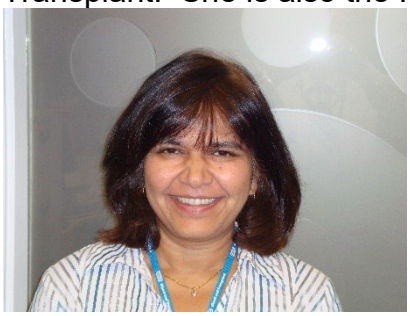
Advances in Transfusion Medicine Symposium

Wednesday 23rd November

Evidence-based transfusion practice

Chairs: Dr Shubha Allard & Professor Beverley Hunt

Shubha Allard MD FRCP FRCPath – is a Consultant Haematologist at NHS Blood and Transplant. She is also the RCPath Clinical Director for Publishing & Engagement, actively promoting the role and expertise of various pathology specialities in patient care together with wider public awareness. She has been the NHSBT's Clinical Director for the Patient Blood Management Team and Secretary to the National Blood Transfusion Committee. Shubha is a member of the ISBT Clinical Transfusion Working Party (previous Co Chair), the Steering group for the update of WHO and ISBT Clinical Use of Blood Educational modules. Shubha has also been an ISBT Regional Director and Board member.



Liver disease and coagulopathy

Dr Lara Roberts is a Consultant Haematologist at King's College Hospital and Honorary Reader in Thrombosis and Haemostasis at King's College London. Dr Roberts is the clinical lead for venous thromboembolism at KCH. She is the non-malignant haematology speciality lead for the South London Clinical Research Network, a committee member of the BSH Obstetric Haematology Special Interest Group and the ISTH SSC working group on Haemostatic management of patients with Liver Disease. Dr Roberts was co-clinical lead of the GIRFT Thrombosis survey of national VTE prevention practice in England. Her clinical and research interests include venous thromboembolism prevention and management, anticoagulation and haemostasis in liver and renal disease.

Patient Blood Management in paediatrics

Dr. Ruchika Goel is an Associate Professor of Internal Medicine and Pediatrics, Division of Hematology/Oncology at the Simmons Cancer Institute at SIU School of Medicine and an Adjunct faculty in the Department of Pathology, Division of Transfusion Medicine, at Johns Hopkins University. In addition, she serves as the Medical Director at ImpactLife Blood Services. Dr. Goel serves a dual role as a practicing hematologist oncologist and a transfusion medicine physician and is actively engaged in research in Big Data applications in Transfusion Medicine with a special interest in Pediatric and Neonatal Transfusions. She is the current chair of the Pediatric Subgroup of the International Society of

Blood Transfusion (ISBT). She also serves as an invited consultant and subject matter expert for the NHLBI funded REDS-IV-P longitudinal studies.

Dr. Goel has multiple accolades to her name including the BEST Collaborative Scott Murphy Lectureship, AABB Fenwal Future Leader TM Scholarship Award, Paul J. Stranjford Young Investigator award by the American College of Laboratory Physician and Scientists, 40 under 40 award for exemplary clinical service and has also received international recognition with the ISBT Harold Gunsen fellowship and ANZBT Presidential award. Dr. Goel has over 120 peer reviewed publications and book chapters to her name including key first author publications in some leading journals including *JAMA*, *JAMA Surgery*, *Blood*, *Transfusion* and *Vox Sanguinis* and has been invited to lecture nationally and internationally on topics of her research focus.

Focus on sickle

Red cell genotyping: translation into care

Dr Sara Trompeter is a Consultant Haematologist and Paediatric Haematologist at University College Hospitals London and NHS Blood and Transplant. She is the lead for paediatric haematology at UCLH and a core member of the adult service.

Dr Trompeter created and leads the paediatric red cell research programme at UCLH and has supported access to research for patients elsewhere in the haemoglobinopathy network. Much of her previous research has been focused on the use of transfusion in red cell disorders including leading the two largest surveys in haemoglobin disorders natioanally: National Comparative Audit of Transfusion in sickle cell disease 2014 and the Haemoglobinopathy Survey of 2012. She has several (inter)national roles including the positions on the following groups: National Haemoglobinopathy Panel; Chair of the NHSBT Haemoglobinopathy Coordinating Centre Liaison Team; co-leads the Haemoglobinopathy section of the NiHR bioresource for rare diseases, PI in the Blood transfusion Genomics Consortium

The current focus of her research is using genetic information to leverage understanding and improved outcomes for patients. She is co-leading a UCLH BRC initiative to support the development of UCLH to deliver informatically informed genotypically informed patient care. She co-leads the Haem-Match consortium (www.haemmatch.org) that aims to deliver AI driven genotypically matched blood to the bedside, aimed at improving transfusion outcomes for patients with sickle cell disease, thalassaemia and other transfusion dependent anaemias, and decreasing waste and improving the efficiency of blood transfusion. She is working with NHSE to ensure all people with haemoglobinopathies are offered red cell genotyping free of charge.

