NIHR | Blood and Transplant Research Unit in Genomics to Enhance Microbiology Screening at University of Oxford

Newsletter

First edition, October 2022

What is GEMS?

Genomics to Enhance Microbial Screening (GEMS) is a new National Institute of Health and care Research (NIHR) funded blood and transplant research unit (BRTU). It is directed by Professor Peter Simmonds and involves laboratories based at the University of Oxford and University College London (UCL) alongside close collaboration with NHS Blood and Transplant (NHSBT).

GEMS has been set up to evaluate the risk of, and provide solutions for, the transmission of potentially detrimental microbes in donated samples.

Another key aim of the unit is to establish an ever-growing bioarchive of blood and organ donor samples that can provide a resource for immediate large-scale investigation of the UK population for novel microbes of concern.

Get involved

Public and patient involvement in research is beneficial to the quality of the research. We would like to feature articles from our Public and Patient involvement and Engagement panel members, researchers and other BTRU members.

New starters

Welcome to Nadya Urakova, and Shannah Gates our new postdocs researchers, also to Sarah Buddle, Michael Fu and Saskia Proud our new PhD students.

Our Media

Twitter: https://twitter.com/BTRU_GEMS

Website: Introduction — Experimental Medicine Division (ox.ac.uk)

BTRU-GEMS launch meeting

On 28th of September 2022, we successfully held our BTRU-GEMS launch meeting. Over 50 researchers and representatives from Public Health organisations attended our launch meeting. The purpose of this meeting was to bring all the researchers together to share data, practices and to encourage innovation and discussion between themes and researchers. Prof Peter Simmonds presented an introduction to BTRU-GEMS and its overall objectives as well as an overview of the three themes. A patient perspective for blood safety talk was given by Mr Roger Graham followed by talks relating to Unexplained hepatitis in children by Prof Emma Thomson from University of Glasgow. The three theme leaders gave an overview in respect of the objective of each theme and current research; Blood screening and safety by Dr Heli Harvala (Theme 3), Metagenomics in action by Prof Judith Breuer (Theme 2) and Sequencing technologies and application by Dr Tanya Golubchik (Theme 1). Furthermore, the presentations continued to the afternoon which consisted of sessions led by Prof Peter Horby from University of Oxford on Emerging infections and pandemic planning followed by Prof Christopher Fraser on preventing pandemics. Prof Charles Chiu from University of California San Francisco presented Advances in high throughput sequencing and diagnostic technologies. Dr Su Brailsford and Prof Eamonn Ferguson from ethics committee presented Changing donor rules – is it a risk? The meeting was concluded by a talk by Prof Hans Zaaijer from Sanquin, Amsterdam presenting an overview on Transfusion microbiology –what is around the corner?