



GET INVOLVED NEWSLETTER

NHS
National Institute for
Health Research

Blood and Transplant Research Unit in Organ Donation and Transplantation

Welcome to our first issue

by Lynne Stobbart

Our quarterly Get Involved Newsletters will provide updates on ongoing activities and forthcoming plans within the NIHR Blood and Transplant Research Unit in Organ Donation and Transplantation. As well as dates for your diary and notification of items of interest, each newsletter will shine a spotlight on one of the core themes of the BTRU. We will also provide updates on proposals and applications that have been reviewed by the Patient and Public Research Panel, and keep you posted on further opportunities to contribute.

Upcoming Events

The first quarterly meeting of the BTRU Patient and Public Research Panel will take place on Tuesday 23rd January 2018 from 12:00 midday till 3 pm.

The meeting will be held in the Institute of Health and Society at Newcastle University. Members will be invited to participate in discussion about their future involvement in transplantation research, as well as reviewing a research proposal about the management of acute liver failure.

Subsequent meetings will take place on the following dates:

- Wednesday 25th April, 14:00–17:00hrs
- Monday 23rd July, 13:00–16:00hrs
- Wednesday 24th October 14:00–17:00hrs

Venues to be confirmed.

At the April meeting, panel members will hear from Dr Joanne Lally about the various funding streams and mechanisms available to researchers, and Professor Andy Fisher will present his proposal for the use of amniotic stem cells in lung transplantation.

Showcasing Research in Organ Donation and Transplantation

On Wednesday 7th February, the Institute of Transplantation at Freeman Hospital (pictured), Newcastle upon Tyne, will host a public event showcasing research in organ donation and transplantation of lungs, hearts, livers, kidneys and pancreas.

The event will comprise interactive panel presentations for each of the organs listed. We will invite questions and debate from members of the audience in order to address existing questions and to determine new areas for research.



Cambridge Science Festival

In March this year, members of the Cambridge team will once again be taking part in the ever-popular Cambridge Science Festival. They are doubling their efforts this year and hosting two events: a public lecture on the future of transplantation from a young researcher's perspective and a hands-on session as part of the Cambridge Biomedical Campus Day. Details for these events will be available shortly on the BTRU website (<http://odt.btru.nihr.ac.uk/>) and the Cambridge Science Festival site (www.sciencefestival.cam.ac.uk).

The team's previous events at the festival have been really well attended and generated some great feedback.



Spotlight on:

Theme 3 Resuscitating and reconditioning thoracic organs ex vivo

by Morvern Morrison



Theme members:

- Lead – Professor Andy Fisher (pictured)
- Senior Investigators – Professor John Dark, Professor Steve Clark, Professor Simi Ali, Dr Guy McGowan
- Senior Research Associate – Dr William Scott III
- Clinical Research Fellows – Dr Morvern Morrison, Mr Anders Andreasson
- Research Technician – Ms Lucy Bates
- PhD Student – Tom Pither

For some people with very severe heart or lung disease, heart or lung transplantation can offer the chance of life-saving treatment. Unfortunately, the number of people who are suitable for a transplant and are on the

heart or lung transplant waiting list greatly exceeds the number of donor organs available for transplantation.

In Theme 3 we aim to investigate new approaches to increase the number of hearts or lungs suitable for transplantation by allowing more of those organs that are initially felt to be unsuitable to be more rigorously assessed by the medical team.

We aim to assess these hearts and lungs by using specialised machines that perform a technique called ex vivo normothermic perfusion (EVNP). By mimicking the normal function of the heart or lungs outside the body of the donor before they are transplanted into the patient, this technique allows the organs to be more closely assessed.

In addition to assessing these organs, we are hoping to find new ways to treat the donor organs outside the body to improve their performance. EVNP provides an opportunity to administer beneficial medicines and treatments such as antibiotics and anti-inflammatory drugs to the hearts or lungs with the aim of improving their condition.

Our exciting research will investigate ways in which we can deliver new therapies to hearts or lungs whilst they are on the EVNP circuit, including medications targeting the heart muscle, the blood vessels within the lungs and testing regenerative interventions such as stem cell therapies.

Collaborations

Theme members are collaborating with Professor Mike Nicholson (Theme 4) in kidney perfusion to see whether some of the same tests can be employed to test organ function and to allow testing of potential new therapies.

Collaboration with Dr Menna Clatworthy (Theme 7) will evaluate ways to monitor perfusion success and predictors of clinical outcomes (in EVLP).

Work is also underway with Professor Rob Taylor (Theme 8) analysing the behaviour of lung tissue at a cellular level.

Beyond the BTRU, theme members are collaborating with other experts and institutions both nationally and internationally, and with industrial partners.



Stop Press!

Congratulations to Mr Gavin Pettigrew and team, who have recently been successful in their application for a National Institute for Health Research (NIHR) Health Technology Assessment Award to explore the value of

employing ultrasound to detect abnormalities in newly formed arteriovenous fistulas in patients undergoing haemodialysis for end-stage kidney disease. It is anticipated that recruitment will begin later in the year.

*Look out for Issue 2 of our
Newsletter in April*