Transfusion & Transplantation Science

Chair: Professor Cheng-Hock Toh

Professor Cheng-Hock Toh CBE is Professor and Consultant in Haematology at Liverpool. He is Chair of the National Blood Transfusion Committee and has been President of the British Society for Haematology and Academic vice-president of the Royal College of Physicians. His longstanding research interest has been on blood changes in patients with sepsis and critical illness. The impact of this work includes discovering new molecular mechanisms of thrombin generation during critical illness, which have led to spin-out business companies for point-of-care diagnostics.

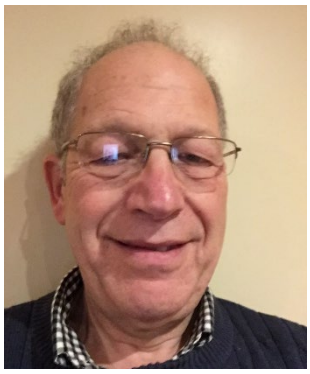
In vitro production of red cells and platelets

Prof Cedric Ghevaert MD PhD FRCP FRCPath holds the Chair of Transfusion Medicine at the University of Cambridge and is a Consultant Haematologist for the NHS Blood and Transplant. He obtained his MD in 1998 from the University Libre de Bruxelles. After qualifying as a Consultant Haematologist, he did his PhD in Cambridge to develop recombinant antibodies for the treatment of fetomaternal alloimmune thrombocytopenia which culminated in a first-in-man study. Upon obtaining his PhD, Dr Ghevaert obtained a personal fellowship from the British Heart Foundation to work on megakaryopoiesis in the context of myeloproliferative diseases at the university of Birmingham. He was appointed as a Principal Investigator at the University of Cambridge in 2010. His current group focuses its work on the production of blood cells from pluripotent stem cells with the declared aim to produce novel cellular therapies for transfusion to patients. His approach combines the manipulation of key transcriptional regulators to efficiently forward programme stem cells into mature blood cells and 3D bioengineered scaffolds to recreate the bone marrow niche and increase the production efficiency and purity of the manufactured blood cells. His expertise lies at the hinge of basic bench-based science and translational studies and as such he is Chief Investigator for a clinical trial of in vitro-produced red cells in human volunteers.

Thursday 25th November

Transfusion Safety

Chair: Professor James Neuberger



Dr James Neuberger qualified from Oxford and, after training posts in London and Leeds, worked at the Institute of Liver Studies, Kings College Hospital before moving to Birmingham where he remains an honorary Consultant. He was Associate Medical Director for Organ Donation and Transplantation at NHSBT. He has been Chair of SaBTO since 2016.

25 years of SHOT

Dr Shruthi Narayan, haematologist by background, is the Medical Director of SHOT. Additionally, she has a role as a Donor Consultant at NHS Blood and Transplant. Shruthi also chairs the Royal College of Pathologists Transfusion Specialty Advisory Committee, is a member of the International Society of Blood Transfusion Haemovigilance Working Party and has recently been elected as the President of the International Haemovigilance Network. She is passionate about improving transfusion safety, is actively involved in transfusion education as well as initiating and sustaining improvements in healthcare.

Blood safety: lessons learnt and new challenges

Dr Su Brailsford was appointed to the post of Consultant in Epidemiology and Health Protection at NHS Blood and Transplant following Public Health training in London, she is currently the interim Clinical Director for Microbiology and Public Health. She has a PhD in Microbiology and is a Fellow of the Faculty of Public Health. She has an honorary appointment at the UK Health Security Agency where she leads the joint NHSBT/UKHSA Epidemiology Unit which runs several surveillance programs providing data on infections in donors and recipients. Su is a member SaBTO, the department of Health Expert Committee on the Safety of Blood, Tissues and Organs and chaired the NHSBT-led multidisciplinary FAIR steering group.

