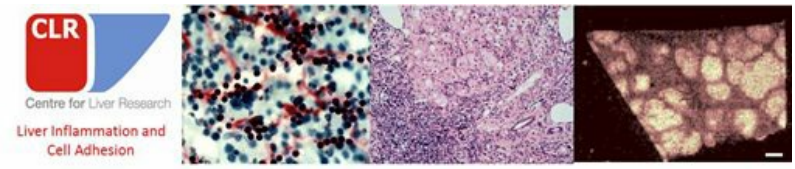
University of Birmingham

Liver Inflammation and Cell Adhesion: Centre for Liver Research and NIHR Biomedical Research Unit



Group leaders: **Prof David Adams (http://www.birmingham.ac.uk/staff/profiles/iandi/adams-david.aspx)** and **Dr Patricia Lalor (http://www.birmingham.ac.uk/staff/profiles/iandi/lalor-patricia.aspx)**

Overview

Liver disease is becoming increasingly common in the UK and is now the 5th most common cause of death. Our groups' research is focussed upon understanding the processes that lead to inflammation of the human liver and how this is linked to the development and progression of long-term liver injury. We study different blood cell types and measure how they interact with cells lining hepatic blood vessels and other liver cell types. We also use human tissue collected from patients with liver disease to understand the role of different cell types, genes and proteins in disease.

Our research group

Our group is composed of scientists and clinical staff at all stages of their careers from undergraduate students to established researchers. Our research forms a subsection of the studies being performed in the Centre for Liver Research. We use human ex vivo models and animal systems to investigate the processes underlying cell adhesion and migration and how this impacts upon disease pathogenesis.

Recent Publications

Open all sections

- Tuncer C, Oo Y, Adams DH and Lalor PF (2013) **The regulation of T cell recruitment to the human liver during acute liver failure (http://www.ncbi.nlm.nih.gov/pubmed/23617240)**. *Liver International* 33(6):852-63
- Karim S, Liaskou E, Hadley S, Youster J, Faint J, Adams DH and Lalor PF (2013) **An in vitro model of human acute ethanol exposure that incorporates CXCR3 and CXCR4-dependent recruitment of immune cells (http://www.ncbi.nlm.nih.gov/pubmed/?term=An+in+vitro+model+of+human+acute+ethanol+exposure+that+incorporates+CXCR3+and+CXCR4-dependent+recruitment+of+immune+cells.)**. *Toxicological Sciences* 132(1):131-41
- Lalor PF, Herbert J, Bicknell R and Adams DH (2013) **Hepatic sinusoidal endothelium avidly binds platelets in an integrin-dependent manner leading to platelet and endothelial activation and leukocyte recruitment (http://www.ncbi.nlm.nih.gov/pubmed/23257923)**. *American Journal of Physiology* 304(5):G469-78
- Liaskou E, Zimmermann HW, Li KK, Htun Oo Y, Suresh S, Stamataki Z, Qureshi O, Lalor PF, Shaw J, Syn WK, Curbishley SM and Adams DH (2013) **Monocyte subsets in human liver disease show distinct phenotypic and functional characteristics (http://www.ncbi.nlm.nih.gov/pubmed/22911542)**. *Hepatology* 57(1):385-98
- Shetty S, Bruns T, Weston CJ, Stamataki Z, Oo YH, Long HM, Reynolds GM, Pratt G, Moss P, Jalkanen S, Hubscher SG, Lalor PF and Adams DH (2012) **Recruitment mechanisms of primary and malignant B cells to the human liver (http://www.ncbi.nlm.nih.gov/pubmed/22508288)**. *Hepatology* 56(4):1521-31

For full publication lists see:

- **David Adams publications (http://www.ncbi.nlm.nih.gov/pubmed?term=adams%20DH%20liver)**
- **Patricia Lalor publications (http://www.ncbi.nlm.nih.gov/pubmed/?term=lalor+pf+liver)**

