

NIHR Birmingham Liver Biomedical Research Unit



The NIHR Birmingham Liver Biomedical Research Unit (BRU) at the **University Hospital Birmingham (UHB)** (<http://www.uhb.nhs.uk/>) was set up in 2008 in partnership with the University of Birmingham as part of a multi-million pound scheme to drive innovation in the prevention, diagnosis and treatment of ill-health and to translate advances in medical research into benefits for patients

We are now one of 20 BRUs in England funded by the **National Institute for Health Research (NIHR)** (<http://www.nihr.ac.uk/>) that focus on translational research. The Birmingham funding supports people, infrastructure, equipment and running costs allowing a team of scientists to undertake challenging and complex translational research to develop new therapies for liver disease.

We have appointed a team of translational researchers to work with existing staff and help take these studies forward. This team comprises clinical research fellows, senior biomedical scientists, trials coordinators, trials statisticians, research nurses, clinical senior lecturers, an MRI physicist, as well as technical and administrative staff.

The first phase of funding (July 2008- March 2012) included capital monies which funded the purchase and installation of a clinical leukapheresis machine to allow the safe isolation of blood cells from patients, a cell analyser to phenotype therapeutic cells and a 3T MRI machine to study the trafficking of labelled cells after infusion into patients. In addition we have refurbished a laboratory to GCLP grade standard for the reception, processing and storage of clinical specimens and equipped it with blood and tissue processing equipment and a real-time PCR analyser to allow rapid processing of patient samples. We work closely with the Cell Therapy Unit in the **Advanced Therapy Facility** (<http://www.birmingham.ac.uk/facilities/crf/facilities/index.aspx>)

In 2011 we received **funding** (http://www.nihr.ac.uk/infrastructure/Pages/infrastructure_biomedical_research_units.aspx) for a further 5 years (April 2012-March 2017)

We are continuing to initiate and deliver translational clinical research programmes within the following NIHR approved Research Areas:

- Immune modulation and inflammation - Area Lead **Professor David Adams** (<http://www.birmingham.ac.uk/research/activity/mds/centres/liver/staff/record.aspx?Referenceld=6176>)
- Optimising anti-viral therapies for hepatitis C infection - Area Lead **Professor Jane McKeating** (<http://www.birmingham.ac.uk/research/activity/mds/centres/liver/staff/record.aspx?Referenceld=6281>)
- Liver regeneration, repair and stem cells - Area Lead **Professor Phil Newsome** (<http://www.birmingham.ac.uk/research/activity/mds/centres/liver/staff/record.aspx?Referenceld=6284>)
- Immunotherapy of liver cancer - Area Lead **Dr Simon Afford** (<http://www.birmingham.ac.uk/staff/profiles/iandi/afford-simon.aspx>)
- Metabolic & fatty liver disease - Area Lead **Professor Jeremy Tomlinson** (<http://www.birmingham.ac.uk/staff/profiles/cem/EDM/Tomlinson-Jeremy.aspx>)
- Clinical trial infrastructure - Area Lead **Professor David Mutimer** (<http://www.birmingham.ac.uk/research/activity/mds/centres/liver/staff/record.aspx?Referenceld=6283>)

You can see and hear more about some of the trials we are involved in on this **YouTube** (http://www.youtube.com/watch?v=SRK1jC_ufJQ&list=PL7N0D2Uw210xJ6aeud6Q-XT1GkLR-VdEh) video which is on the NIHR Channel, and on this **video** (<http://www.youtube.com/watch?v=gPaL7ERtEi4>) we made for AASLDTV (broadcast at the AASLD 2013 meeting). A full list of our clinical trials can be found **here** (<http://www.research.uhb.nhs.uk/trials/>)