New components

Rebecca Cardigan PhD FRCPath is a Consultant Clinical Scientist in Haematology, currently National Head of Components Development for NHS Blood & Transplant, and Affiliated Lecturer, Department of Haematology, University of Cambridge. She is responsible for the laboratory and clinical evaluation of major changes to how blood for transfusion is produced, stored and monitored in England. Rebecca has led numerous research projects that have subsequently been translated into routine practice in the NHS and has made significant contributions to setting national guidelines/policy as Chair of the UK Standing Advisory Committee on Blood Components between 2011-2017. She received the British Blood Transfusion Society Race & Sanger award in 2007 for an outstanding contribution to transfusion medicine and Kenneth Goldsmith Award in 2019 for contribution to research in the field of transfusion. She is a Consultant Civilian Advisor to the Ministry of Defence, a member of the Safety Advisory Board for Hema-Quebec and Board of Directors of the international Biomedical Excellence for Safer Transfusion (BEST) Collaborative. She has published over 100 papers in the area of haemostasis and transfusion.

Promoting the consultant clinical scientist role

Chair: Angela Douglas

Angela Douglas is currently the Deputy Chief Scientific officer for NHS England, appointed in December 2018, has worked in the NHS for almost 40 years, is a Fellow of RCPath, an Honorary Fellow of AHCS and previously worked as the Scientific Director of the Cheshire and Merseyside Genetics and Genomics Service, delivering the 100,000 Genome Project. Angela was President of the BSGM in 2012, having previously been the Chairman of the ACC and the ACGS and completed a term of office as Chair of the RCPath Genetics and Reproductive Medicine SAC and was the RCPath Scientific Workforce Lead. Was appointed the NW Scientific Director in 2010 and Scientific Advisor to the CSO, working to support all Healthcare Science disciplines across the NW to implement NHS policy. Worked with NHS Test and Trace in Covid product technical validation and leads as DCSO the TVG and supports the CTDA for UKHSA. Angela chairs the National Clinical Engineers Network and the National Pathology Laboratory Quality Assurance Group. In 2014, was named in HSJ as one of UKs top 50 Inspirational Women Leaders, in 2015 was awarded Healthcare Scientist of the Year by NHS E, in 2016 was honoured in the Queens 90th Birthday Honours list as a Member of the Order of the British Empire for Research and Mentoring students. In 2019, was named a trailblazer in the Pathologist 2019 Power List, in 2021 was awarded Honorary Fellowship to the Institute of Physics and Engineering in Medicine.

Consultant clinical scientist in transfusion

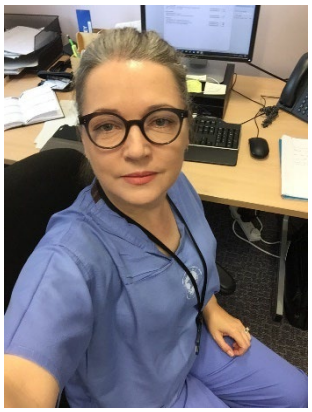
Dr Tom Bullock DClinSci FRCPath FIBMS is a Consultant Clinical Scientist with a specialist interest in Red Cell Immunohaematology (RCI). He works in the Clinical Services directorate of NHS Blood & Transplant (NHSBT), based in Bristol.

As a Consultant Clinical Scientist in RCI, Tom has extensive experience in the investigation of antibodies to both high and low frequency antigens, complex mixtures of antibodies and the provision of blood for patients with complex transfusion requirements, such as those with Sickle Cell Disorder. Working with his colleagues, he has also been involved in the discovery of many new blood group system antigens, and the implementation of novel reagents and investigative procedures in RCI laboratories. He has also authored and co-authored papers, guidelines and textbook chapters in this specialist area. Dr Bullock enjoys teaching and training, and is the current module lead of an Applied Transfusion and Transplantation MSc, run in partnership between the University of the West of England (UWE) and NHSBT.

Consultant clinical scientist in haematology

Dr Mark Grey MD FRCP(UK) FRCPath is a Consultant Haematologist and Head of Department in Clinical Haematology at Lancashire Haematology Centre (LHC). LHC is a tertiary Haematology centre serving Lancashire and South Cumbria. Dr Grey has a special interest in myeloma and is principal investigator in a number of clinical trials. He has occupied a number of senior leadership roles throughout his career and is currently chair of the Lancashire and South Cumbria Clinical Haematology Network. He leads a local workforce strategy supporting a blended multi-professional workforce in Clinical Haematology to address the current pressures on the medical haematology workforce which could be replicated nationally.