Staff

Principal Investigators
David Adams (http://www.birmingham.ac.uk/staff/profiles/iandi/adams-david.aspx) - School of Immunity and Infection
Patricia Lalor (http://www.birmingham.ac.uk/staff/profiles/iandi/lalor-patricia.aspx) - School of Immunity and Infection
Phil Newsome (http://www.birmingham.ac.uk/staff/profiles/iandi/newsome-philip.aspx) - School of Immunity and Infection
Simon Afford (http://www.birmingham.ac.uk/staff/profiles/iandi/afford-simon.aspx) - School of Immunity and Infection
Ye Oo (http://www.birmingham.ac.uk/staff/profiles/iandi/Oo-Ye.aspx) - School of Immunity and Infection
Zania Stamataki (http://www.birmingham.ac.uk/staff/profiles/iandi/stamataki-zania.aspx) - School of Immunity and Infection
Shishir Shetty (http://www.birmingham.ac.uk/staff/profiles/iandi/shetty-shishir.aspx) - School of Immunity and Infection

Postdoctoral Researchers
Evaggelia Liaskou
Chris Weston
Abhilok Garg
Yung Yi Chen

PhD Students and Clinical Fellows
Elizabeth Hepburn
Steve Ward
Palak Trivedi
Abishek Chauhan
Richard Parker
Ka-Kit Lee

Internal Collaborators
We collaborate widely with clinical and scientist colleagues throughout the University including but not restricted to:
Ed Rainger (http://www.birmingham.ac.uk/staff/profiles/cem/CVRS/Rainger-Ed.aspx) - School of Clinical and Experimental Medicine
Gerard Nash (http://www.birmingham.ac.uk/staff/profiles/cem/CVRS/Nash-Gerard.aspx) - School of Clinical and Experimental Medicine
Steve Watson (http://www.birmingham.ac.uk/staff/profiles/cem/CVRS/Watson-Steve.aspx) - School of Clinical and Experimental Medicine

Neena Kalia (http://www.birmingham.ac.uk/staff/profiles/cem/CVRS/Kalia-Neena.aspx) - School of Clinical and Experimental Medicine
Roy Bicknell (http://www.birmingham.ac.uk/staff/profiles/iandi/bicknell-roy.aspx) - School of Immunity and Infection and Cancer Studies
Gideon Hirschfield (http://www.birmingham.ac.uk/staff/profiles/iandi/hirschfield-gideon.aspx) - School of Immunity and Infection
Chris Buckley (http://www.birmingham.ac.uk/staff/profiles/iandi/buckley-christopher.aspx) - School of Immunity and Infection
Jane McKeating (http://www.birmingham.ac.uk/staff/profiles/iandi/mckeating-jane.aspx) - School of Immunity and Infection

NHS Collaborators
Stefan Hubscher - Consultant Pathologist, University Hospitals Birmingham NHS Trust, UK

Funding Bodies

- **Biotechnology and Biological Sciences Research Council** (http://www.bbsrc.ac.uk)
- **Cancer Research UK (CRUK)** (http://www.cancerresearchuk.org/home)
- **Core** (http://www.corecharity.org.uk/)
- **Medical Research Council (MRC)** (http://www.mrc.ac.uk/index.htm)
- **National Institute for Health Research (NIHR)** (http://www.nihr.ac.uk/Pages/default.aspx)
- **Wellcome Trust** (http://www.wellcome.ac.uk/)

Useful Links

- **Centre for Liver Research** (http://www.birmingham.ac.uk/research/activity/mds/centres/liver/index.aspx)
- **Birmingham NIHR Liver Biomedical Research Unit** (http://www.birmingham.ac.uk/research/activity/mds/centres/liver/BRU/index.aspx)
- Centre for Translational Inflammation Research
- **MRC Centre for Immune Regulation** (http://www.birmingham.ac.uk/research/activity/mds/centres/mrc-immune/index.aspx)

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