downloaded from the Introduction link of the homepage.

May 28, 2009

- Applied Biosystems informed us that they inadvertently included a duplicate Hispanic Yfiler sample in their data set for the Release 2.0 update performed on March 1, 2009. This sample was removed and all Descriptive Statistics were updated to reflect this change.

May 7, 2009

- After a request for Release 1.0 Database Descriptive Statistics information for court purposes subsequent to the update of the Database to Release 2.0, all archived information for any previous releases can now be downloaded from the Introduction link located on the Database homepage.

March 1, 2009

- The Database was updated to Release 2.0. An additional 3,310 haplotypes were uploaded to the website: 1062 African American, 115 Asian (Southern Indian), 1062 Caucasian, and 1071 Hispanic. Applied Biosystems donated 2912 17-locus haplotypes (950 African American, 957 Caucasian, and 1005 Hispanic). The Illinois State Police donated 283 11-locus haplotypes (112 African American, 105 Caucasian, and 66 Hispanic) and 115 12-locus haplotypes (Asian/Southern Indian).

September 10, 2008

- An update to Management information performed on September 8, 2008 changed the data set returned when searching all 17 loci from 4163 to 4166. IT corrected the issue and implemented code that would prevent the problem from arising again. The effect on frequency results during this time is negligible.

August 18, 2008

- Updated the Populated Loci section of the Database Descriptive Statistics to include a better description of the variation in the number of populated markers within the Database observed during partial profile searches. The Database is designed to query only those samples that possess data at the particular markers chosen by the user, resulting in a data set that varies depending on which markers are selected.

August 8, 2008

- Adjusted and validated the > (greater than) and < (less than) queries. Previously, the Database returned only exact matches to the > and < allele designations. A user can now select from the drop-down menu or manually enter an allele with a > or < designation at any marker and the Database will also return alleles greater than or less than the entry and calculate these haplotypes into the results table and statistics statements.

July 29, 2008

- It was brought to our attention that the data set returned when searching all 17 loci had changed from 4163 to 4165. Upon closer inspection, two partial profiles were registering as full profiles and being counted in the query. The partial profiles in question were being counted correctly in partial queries and the issue was corrected, returning the data set to 4163. The effect on frequency results during this time is negligible.

May 23, 2008

- Edited the Introduction to include a better description of the US Y-STR Database and its intended use, specifically clarifying the difference when compared to the CODIS database. Also added a single PDF download under the Introduction link for all website information and pertaining publications.
- Added information to the Database Descriptive Statistics illustrating the discrimination potential and the number of unique haplotypes in the current release.
- Completed Sample Submission protocol to increase database size (N) and added information to link on homepage

March 3, 2008

- Completed application to automatically upload haplotypes directly from Genotyper and GeneMapper text files for database queries
- Changed heading of last column in results table under "View Details" from "Confidence Interval" to "Frequency Upper Bound (95%)"
- Awaiting the receipt of 3000 complete Yfiler haplotypes: 1000 Caucasian, 1000 African American, and 1000 SW Hispanic

February 29, 2008

- **PLEASE NOTE:** From January 3, 2008 to February 29, 2008, the last column in results table under "View Details" gave the frequency upper bound (95%), then entitled "Confidence Interval," while the statistics statements under "Overall Database Summary" gave the frequency upper bound of >99%. The statistics statements were changed to reflect the 95% upper bound frequency given in the results table.