

IBBL BIOSERVICES  
SAMPLE PROCESSING

# WHO ARE WE?

IBBL is an autonomous not-for-profit institute dedicated to service provision in the biomedical sector. As an ISO 9001 (general quality management) certified organisation compliant with the principles of ISO 17025 accreditation (competence of testing and calibration laboratories) and NF S96-900 certification (quality of biological resource centres)\*, we offer a full range of bioservices to industry, academia and EU consortia.

In addition to our dedication to quality and our range of services, our location at the heart of Europe makes us an ideal partner for your clinical trials and research projects.

Amongst other services, our laboratories offer automated and validated processing of blood, plasma, serum, tissue, urine, saliva, CSF and stool. Specialised in the optimisation and validation of these sample handling methods, we provide methods, samples and data fit for your needs.

\* More information available on [www.ibbl.lu/about-ibbl/#quality](http://www.ibbl.lu/about-ibbl/#quality)





# WHAT DO WE OFFER?

1

## Genomic and Circulating DNA Extraction

- DNA extraction from blood or stool using Chemagen technology with Perkin Elmer liquid handling
- DNA extraction from frozen or Formalin Fixed Paraffin Embedded (FFPE) tissue using QIAGEN QIAcube. This process is performed under the supervision of one of our in-house pathologists
- DNA extraction from saliva, serum, plasma

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## miRNA / mRNA Extraction

- RNA extraction from blood, cells or tissue on either QIAGEN QIAcube or QIAGEN Biorobot
- Total RNA (mRNA/miRNA) extraction from frozen or Formalin Fixed Paraffin Embedded (FFPE) tissue using QIAGEN QIAcube. This process is performed under the supervision of one of our in-house pathologists

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## Protein Extraction

Extraction of total protein from cells and tissues optimised for different biospecimen types and downstream applications

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## Freeze Drying

Freeze drying of CSF samples carried out by an experienced cryobiologist on our Epsilon 2-4 LSC lyophilizer

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## Peripheral Blood Mononuclear Cell (PBMC) Extraction

- Manual extraction by traditional Ficoll layering
- Automated extraction using Cell Preparation Tubes (CPT) and a TECAN liquid handling robot

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## Cell Sorting

Cell sorting using autoMACS technology



# WHAT DO WE OFFER?

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## Cell Culture

Cell line and primary cell culture with extensive experience in fibroblast culture from skin biopsies

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## Lymphoblastoid Cell Line Establishment

Epstein-Barr virus transformation of primary lymphocytes to establish immortalised lymphoblastoid cell lines

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## Frozen Biospecimen Aliquoting

Coring of frozen tissue and fluid biospecimen using CryoXtract CXT350 to provide frozen aliquots for analyte extraction/quality assurance without freeze thaw cycles

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## Tissue Block Processing

Preparation of Formalin Fixed Paraffin Embedded (FFPE) and Paxgene Fixed Paraffin Embedded (PFPE) blocks under controlled pre-analytical conditions. The histological processing including the final slide staining (hematoxylin/eosin/saffron) is done under the supervision of one of our in-house pathologists

