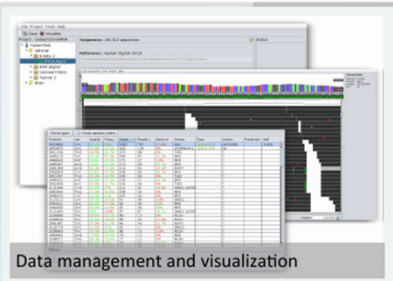
Phenosystems SA

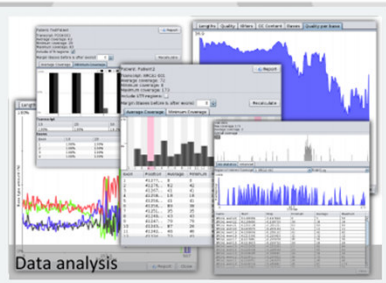
Belgium - Switzerland

- Developing software for molecular genetic diagnostics since 2002.
- Participating since FP6 in EU funded research projects: Eurogentest, NMDchip, Gen2Phen, capHIV
- Long term R&D collaboration with iCoSys HES-SO Fribourg (Switzerland) on HPC, Cloud computing and Machine Learning technologies.

GensearchNGS

Software suite



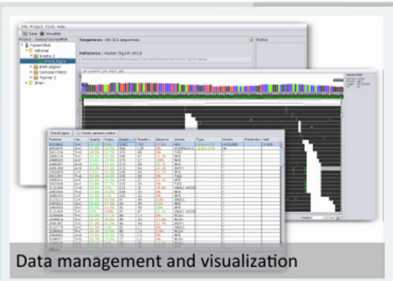


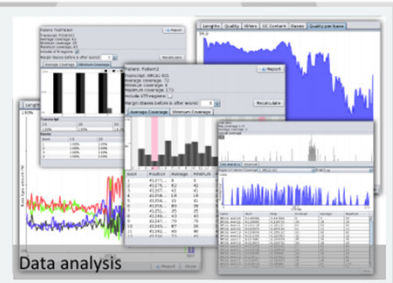
- DNAseq, DNA-Meth and RNAseq analysis software for NGS
- Dedicated to re-sequencing for detection and interpretation of variants, from panels to WGS.
- User base includes accredited laboratories working on cancer samples (somatic and germline), rare diseases, microbiology samples in Europe.
- User-friendly GUI integration of the entire process, requires no special/dedicated IT competences.

PhenoSystems SA

GensearchNGS

Software suite





- Raw data quality analysis
- Alignment of the reads (plug-in aligners and own GensearchAligner)
- Coverage and quality analysis of the Region of Interest
- Variant detection and filtering (including on filters such as HPO, OMIM… as well as family analysis)
- Interpretation support through annotations from public data sources
- Report on detected variants/mutations, storage in patient centric DB
- Sanger validation step
- Sharing and helping discovery (Clinvar, CafeVariome, Peer-2-Peer)
- Flexible ‘pipeline’: input/output at various steps in common file formats (bam, fastq, VCF, XML,...)

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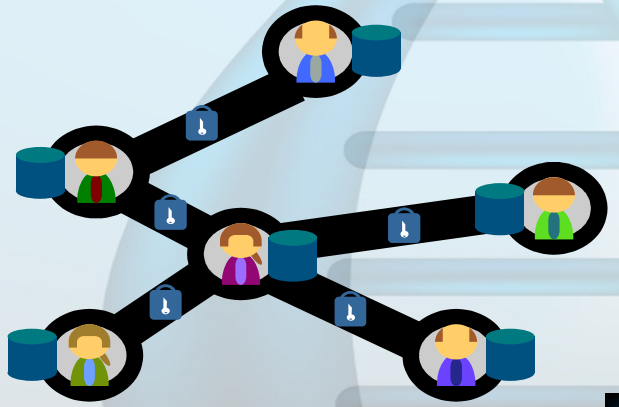
Trusted Friend Computing

Developed to prototype level

- Encrypted Peer-2-Peer approach
- Share resources (data, computing power) with trusted ‘friends’, e.g. variants/phenotypes or computing resources for alignment
- Data doesn’t pass through or is stored in a commercial entity.
- No central organisation
- Select with whom to share what



Instand NGS4P

Lot 3: bioinformatics analysis

We can offer our experience acquired with GensearchNGS:

- Familiarity with genetic diagnostics processes
- GUI based integrated analysis software from FastQ to technical report and patient centric database.
- Java based, modular, deployment from desktop PCs to servers or Cloud based
- Peer-2-Peer compute resource and data sharing approach.

*Potential partners: storage, 'platform' integrating *omics/clinical*

Contact: phenosystems@gmail.com

Phenosystems SA, Sentier des Communs 1, CH-1807 Blonay

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