



Liverpool Life Sciences UTC Transmits



Personalised Medicine Seminar Programme

9th November 2016

1.00pm Welcome for Students

1.05pm **Dr Ana Alfirevic**, Senior Lecturer, University of Liverpool
Personalised, Individualised, Stratified, Precision Medicine

1.20pm **Anita Hanson**, Lead Research Nurse, University of Liverpool
Patient Recruitment

1.35pm **Dr Dan Carr**, Tenure Track Fellow, University of Liverpool
Toxic Effects of Medications – Skin and Stomach

1.50pm Break

2.10pm **Dr Amy Chadwick**, Tenure Track Fellow, University of Liverpool
Mitochondria: A Key Player in Adverse Drug Reactions?

2.25pm **Juhi Gupta**, PHD Student, University of Liverpool
Preterm Birth and Personalised Medicine

2.40pm **Kate Navaratnam**, PHD Student, University of Liverpool
Personalised Medicine in Clinical Practice

Introduction

Liverpool is uniquely positioned as a leader in the research and 'bench-to-bedside' delivery (clinical translation) of Personalised Health thanks to partnerships between the University of Liverpool, Liverpool Health Partners and its nine Hospital Trusts.

The current work in Personalised Health research and implementation already benefits the region, while demonstrating the way of the future nationally and internationally.

In Liverpool the core of the personalised approach comes from pharmacological expertise, with a unique approach to therapeutic risk/benefit analysis and focus on understanding drug toxicity, pharmacogenomics determinants of efficacy and tolerance, and the molecular pharmacology of drug efficacy.

With thanks to



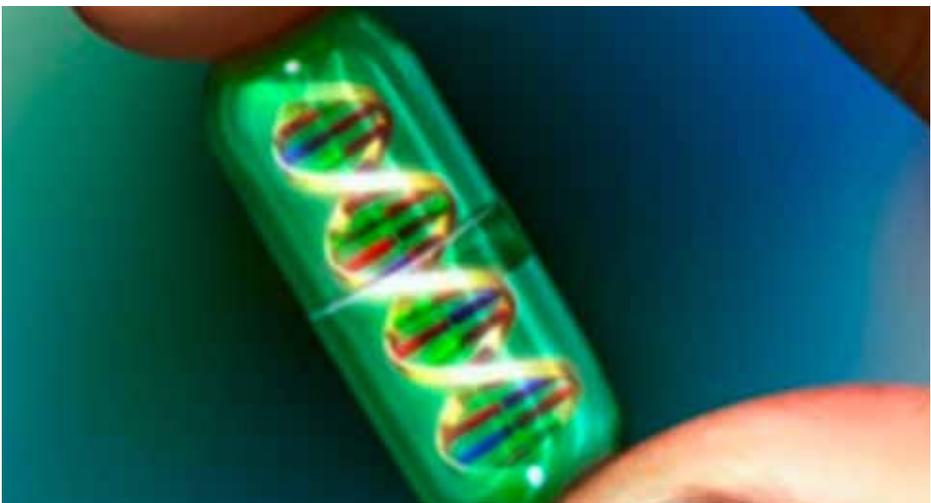
Speakers

Ana Alfirevic

Senior Lecturer, University of Liverpool



Ana Alfirevic is a Senior Lecturer in Pharmacogenetics at the University of Liverpool, UK. She received an MD at the University of Zagreb Medical School. In 2005, she received a PhD in Pharmacology at the University of Liverpool. Since then she has been working in The Wolfson Centre for Personalised Medicine at the Department of Molecular and Clinical Pharmacology, University of Liverpool. Her research over the past 10 years has been focused on the molecular pharmacology and pharmacogenetics. She has been working on several projects on identification of genetic predisposing factors for drug-induced hypersensitivity reactions and hepatotoxicity using high throughput genotyping and sequencing methodologies. She has also developed an interest in safety pharmacogenetics of cardiovascular diseases, in particular with lipid lowering therapy, anticoagulants and antiplatelet drugs. She has also focused her research in the area of implementing new technologies for point of care diagnostics into clinical practice through the National Institute of Health Research Collaboration for Leadership in Applied Health Research and Care, which brings universities, local authorities, NHS organisations and the public together to accelerate the translation of research findings into health service improvements.



Anita Hanson

Lead Research Nurse

As the Lead Research Nurse at the Wolfson Centre for Personalised Medicine (WCPM), I have overall management and responsibility for both the administration team and the pharmacology clinical research nurses at the Royal Liverpool Hospital. The research activity within the WCPM involves patient recruitment on a national scale, complemented by international collaboration. I ensure effective use of resources to facilitate patient recruitment in keeping with the specified targets and timelines. My role also involves assisting with the design and development of study protocols and associated documentation, and obtaining the necessary ethical and regulatory approvals for pharmacology studies. I lead the Drug Safety Patient & Public Involvement group in collaboration with 'SJS Awareness UK', ensuring patients are at the centre of research and are involved in design, delivery and participation.



Dr Dan Carr

Tenure Track Fellow, University of Liverpool

Dan Carr studied for a BSc (Hons) Physiology and Pharmacology at the University of Central Lancashire (1999). He then obtained an MSc in Molecular Pathology and Toxicology at the University of Leicester in 2000 and subsequently spent time working within the Safety Assessment Department, AstraZeneca at Alderley Edge, Cheshire before returning to Leicester to complete a PhD within the Department of Cancer Studies and Molecular Medicine in 2005. He then moved to a postdoctoral position at the Department of Pharmacology and Therapeutics (latterly Molecular and Clinical Pharmacology) at the University of Liverpool, under the supervision of Professors Munir Pirmohamed and Kevin Park.