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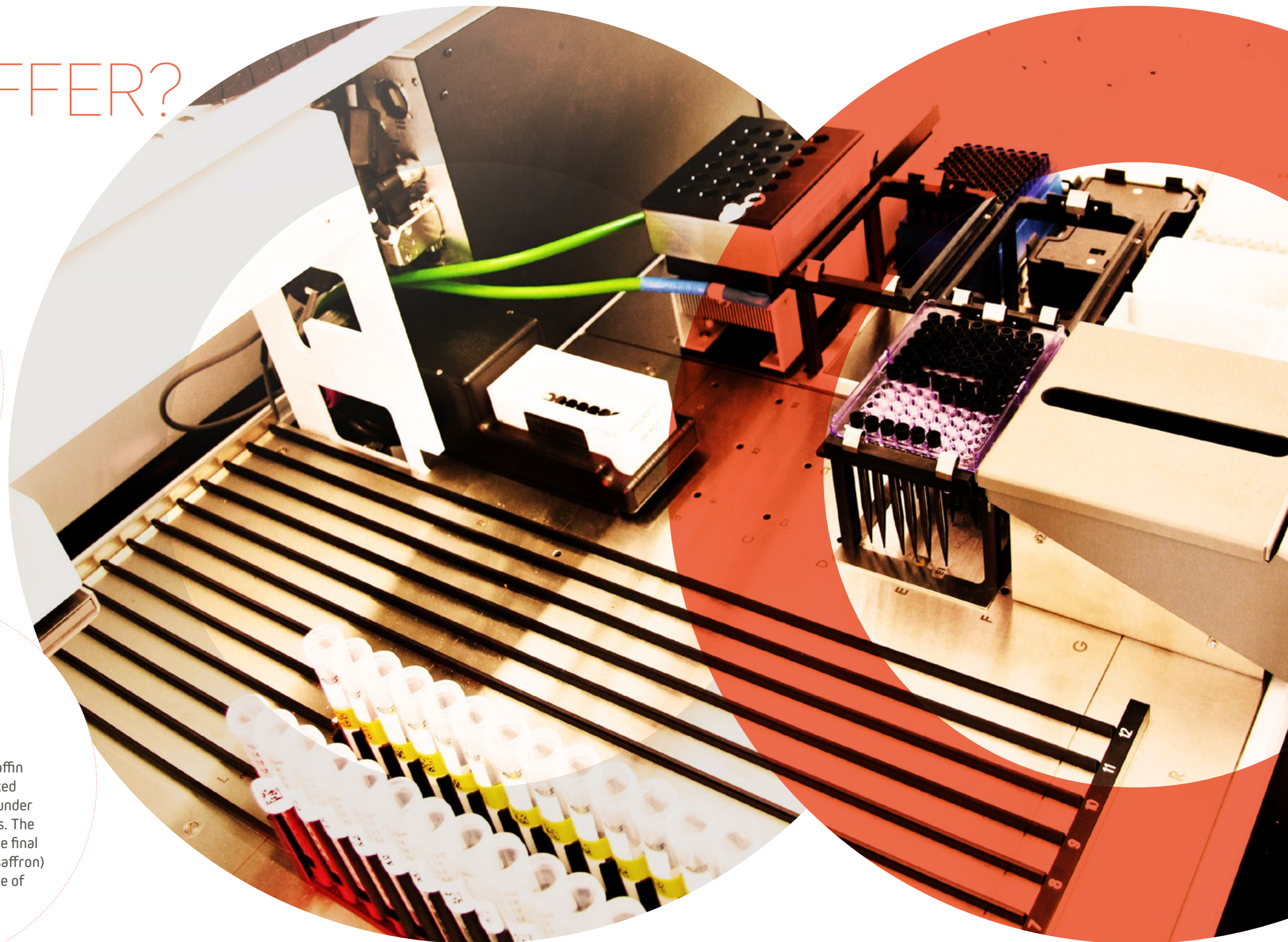
## Slide and Image Processing

Sectioning can be done from FFPE blocks and from snap frozen tissue blocks for morphological analysis and for immunohistochemical assays (including, if desired, digitalisation of the slides). Sectioning can also be done for downstream extraction processing (e.g. DNA, RNA extraction)

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## Tissue Microarrays

Construction of tissue microarray (TMA) blocks from up to 448 donor FFPE blocks







# WHY CHOOSE US?

## ✓ TO ENSURE THE UNIFORM HIGH QUALITY OF YOUR SAMPLES

Being ISO 9001 certified and compliant with the principles of ISO 17025 accreditation and NF S96-900 certification, all of our sample processing procedures are standardised and formally validated, their performance is continuously monitored. This minimises pre-analytical variation and ensures the consistent quality of your samples. Procedures can be adapted to project-specific requirements and be followed-up by a range of quality control tests.

## ✓ FOR HIGH THROUGHPUT PROCESSING

The use of high throughput processing robots allows us to simultaneously handle and process large volumes of samples, while ensuring quality and consistency. As this reduces both time and cost, we are able to offer competitive pricing and discounts for large volumes.

## ✓ FOR EXPERIENCED AND HIGHLY TRAINED STAFF

Our biorefinery department specialises in research on the impact of pre-analytical variation on a sample's fitness-for-purpose. The results of this research flow directly into our quality management system and are applied to continuously improve our procedures. You will also benefit from the support of an experienced project manager, as well as from access to our in-house pathology expertise.

## ✓ TO COMBINE PROCESSING, ANALYSIS AND STORAGE IN A SINGLE LOCATION

No need to coordinate with multiple suppliers. From sample and data collection, to processing and quality control, to storage and redistribution, all the pre-analytical activities on your samples can be handled by a single service provider on a single site in the centre of Europe.





PUT YOUR SAMPLES IN SAFE HANDS

GET IN TOUCH!



[www.ibbl.lu](http://www.ibbl.lu)



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# YOUR EUROPEAN BIOSERVICE PROVIDER

Biobanking

Sample  
Processing

Sample Analysis  
& Quality Control

Biospecimen  
Proficiency Testing

Biomarker  
Validation

University Biobanking  
Certificate



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