Dr Sharran Grey OBE DClinSci FRCPath FBBTS FAHCS is a Haematology Consultant Clinical Scientist in Clinical Haematology at Lancashire Haematology Centre, and Lead Consultant for Blood Transfusion, Laboratory Director/Clinical Lead for Blackpool and Lancashire Teaching Hospitals. She performs haematology diagnostic clinics and provides advice and guidance in obstetric haematology. She is also the working expert for TACO with SHOT and is actively engaged with international colleagues on advancing this area of transfusion. She contributes to BSH transfusion guidelines and practice-based research. Her doctoral research on Accelerated Red Cell Transfusion won the Chief Scientific Officer's Healthcare Science Award in 2017. She is committed to the development of consultant clinical scientists to strengthen, transform and modernise the Clinical Haematology workforce. She was honoured with an OBE in 2021 for services to blood transfusion and patient care.



Future of Transfusion

Chairs: Professor Erica Wood and Professor Lise Estcourt

Professor Erica Wood is a haematologist at Monash Health and Head of the Transfusion Research Unit in the School of Public Health and Preventive Medicine at Monash University in Melbourne, Australia. Erica has served as Chief Examiner (Haematology) for the Royal College of Pathologists of Australasia. She is immediate past president of the International Society of Blood Transfusion, former president of the International Haemovigilance Network and the Australian and NZ Society of Blood Transfusion, and a member of WHO expert groups on transfusion and anaemia.

Erica is a founding member of the Victorian Blood Matters Advisory Committee, and chaired its Serious Transfusion Incident Reporting (STIR) expert group. She serves on Australia's national Haemovigilance Advisory Committee, Therapeutic Goods Administration Committee on Biologicals, and Evaluation Subcommittee of the Medical Services Advisory Committee. She is a National Health and Medical Research Council (NHMRC) Leadership Fellow, and leads the NHMRC-funded Blood Synergy research program.

Red cell shortages – key lessons and actions

Professor Lise Estcourt is a Consultant in Haematology and Transfusion Medicine at NHS Blood and Transplant (NHSBT), Oxford and an Associate Professor in Haematology and Transfusion Medicine at the University of Oxford. She is the Director of NHSBT's Clinical Trials Unit, the Clinical Lead for the National Comparative Audit in Blood Transfusion, Clinical Lead for the Systematic Review Initiative, Associate Medical Director for Research, Development and Quality Improvement in Transfusion for NHSBT, and the Co-ordinating editor for Cochrane Haematology. She has authored and co-authored more than 150 papers in peer-reviewed journals. Professor Estcourt led the convalescent plasma transfusion trials on behalf of NHSBT (transfusion aspects of RECOVERY and REMAP-CAP trials) with Professor David Roberts. Her other interests include: the safe and appropriate use of blood components; alternatives to blood transfusion; risk factors for bleeding in haematology patients; and systematic reviews.

Transfusion 2024: achievements and challenges

Dr Farrukh Shah, FRCPath – Chair
Medical Director - Transfusion NHSBT, Colindale
Red Cell Disorders Unit, Department of Haematology, Whittington Hospital NHS

Dr Shah is a haematologist by background; she trained in London. Dr Shah did her research with Professor John Porter at UCL, looking at iron regulation in patients with sickle cell disease and thalassaemia. After her research, she was appointed as a consultant at Whittington Hospital, looking after patients with thalassaemia syndromes and sickle cell disease. In July 2021, she became the Medical Director for Transfusion at NSHBT. Dr Shah still works at Whittington for one day-a-week and sees patients with thalassaemia and sickle cell anaemia.

Dr Shah applied for the MD for Transfusion role as she is interested in medical management and wanted to really look at developing services in a more strategic and national role. This has been an interesting learning curve, seeing and thinking about how NHSBT links with hospitals nationally, and what it can do organisationally to support the care of patients, improve service delivery and support training of hospital colleagues in transfusion.

Dr Shah is the Chair of the UK Forum on Haemoglobin Disorders, which is a national organisation that advocates services for people living with haemoglobin disorders and services nationally. It also leads on the Peer review programme for haemoglobinopathy centres and help to facilitate equity and standardisation of care. Dr Shah is also the Chair of the National Haemoglobinopathy Registry. This is a registry of patients with haemoglobinopathies and rare inherited anaemias, funded by NHS England. The registry aims to help improve the care of sickle cell patients and those with rarer disorders, to ensure everyone who needs to can access treatment-critical information on one platform. NHSBT antibody data, genotype data, etc, will be co-located on this registry, along with hospital red cell antibody data, and this will have a major impact on improving transfusion safety for patients.