In 2009 he moved into the newly created Wolfson Centre for Personalised Medicine, University of Liverpool. In 2013, he was appointed to the position of Tenure-Track fellow.



Dr Amy Chadwick

Tenure Track Fellow, University of Liverpool



Dr Amy Chadwick (formerly Mercer) gained her first degree at The University of Liverpool, where she graduated with an MChem in Chemistry with Pharmacology (2002). She continued her studies at the interface of chemistry with pharmacology by completing a PhD under the supervision of Prof Paul O'Neill and Prof Kevin Park at the University of Liverpool which was focussed upon elucidating the chemical and molecular mechanisms of cell death induced by the Artemisinin antimalarials (2006). Following this Amy completed a postdoctoral position in the Department of Pharmacology at the University of Liverpool with Kevin Park, funded by Pfizer Pharmaceuticals, in which she developed her knowledge of drug-induced liver injury. She then took up a position to use her skills and knowledge of cellular health and fundamental mechanisms of cell death as a Senior Postdoctoral Fellow at the newly established MRC Centre for Drug Safety Science where Amy began to develop her interest in drug-induced mitochondrial toxicity (2013). Dr Chadwick is currently a Tenure Track Fellow in the Department of Clinical & Molecular Pharmacology where she heads the Mitochondrial Toxicity group, which has particular interest in the role of mitochondrial toxicity in drug-induced liver injury and the factors underlying the inter-individual response to drug-induced mitochondrial toxicity.

Juhi Gupta

PhD student



Juhi Gupta is a new PhD student in Pharmacogenetics at the University of Liverpool. In July 2016, Juhi graduated from the University of Liverpool with a Master in Biological Sciences (MBiolSci), Genetics with placement. She completed her Masters Placement year at the Liverpool Women's Hospital Regional Genetics service, where she investigated different DNA microarray technologies for use in a diagnostic setting. Prior to this, she worked on a project investigating the malignant transformation in Oral Epithelial Dysplasia as part of her BSc.



Kate Navaratnam

PhD student



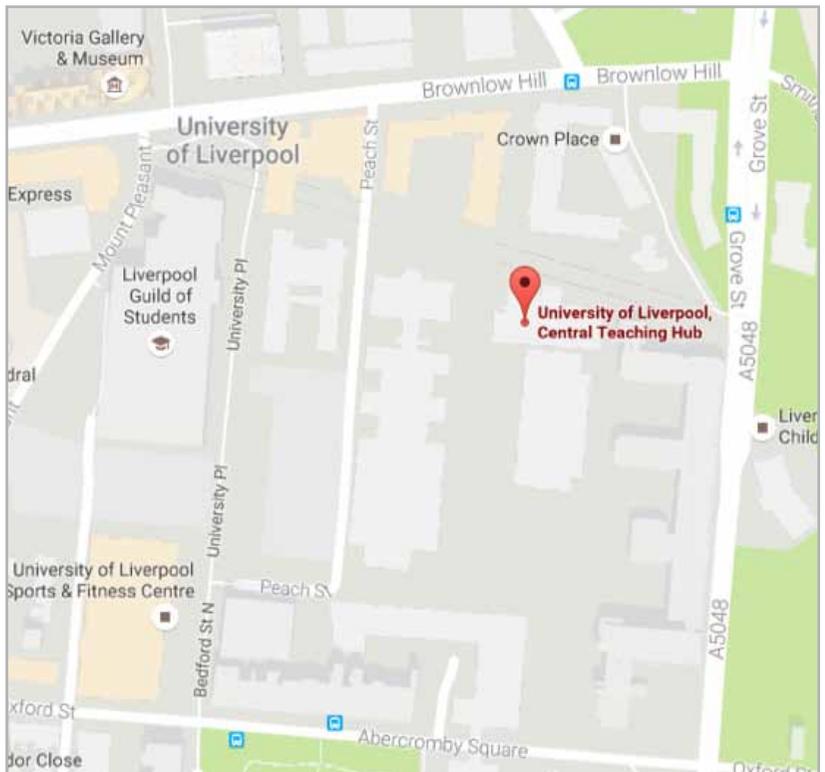
Kate obtained her MBChB (hons) from the University of Leeds in 2007. After completing houseman jobs in Yorkshire she moved to Liverpool in 2009 to begin specialist training in Obstetrics and Gynaecology. Kate quickly developed clinical and academic interests in Feto-Maternal medicine and began her ultrasound training whilst working with the Cochrane Pregnancy and Childbirth Group. After completing her specialist exams and obtaining MRCOG in 2012, she began pilot work investigating platelet activation in pregnancy with Dr Ana Alfirevic which, in 2014, led to Kate receiving a Research Training Fellowship from Wellbeing of Women to support her PhD and the EARTH study, a study of platelet responses in pregnant women prescribed aspirin to reduce the risk of pre-eclampsia. Kate is now working on a genome wide association study (GWAS) investigating genetic factors in women's individual responses. Kate is currently in the final year of her PhD and undertaking a postgraduate certificate in Genomics Medicine supported by Health Education England. Kate hopes to continue her clinical academic career in the field of perinatal pharmacology and pharmacogenetics in pregnancy whilst advancing her clinical work in Feto-Maternal Medicine. She plans to apply for Academic Clinical Lectureship and subspecialist training in Feto-Maternal Medicine on completion of her thesis.

UTC Transmits:
Personalised Medicine
Seminar Afternoon



9th November 2016,
1.00pm–3.00pm

LTB Lecture Theatre
Central Teaching Laboratories
University of Liverpool
L69 7BX



With thanks to

