



GPS-ibd makes relationship
analysis simple



Paternity, ancestry and kinship analysis – Relationship analysis made simple

GPS-ibd is an automated relationship testing application that can dramatically improve the speed, efficiency and cost-effectiveness of your laboratory processes.

GPS-ibd is so easy to use and feature-rich that an experienced DNA analyst using the system can analyse and report a paternity, immigration or other relationship testing casework problem in just a few minutes.

Easy to set up, easy to use

Like all our DNA Expert Software Solutions, GPS-ibd is built to the highest possible scientific and technical standards, yet is specifically designed to be easy to use.

Through a clear graphical user interface, analysts can undertake simple or complex relationship analyses by creating hypothetical pedigree trees using a 'drag and drop' technique.

With just a few clicks of the mouse they can then add in DNA data. They can also determine exactly how the analysis will be carried out, as the application can account for potential mutations and allow for rare alleles (size-bias) and Fst corrections.

GPS-ibd can import DNA profiles from commercial DNA interpretation software or from a MS Excel spreadsheet.

Enjoy a rich set of features

To make life even simpler for analysts, GPS-ibd already contains a palette of pedigree patterns for common relationship problems – paternity, single parent and sibling analysis – which can be edited or combined to investigate more complex relationships.

The system is supplied with every common STR marker system built in and the 'gene pool' data for each of these has already been generated for UK and US populations. The user can modify or edit this data within the application to create a customised laboratory tool.

In addition, GPS-ibd includes an advanced report generation tool that documents all stages of the analysis. Users can also request laboratory-specific statements for court or clients which the system will create in a matter of seconds.

Reap the benefits of GPS-ibd

Developed by forensic scientists for forensic scientists, GPS-ibd can deliver a wide range of benefits to your organisation:

- Lets you create your own laboratory specific system using the in-built data
- Improves the productivity and efficiency of your lab
- Reduces the unit cost of your DNA relationship testing
- Speeds up analysis and reporting processes
- Allows for easy analysis of the most complex relationships

For more information contact
forensics@vidavia.com

Re: **Name of Alleged Child**

Ref. No. of Proceedings: **Case Reference**

Case No.: **Case Number**

I, **GPS-ibid User Name**, hereby declare that I have carried out an analysis of the samples provided by the persons named in this report, within a laboratory of **GPS-ibid User Organisation**, that meets with government approved standards, for the purpose of Part III of the Family Reform Act, 1969.

Summary of Results

The results of the DNA Profiling tests carried out provide evidence to support the assertion that **Name of Alleged Father** and **Name of Alleged Mother** are the natural parents of **Name of Alleged Child**.

Sample Receipt

On dates specified the following buccal swab samples were received at the **GPS-ibid User Organisation**. The unique numbers shown have been allocated to these samples.

Samples Table

Sample No.	Date received	Name	Alleged relationship
Test Sample No	Test Date	Test Name	Test Relationship
Test Sample No	Test Date	Test Name	Test Relationship

Purpose of Examination

In this case I have been asked to test the buccal swab samples to assist in determining whether or not **Name of Alleged Father** and **Name of Alleged Mother** are the natural parents of **Name of Alleged Child**.

Clients are advised that the identification of the buccal swab samples received for testing is based on information supplied with the samples.

Comprehensive technical reporting

DNA Profiling Data

Multiplex = multiplex for multiplex 20081010; F_{adj} = 0; Adjustment = Size Bias; Mutation = No

Name	Fred Flint	Molly Malone	Charlie Malone
Sample No.	123456	123457	123458
D3	11, 12	13, 14	11, 14
VW	11, 12	13, 14	11, 13
D16	11, 12	13, 14	12, 13

Allele Frequencies

Genepop = RCI1 simplex multiplex 20081010; F_{adj} = 0; Adjustment = Size Bias; Mutation = No

Locus Allele (frequency)

D3 11 (0.00227272666472916), 12 (0.00227272666472916), 13 (0.0068167997249581), 14 (0.1506498854447), x (0.805862015410066)
VW 11 (0.00227272666472916), 12 (0.00113655999100574), 13 (0.00227272666472916), 14 (0.06666301684703), x (0.895455020784729)
D16 11 (0.2846359886431), 12 (0.2846359886431), 13 (0.187), 14 (0.026455008745193), x (0.204885994657581)

X = frequency of remaining alleles = $1 - (\text{the sum of frequencies of the displayed alleles})$

Hypotheses, probabilities and Likelihood Ratio

Hypothesis 1 = Parentage; Hypothesis 2 = Unrelated

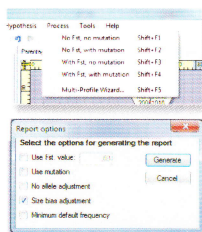
Locus Probability (Hypothesis 1) Probability (Hypothesis 2) Likelihood Ratio

D3	4.68296E-08	1.1819E-11	413.676
VW	5.80285E-10	2.36791E-14	24290
D16	0.000461524	0.000198619	2.36971
Total	1.254033374E-21	8.4234788626481E-20	23122400

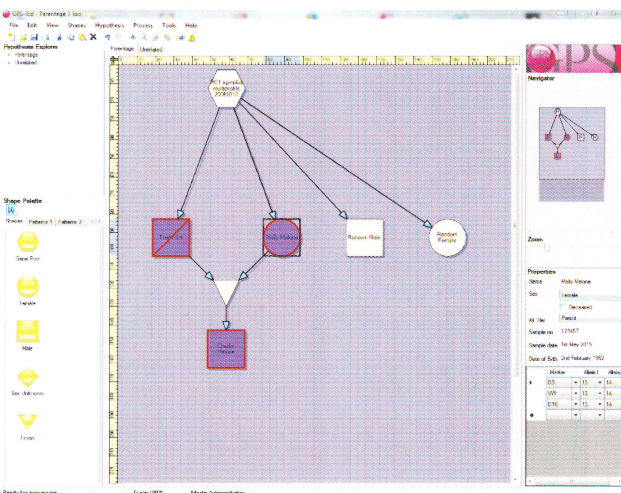
Highly flexible report template system for custom report generation



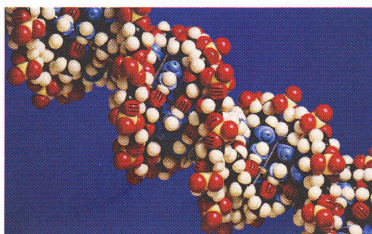
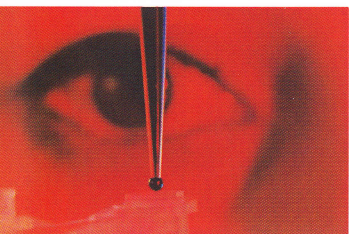
An intuitive and easy-to-use desktop for building and manipulating pedigree trees



Multiple processing options available via menu or keyboard shortcuts



Find out **more**



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Gene Pool Systems is a division of VidaVia.

VidaVia is a leading developer in forensic software solutions.

VidaVia's forensic solutions expertise includes:

- DNA Expert Systems
- Familial Search
- DNA Database Systems and Integration
- Fingerprint Workbenches
- Ultra-High Resolution Image Manipulation & Markup
- Shoemark Databases

Gene Pool Systems also provides:

- Installation and training
- Support and maintenance
- A range of consultancy services in relation to
DNA processing and interpretation

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