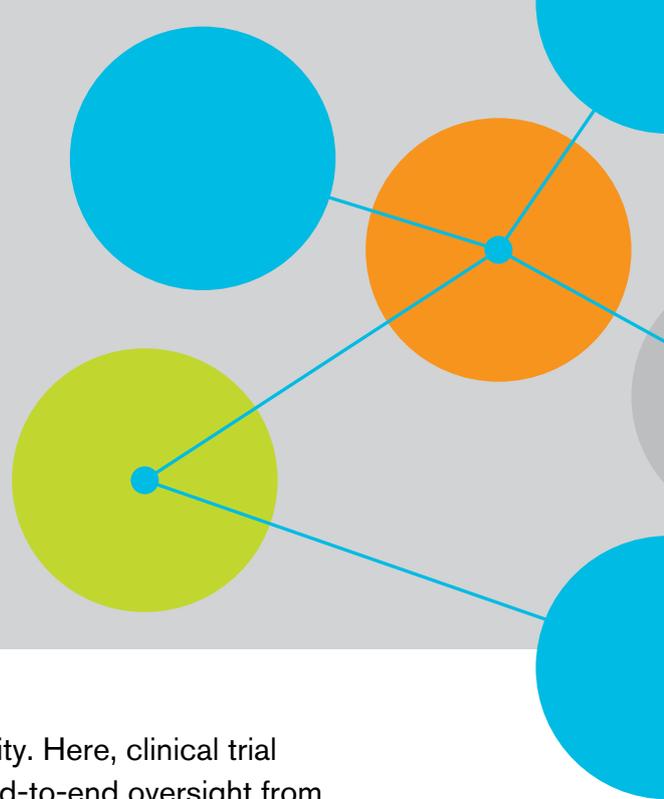


Stratified Medicine Lab



The Stratified Medicine Lab is a uniquely academic-led facility. Here, clinical trial sample analysis and target validation are conducted with end-to-end oversight from world-leading academics and clinicians based at one of the largest healthcare clusters in the UK – Birmingham Health Partners, the strategic alliance between the University of Birmingham and three co-located major teaching hospitals.

The Stratified Medicine Lab's integrated structure catalyses scientific and clinical input to produce translational research of exceptional quality and value. It uses latest-generation tools to provide advice on drug performance, feed scientific knowledge into early clinical trial design and apply new principles of experimental medicine to early phase clinical trials.

Our capabilities

- **Academic-led:** led by world-leading academics from study design to study completion.
- **Integrated:** bringing together basic scientists and clinicians from a variety of therapeutic areas to accelerate the drug development journey.

- **Comprehensively studied patient cohorts:** maximising speed and quality in pathway discovery, target validation and patient stratification.
- **Last-generation technology:** in flow cytometry, mass spectrometry, mass cytometry, transcriptomics and metabolomics.

Our expertise

The Stratified Medicine Lab has access to leading academics and clinicians in the following areas:

- Rheumatology
- Immunology
- Gastroenterology
- Cancer
- Metabolism
- Ageing
- Trauma

Case study

In one of its many collaborative studies, the Stratified Medicine Lab analysed salivary gland tissue samples for an industrial partner's clinical trial on Sjögren's syndrome. Reviewing the data, Dr Francesca Barone, Arthritis Research UK Senior Fellow, noticed that a trend in one indicator (focus score) in the lab's histological analysis suggested that another indicator in the clinical data (ESSDAI) had been miscalculated. Unpicking the mismatch, she found that the number of patients with active disease was insufficient for the drug to demonstrate efficacy.

Academic oversight of the trial allowed identification of a problem with patient recruitment, catalysing a discussion with the industrial partner. This led to a revision of the trial results and a subsequent re-evaluation of the whole experimental programme around the drug of interest.



'HAVING ACADEMIC OVERSIGHT THROUGHOUT THE STUDY – NOT JUST THROUGH THE INTERMITTENT INPUT DURING ACADEMIC ADVISORY BOARDS – ALLOWS US TO PROVIDE INSIGHTS ABOVE AND BEYOND THE INITIAL STUDY BRIEF, ADDING VALUE FOR OUR RESEARCH AND OUR PARTNERS.'

DR FRANCESCA BARONE – ARTHRITIS RESEARCH UK SENIOR FELLOW

Stratified Medicine Lab

Linked facilities

The Stratified Medicine Lab works closely with several other University of Birmingham facilities and research centres, forming a comprehensive suite of opportunities for collaboration.

Birmingham Centre for Clinical Trials: For 40 years, clinical trials at the University of Birmingham have driven forward translational research across drugs, devices and diagnostics. As a result, the Birmingham Centre for Clinical Trials conducts trials at a scale, quality and pace that only decades of experience can achieve. It is a single gateway for accessing leading academic and clinical expertise in any therapeutic area. birmingham.ac.uk/bcct

The Clinical Immunology Service: The Clinical Immunology Service is one of the largest diagnostic immunology services in the country. Its medical and scientific specialists provide prompt, accurate results and expert interpretative advice across a comprehensive range of tests. The Clinical Immunology Service is a complete service for the immunological investigation of patients. birmingham.ac.uk/facilities/clinical-immunology-services

Human Biomaterials Resource Centre (HBRC): The HBRC is a Human Tissue Authority (HTA) licensed, Good Clinical Practice (GCP) compliant human sample biorepository. It provides a simple, efficient, and high-quality way to collect, store and distribute human samples and associated clinical data. It can provide access to samples from various West Midlands NHS Trusts, or work with partners to set up bespoke collections. The HBRC also offers various research pathology, tissue processing and analytical services. It is covered by research tissue bank ethical approval. birmingham.ac.uk/hbrc

Phenome Centre Birmingham: The Phenome Centre operates collaboratively with both industry and academia, providing a complete service to meet its partners' needs across metabolomics, bioinformatics and biochemistry. The team of scientists use their expertise and analytical capabilities to investigate a diverse range of sample types, including blood, urine, cells and tissues. The Phenome Centre was established as part of a UK Stratified Medicine Initiative led by the Medical Research Council (MRC). birmingham.ac.uk/phenome-centre

Getting in touch

To learn more about engaging with the University please contact the Business Engagement team:

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