### DELIVERING YOUR SCIENCE

#### Sample Processing Solutions

We process thousands of samples per day with reformatting, extraction, quantification and normalisation of DNA/RNA, using automated systems and a scalable operation that can run 24 hours every day.

UK Biocentre is certified to ISO9001:2015 and ISO 27001:2013 and our laboratories are accredited to ISO15189:2012, which ensures your samples are processed to the highest standard enabling us to support the processing of samples for clinical trials and diagnostics.

> We use a dedicated bespoke LIMS (Laboratory Management System) to track all of our sample processing activities, sample movements and sample holdings. From the moment a sample arrives at UK Biocentre, it is receipted and tracked through all processing activities and movements.

Our LIMS retains all data associated with processed and consumed samples, allowing a cohort to be comprehensively tracked during its lifetime at UK Biocentre. We can also store your samples as we have the largest automated biorepository in the UK and one of the largest in the world, as well as manual -80°C and -196°C LN2 cryo storage.

We can arrange shipping of samples through our extensive network of high-quality sample transportation partners, both nationally and globally. We also offer an in-house courier service for domestic transport.

You can also benefit from valuable research insights and guidance through our study advisory expertise. We will provide you with tailored advice and strategies to enhance the quality and impact of your studies. We will work closely with you to develop a study design that provides meaningful and robust results.



LUDATIC



Our main facility is in Milton Keynes with a backup storage facility in Oxford

#### >70,000 sq foot

Our facility in Milton Keynes is used for the management, processing and analysis of biological samples.

samples We offer automated and manual storage at -80°C and -196°C

35M

#### Our mission is simple:

To provide solutions tailored to meet the unique challenges of the biomedical world, and in doing so, help shape the future of global health

## DELIVERING YOUR SCIENCE

#### **Our Sample Processing Solutions**

#### Sample Receipting

 All samples are receipted on the day of arrival into our bespoke Laboratory Management Systems (LIMS) which tracks all sample processing activities, sample movements and sample holdings.

#### **Blood Fractionation**

 Fractionation is the separation of plasma/serum, buffy coat, and plasma depleted red blood cells from a whole-blood sample. We achieve this by using high-speed centrifuges and bespoke liquid handling robots.

#### Aliquoting

• We can take multiple smaller samples from the original source sample so that you can store multiples copies for future processing and testing without compromising sample integrities, as well as biobanking them for future research.

#### Sample Reformatting

 Automated liquid sample transfer from a source to a different labware allowing for pooling/ combination for samples or movement.

#### **Genotyping and Sequencing**

• We provide genotyping and sequencing services through an on-site partner, enabling a multitude of assays and services across most commercial platforms.

#### Key benefits of working with us

- Full data integrity and sample provenance.
- Large scale sample processing. For studies with many participant samples that require short turnaround time processing, our high throughput laboratories ensure highly consistent, repeatable results for complete peace of mind.
- Complete sample visibility via automated LIMS reports.
- Quality assurance: HTA licensed, ISO 15189: 2012, ISO90001:2013 and data protection standards.

#### **DNA/RNA Extraction**

• Using highly automated processes, we can offer high throughput services that help you deliver your project faster and more cost-effectively whilst ensuring high-quality DNA or RNA to meet the needs of your chosen genetic analysis.

#### Normalisation

• We offer fully automated normalisation of DNA or RNA to ensure projects of any scale can be completed efficiently and cost-effectively whilst ensuring data integrity are maintained to the highest standards.

#### Quantification

- To assess the quality of nucleic acids, whether extracted by us or elsewhere, we can offer the following services that ensure your DNA/RNA is available to meet the quality demands of downstream analyses.
  - Quantification by absorbance
  - PicoGreen<sup>™</sup>
  - RiboGreen™
  - Agarose Gel Electrophoresis

#### **Kit Preparation**

• We can provide bespoke sample collection kits for the collection of biological samples from participants.

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Connect with UK Biocentre and discover solutions that will deliver your science.

For more information about our solutions, please contact: info@ukbiocentre.com |01908 870 800

