

# Bioinformatics

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## Organisation

**Name of the organisation** BioLizard

**Department** Bioinformatics

**Country** Belgium

**Geographical Area** Flemish Region

## SCOPE OF THE METHOD

<b>The Method relates to</b>	Animal health, Environment, Human health, Other: Food & agriculture
<b>The Method is situated in</b>	Basic Research, Regulatory use - Routine production, Translational - Applied Research
<b>Type of method</b>	In silico

## DESCRIPTION

### Method keywords

Microbiome analysis

Data analysis

therapeutic

antibody

### Scientific area keywords

Data Science

bioinformatics

in silico

statistical modelling

## Method description

Through leveraging our combined computational and biological knowledge, we have proven expertise supporting clients in:

- (1) Developing and applying a range of statistical methods tailored to specific problem settings in both clinical and non-clinical datasets,
  - (2) Integrating multi-omics data with other data sources, both in-house and in public databanks,
  - (3) Developing bioinformatics proof-of-concept studies on client in-house platforms to support R&D activities *In silico* characterization of organisms, genetic material, and peptides,
  - (4) Mining publicly available data to screen for target, drug or biomarker candidates *in silico*,
  - (5) Explorative analysis of large datasets, from quality control to result visualization,
  - (6) Detection of structural variants from whole genome sequencing data,
  - (7) Performing structural bioinformatics analyses, such as functional site prediction
- ... And more.

## Method status

History of use

Internally validated

Published in peer reviewed journal

Validated by an external party (e.g. OECD, EURL ECVAM,...)

## REFERENCES, ASSOCIATED DOCUMENTS AND OTHER INFORMATION

### References

Taillieu, E., Taelman, S., De Bruyckere, S. et al. The role of *Helicobacter suis*, *Fusobacterium gastrosuis*, and the pars oesophageal microbiota in gastric ulceration in slaughter pigs receiving meal or pelleted feed. *Vet Res* 55, 15 (2024).

<https://doi.org/10.1186/s13567-024-01274-1>

### Links

[BioLizard Services - Bioinformatics](#)

[Case study: Whole genome sequencing data analysis of a family of six](#)

[Microbiome analysis: Correlation is not causation](#)

[On teamwork and transcriptomics: Building bespoke bioinformatics solutions with ...](#)  
[Case study: Using bioinformatics and machine learning to find new anti-microbia...](#)

### **Other remarks**

We have proven experience working with biologicals, cell therapies, small molecules, and more, and we offer multiple bioinformatics approaches and software tools to help you get the most out of your biomedical data. To make sure you stay in full control of your results, we provide support throughout the analysis process and fully explain our data science approaches - there's no black box when you work with BioLizard.

*Coordinated by*



*Financed by*

